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Forthcoming conferences

Institute of Historical Research, London
1 July 2013
Agriculture and Industry: the development of rural England, 1200–1700

Details from j.bowen@lancaster.ac.uk or a.t.brown@durham.ac.uk

British Agricultural History Society
Winter Conference, 7 December 2013
Augmented Agriculture: tools, fuel and traction in farming. A conference in honour of Ted Collins

Details will be circulated and made available on the Society's website in July

British Agricultural History Society
Spring Conference, 7–9 April 2014

To be held at Denman College near Abingdon

Agricultural History Review looks forward to seeing its readers at

Rural History 2013, Bern, Switzerland
19–22 August 2013

Details are to be found at www.ruralhistory2013.org

Marking the boundaries: William Jordan's 1633 pre-enclosure survey of Duffield Frith (Derbyshire)*

by Heather Falvey

Abstract

Although many forest surveys were conducted during the seventeenth century, little is known about the work of forest surveyors. Here we draw together evidence for their remuneration and working conditions. Furthermore, the records of the disputed enclosure at Duffield Frith in Derbyshire permit an examination not only of the mechanics of surveying a forest but also of subtle forms of resistance to enclosure, including the role played by women in advancing that resistance.

On 20 September 1633, Timothy Pusey and Thomas Gilbert, commissioners charged by the Duchy of Lancaster with overseeing the partition of the former royal forest of Duffield Frith, certified the Duchy court of the acreage of each division. To ensure that their report was intelligible, William Jordan, the surveyor who had worked on their behalf, provided 'plottes', or sketch maps, upon which the three distinct sub-divisions of each of the three wards were delineated in green, violet and red.[1] Jordan's maps have, regrettably, failed to survive, and thus we lack any cartographical representation of the Frith at the time of its enclosure. However, appended to the commissioners' report is a statement by John Lane, jun., one of the local men appointed to assist in laying out the divisions, which vividly describes Jordan's activities and the problems that he encountered when surveying the area.[2] Lane's account illuminates not only the murky circumstances in which forest surveyors carried out their work, but also the subtle strategies of resistance with which they might be confronted.

Until relatively recently, riot was virtually the only form of popular protest studied by early modern historians. This emphasis, one suspects, is due largely to the fact that such incidents are fairly easy to find in various legal archives, in particular those of central government.[3] Many case studies have been published and a great deal has been learned about early modern

* Thanks are due first and foremost to Steve Hindle; also to Bernard Capp, Simon Healy, Richard Hoyle, Ken Sneath, Nigel Tringham and John Walter; to the participants at the session 'Maps and plans as information' at the Reading EMRC conference 'Commerce, negotiations and exchanges', 18–20 July 2011; and to two anonymous referees. All documents cited are in the National Archives (TNA).

[1] DL 44/1127, document 1, commission, dated 27 Mar. 1633; document 2 includes measurements of the division of Duffield Frith.

[2] DL 44/1127, document 4, dated 20 Sept. 1633.

[3] See, for example, K. Lindley, *Fenland riots and the English Revolution* (1982); R. B. Manning, *Village revolts: social protest and popular disturbances in England, 1590–1640* (1988); B. Sharp, *In contempt of all authority: rural artisans and riot in the west of England, 1586–1660* (1980).

riots during which enclosures in forests were destroyed or damaged.[4] But various non-violent strategies were also open to protestors.[5] John Walter has provided a particularly detailed discussion of resistance strategies that stopped short of riot, including grumbling, cursing, appeals, libels, complaint letters, petitions, foot-dragging and harassment.[6] Andy Wood, noting the effectiveness of various non-violent forms of protest, has commented that there was 'a politics to semi-public verbal dissent, muffled grumbling and anonymous threat as much as there was to open protest'.[7] The very subtlety of such protests, however, has rendered their detection, by both contemporary authorities and historians, much more problematic.

The disafforestation and subsequent enclosure of Duffield Frith was but one of the Caroline administration's numerous projects aimed at increasing revenue from the vast but mismanaged crown estates; thus events there are relatively well-documented.[8] Evidence from Duffield confirms historians' suspicions that more subtle strategies of resistance were practised, for their perpetrators were traced and some were prosecuted. In addition, this evidence emphasizes the role played in that resistance by women, who themselves rarely appear in prosecutions of riot. It is also, moreover, highly revealing of the technical aspects of the work of forest surveyors, about which the historical record is almost invariably silent.[9] The following discussion, based largely on the report compiled by the Duffield enclosure commissioners, not only rectifies this historiographical omission, but also emphasizes the severe challenges faced by, and the scant rewards due to, those who were responsible for surveying early modern forests.

I

In early modern England the work of surveyors created tension, not only between the owner and the tenants of the land being surveyed, but also between the tenants and the surveyor himself. The work of the estate surveyor is well known both from contemporary publications

[4] D. G. C. Allan, 'The rising in the West, 1628–1631', *EcHR* 5 (1952–3), pp. 76–85; J. H. Bettey, 'The revolts over the enclosure of the royal forest of Gillingham', *Proc. Dorset Natural History and Archaeological Society* 97 (1975), pp. 21–4; R. W. Hoyle, 'The forest under the Dynhams', in J. Broad and R. W. Hoyle (eds), *Bernwood: the life and afterlife of a forest* (1997), pp. 35–72; D. O. Pam, *The story of Enfield Chase* (1984), pp. 63–77; Sharp, *In contempt of all authority*.

[5] See, for example, the strategies identified in J. C. Scott, *Weapons of the weak: everyday forms of peasant resistance* (1985) and id., *Domination and the arts of resistance: hidden transcripts* (1990).

[6] J. Walter, 'Public transcripts, popular agency and the politics of subsistence in early modern England', in M. J. Braddick and J. Walter (eds), *Negotiating power in early modern society: order, hierarchy and subordination in Britain and Ireland* (2001), pp. 123–48.

[7] A. Wood, *Riot, rebellion and popular politics in early modern England* (2002), p. 89.

[8] For crown projects see the various contributions in R. W. Hoyle (ed.), *The estates of the English Crown, 1558–1640* (1992). For the background to events at Duffield, as well as an account of its enclosure and the aftermath, see H. Falvey, 'Custom, resistance and politics: local experiences of improvement in early modern England' (unpublished PhD thesis, University of Warwick, 2007), chs 2 and 4.

[9] For example, Hoyle notes that for Bernwood (Bucks.) the working papers of the commissioners are lost (Hoyle, 'The forest under the Dynhams', p. 57). Throughout this paper 'forest surveyor' denotes professional land surveyors who were employed to measure timber and land within forests and chases; it does not refer to the 'surveyor general of woods' and his underlings. For these royal officers in woods and forests, see G. Hammersley, 'The Crown woods and their exploitation in the sixteenth and seventeenth centuries', *Bull. Institute of Historical Research* 30 (1957), pp. 136–61.

such as those by Ralph Agas, John Norden, and Aaron Rathborne, and also from the work of various modern scholars of literature and history.[10] Although both contemporary and modern writers have discussed in general terms the developing science of surveying and the mechanics of dividing common fields at enclosure, there is a conspicuous absence of commentary on the measurement and division of enclosures within forests.

The most immediate problem encountered when surveying a forest was that its boundaries were not necessarily delineated either by fences, hedges or ditches on the ground, or by cartographic symbols on paper or parchment.[11] There were very practical reasons for each omission: firstly, as hunting grounds, forests were open spaces where game roamed and browsed freely and through which hunters could chase without impediment;[12] and secondly, as crown property, forests belonged to the largest landowner in the country, who simply could not afford to survey and map all of its lands.[13] Although a 'Great Survey' of crown lands was attempted in 1608–09, and some maps were drawn up, the project was never completed.[14] Furthermore, in 1612 the Frith itself had been one of the royal forests surveyed in preparation for disafforestation but these proposals were shelved on the death of the earl of Salisbury.[15]

Setting out a forest enclosure differed markedly in character from estate surveying. Whereas the latter comprised measuring on the ground and delineating on parchment 'boundaries' that already (either in practice or in memory) existed, laying out an enclosure, particularly one in a

[10] R. Agas, *A preparative to platting of landes and tenements for surveigh* (1596); J. Norden, *The surveyors dialogue* (London, 1607 & new editions in 1610 and 1618) and now M. Netzloff (ed.), *John Norden's* The Surveyor's Dialogue *(1618): A critical edition* (2010); A. Rathborne, *The surveyor in four bookes* (1616); R. Helgerson, 'The land speaks: cartography, chorography, and subversion in Renaissance England', in S. Greenblatt, *Representing the English renaissance* (1988), pp. 327–61; R. Helgerson, *Forms of nationhood: the Elizabethan writing of England* (1992), ch. 3; B. Klein, *Maps and the writing of space in early modern England and Ireland* (2001), ch. 2; A. McRae, 'To know one's own: estate surveying and the representation of the land in early modern England', *Huntington Library Q.* 56 (1993), pp. 332–57; A. McRae, *God speed the plough: the representation of agrarian England, 1500–1660* (1996), especially ch. 6, '"To know one's own": the discourse of the estate surveyor'.

[11] For a summary of the mapping of forests, see E. Baigent, 'Mapping the forests and chases of England and Wales, *c.*1530 to *c.*1670', in J. Langton and G. Jones (eds), *Forests and chases of England and Wales, c.1500-c.1850: towards a survey and analysis* (2005), pp. 21–28; for the mapping of the Duchy's forest of Needwood (Staffs.), see S. Bendall, 'Mapping the English forests: Needwood, 1598–1834', in E. Baigent and R. J. Mayhew (eds), *English geographies, 1600–1950: historical essays on English customs, cultures and communities in honour of Jack Langton* (2009), pp. 23–38.

[12] For a general discussion of forests and forest law, see P. Large, 'From swanimote to disafforestation: Feckenham Forest in the early seventeenth century', in Hoyle (ed.), *Estates of the English Crown*, pp. 392–4. See also P. A. J. Pettit, *The royal forests of Northamptonshire: a study in their economy, 1558–1714* (Northamptonshire Record Soc., 23, 1968).

[13] The most detailed study of crown lands in the early modern period is Hoyle (ed.), *Estates of the English Crown*. However, in some forests at least, such as at Finchampstead bailiwick in Windsor Forest, it was customary to perambulate the boundaries, without necessarily marking them out on the ground. (G. A. Kempthorne, 'An Elizabethan swanimote court roll of Finchampstead bailiwick', *Berkshire Archaeological J.* 36 (1932), p. 107.)

[14] R. W. Hoyle, '"Shearing the hog": the reform of the estates, *c.*1598–1640', in Hoyle (ed.), *Estates of the English Crown*, pp. 204–62, especially pp. 220–27.

[15] R. W. Hoyle, 'Disafforestation and drainage: the Crown as entrepreneur?', in Hoyle (ed.), *Estates of the English Crown*, pp. 368–9. The Frith was also surveyed by the Duchy several times in the sixteenth century. Those surveys have been summarized in J. C. Cox and F. Strutt, 'Duffield Forest in the sixteenth century', *Derbyshire Archaeological J.* 25 (1903), pp. 181–216.

forest, by definition, involved the marking out of new territory.[16] In his discourse on surveying and woodland management published in 1612, Rock Church discussed the advantages and disadvantages of forest enclosures, though he did not describe the actual mechanics of surveying and enclosing.[17] This is all the more frustrating since only three years previously Church himself had surveyed the woodlands in Duffield Frith, in preparation for timber sales there.[18] The development of mathematical surveying by practitioners such as Church dramatically reduced the significance of local knowledge in the recording of boundaries. The earlier supremacy of oral tradition was swept away by the surveyor's theodolite and notebook. Memory was superseded by writing and drawing. As Bernhard Klein has noted, 'The rise of new-style surveyors is indicative of a process that removed land from its location in popular memory and upset the tradition of a limited localized setting, … where "the day's journey and the morning's ploughing" were conventional units of measurement'.[19] Contemporaries themselves were well aware of this development. John Norden observed that maps were visual tools 'which tenants mislike, not that the thing it selfe [i.e. the map] offendeth them, but that by it they are often prevented or discovered of deceitfull purposes'. The lack of proper maps, Norden claimed, had been the cause of 'infinite concealements' and 'many intrusions and incrochments' by tenants.[20] Such deceits notwithstanding, the leading tenants who sat on a manorial court of survey played a legitimate role in the construction of the surveyor's schedule and might manipulate the process incrementally to favour their own interests over those of their landlord. But what of legitimate contributions by tenants or commoners to the surveying of forests prior to their enclosure?

Woodmotes, or forest courts of attachment, dealt only with offences concerning vert (trees, underwood and herbage) and, according to Manwood, venison.[21] Theoretically swanimotes were competent to consider, among many other issues, whether enclosures of moors, plains and waste were 'to the hurt of the commons'.[22] It might be inferred, therefore, that a swanimote, which comprised all freeholders within the forest, could be called on to advise a surveyor in 'their' forest, but no existing study of early modern swanimotes indicates any kind of connection with forest surveys. By the sixteenth century, the swanimotes of some forests, such as Feckenham and those of Northamptonshire, had been adapted by inhabitants to regulate the increasingly

[16] As noted earlier, various aspects of the work of estate surveyors are discussed in, for example, McRae, *God speed the plough*; Klein, *Maps and the writing of space*; Helgerson, *Forms of nationhood*.

[17] R. C., *An olde thrift newly revived* (1612), pt 2: 'The commodities and discommodities of inclosing decayed forrests, commons and waste grounds'. Part 4 explains how to use a 'small portable instrument' for measuring the height and 'solide content' of any tree.

[18] DL 1/391, answer of Robert Treswell and Thomas Jaye to the bill of William, earl of Newcastle, 25 June 1629, recalling events of 8 and 9 James. In his *An Olde Thrift Newly Revived* (p. 21), Church referred to his work as a royal surveyor: 'my late circuit Northward for survey and sale of some of his Maiesties Woods'.

[19] Klein, *Maps and the writing of space*, p. 46.

[20] Norden, *Surveyors Dialogue* (1607 edn), p. 16, quoted in Klein, *Maps and the writing of space*, p. 57.

[21] The most detailed recent discussion of forest courts is G. Jones, 'Swanimotes, woodmotes, and courts of "free miners"', in Langton and Jones (eds), *Forests and chases of England and Wales*, pp. 41–8. Woodmotes continued to be held at Duffield during the late sixteenth and early seventeenth centuries (*VCH Derbyshire*, I, pp. 419–20). 'Venison' initially signified all beasts of the forest but by the sixteenth century it applied exclusively to red and fallow deer. (Large, 'From swanimote to disafforestation', p. 392, n. 14).

[22] Jones, 'Swanimotes, woodmotes, and courts of "free miners"', pp. 42–4, quotation from p. 42.

generous interpretation of common rights. By the seventeenth century, however, the crown itself was attempting to assert the more rigorous regulation of many of its forests.[23] Graham Jones has suggested that, in general, early modern swanimotes could be seen as 'protecting the property of the crown and the perquisites of the forest officials'.[24] They were, therefore, hardly a forum wherein the interests of the commoners were likely to be favoured over those of the crown.[25] Thus when a forest was earmarked for enclosure, the numerous commoners, whose access to that forest was threatened with curtailment or even extinction, could make no legitimate impact on the surveyor's work.[26] This might also hamper the surveyor since inevitably he would need to supplement his own measuring skills with information provided by inhabitants without whose local knowledge he could have no understanding of the forest's boundaries. The usefulness and accuracy of such transfers of knowledge were, however, entirely dependent upon the good will and honesty of those inhabitants, which, under the circumstances, might understandably be lacking. As we shall see, memories of such boundaries might be hazy or even 'forgotten' intentionally.[27]

The surveyor, whether accurately informed, or solely dependent on his own skill, had to be remunerated for his expertise. Records of the surveys of crown lands conducted in the first decade of the seventeenth century, together with those of the forests and chases reserved for the payment of army arrears in the 1650s, provide an indication of the quite substantial rates of pay that might be made to surveyors and their assistants. In the 1600s surveyors working on the crown estates were paid through the Exchequer; those employed when Robert Cecil, earl of Salisbury, was Lord Treasurer were paid a daily rate for surveying and for supervising the engrossing of surveys, out of which they were expected to pay their clerks and other expenses.[28] The 'usual daily rate was 15*s*. whilst "in the field" surveying woods, 4*s*. during the period of writing up the surveys and drawing maps, and 4*s*. whilst "attending about the return of the commission"'.[29] The crown's surveyors were usually given an advance ('imprest') when the survey was commissioned and the balance was paid when the survey was received and approved.[30] The same daily rate was being paid 50 years later to surveyors employed by

[23] See, for example, R. H. Hilton (ed.), 'The swanimote rolls of Feckenham forest', *Miscellany*, I (Worcestershire Hist. Soc., new ser., 1 (1960), pp. 37–40; Kempthorne, 'An Elizabethan swanimote court roll'; Hammersley, 'The Crown woods and their exploitation'; id., 'The revival of forest laws under Charles I', *History* 45 (1960), pp. 85–102; Large, 'From swanimote to disafforestation'.

[24] Jones, 'Swanimotes, woodmotes, and courts of "free miners"', p. 43.

[25] Prior to the disafforestation of Braydon Forest (Wilts.), a jury of 17 'good and lawful men of the county of Wilts' was impannelled. These men did not necessarily have a direct interest in that forest. (F. H. Manley, 'The disafforesting of Braden [*sic*]', *Wiltshire Archaeological and Natural History Magazine*, 45 (1930–2), p. 556.)

[26] Klein, *Maps and the writing of space*, p. 57, touches on the input of tenants in estate surveys but this study of Duffield is the first to draw attention to the subtle difference regarding enclosure surveys. In the 1650s at Enfield Chase it was ordered that the none of the jury who advised the enclosure commissioners should have a direct interest in the Chase. Pam, *Enfield Chase*, p. 70.

[27] See also N. Whyte, *Inhabiting the landscape: place, custom and memory, 1500–1800* (2009), especially chs 4 and 5.

[28] Hoyle, '"Shearing the hog"', p. 220.

[29] H. Lawrence, 'John Norden and his colleagues: surveyors of crown lands', *Cartographic J.* 22 (1985), p. 55, citing E/403/2722 et seqq. If paid daily, 'a typical rate for surveyors was 15*s*. when working in the field'. F. Kitchen, 'John Norden (*c*.1547–1625): estate surveyor, topographer, county mapmaker and devotional writer', *Imago Mundi* 49 (1997), p. 55.

[30] Hoyle, '"Shearing the hog"', p. 220.

the Commonwealth. When working in Kingswood, Needwood, Sherwood, and Enfield forests and chases, the surveyors were to be paid 15*s*. per day. Unlike the earlier surveyors of crown lands, however, these surveyors' disbursements were to be covered by their employers. Wages for clerks, messengers, and men to carry their chains would be met by the Trustees for sale of the Forests.[31] Between September 1656 and November 1658, when Enfield Chase was surveyed prior to enclosure, the commissioners and surveyors there were to employ a clerk at 5*s*. a day and a messenger at 3*s*., and to hire labourers to carry the chains and other instruments at no more than 1*s*. 6*d*. a day.[32] In 1656 at Needwood, the inclosure[*sic*] commissioners, including the surveyor George Sargeant, were to employ a clerk and messenger at the same rates as at Enfield, and to hire labourers for the same purpose.[33]

These rates of pay compare favourably with estimates of other wage rates in the period: agricultural labourers might earn 12*d*. in 1640–49, and building labourers 10–14*d*. in 1630–40.[34] The rates of 3*s*. and 5*s*. for messengers and clerks respectively were relatively generous and 15*s*. per day for surveyors – a sum that was apparently on offer between at least 1602 and 1656 – appears positively lucrative. Surveyors would, however, have been regularly working away from home and would need to cover the expenses of bed and board, and probably stabling, out of their fee. The rewards of surveying were not, from this perspective, particularly attractive. Indeed, a brief survey of biographies of early modern land surveyors in the *ODNB* suggests that the estates of very few were worth a great deal when they died; Norden's wealth at death, for example, was a mere £29 14*s*. 4*d*.[35] Only those who came from landed families, such as John Blagrave of Reading, seem to have died wealthy.[36]

II

Early modern writers on improvement consistently emphasized the fact that the land within royal forests was not being exploited to its full potential and argued that conversion to cultivation would render it more productive and its inhabitants more industrious.[37] Indeed, John Norden considered forests to be 'verye nurseryes of idlenes, atheisme, beggerie [and] perfidiousnes'.[38]

[31] *Calendar of State Papers Domestic, 1655–6,* p. 368; *Calendar of State Papers Domestic, 1656–7,* p. 78.

[32] Pam, *Enfield Chase*, p. 70.

[33] N. Tringham, 'Needwood Forest surveys of 1649–50 and attempted inclosure', *Trans. Staffordshire Archaeological and Historical Society* 44 (2010), p. 32; Bendall, 'Mapping the English forests', p. 27.

[34] Statistical table XV, 'Agricultural day wage rates in southern England', in J. Thirsk (ed.), *Agrarian History of England and Wales*, IV, *1500–1640* (1967), p. 864; D. Woodward, 'The determination of wage rates in the early modern north of England', *EcHR 47* (1994), p. 30.

[35] *ODNB*, 'Norden, John (*c.*1547–1625)'. During his lifetime Norden was forever claiming poverty, possibly spuriously. The monumental *Dictionary of land surveyors and local mapmakers* does not discuss the working conditions of these practitioners, nor does it record any probate inventory values. (*Dictionary of land surveyors and local mapmakers of Great Britain and Ireland, 1530–1850* / compiled … by F. Steer … [et al.]; edited by P. Eden; sec. edn edited by S. Bendall (2 vols, 1997).) The entry for William Jordan (II, p. 285) comprises only the reference for his inventory (in which he is described as 'surveior'); there are no details of any surveying commissions that he undertook.

[36] Blagrave's will: PROB 11/118, fo. 188. See *ODNB*, 'Blagrave, John (*b.* before 1560, *d.* 1611)'.

[37] For example, see the views of John Manwood and John Norden reproduced in J. St John, *Observations on the Land Revenue* (1787), App. I and II.

[38] John Norden, 'To the Righte Honorable the Lorde Highe Treasurer of Englande. A Proiecte towchinge the improving of some of his Maiesties forestes, parkes,

The financially straitened monarchs of the early seventeenth century accordingly implemented a policy of disafforestation and enclosure 'by agreement' in several royal forests.[39] In 1632, enclosure agreements were signed by leading tenants of the various manors in and around Duffield Frith.[40] Following enclosure each of the wards would be divided into thirds, one third to be retained by the crown and leased for cash, the other two thirds to be allocated to the legal commoners, this being the usual way for the crown to proceed with enclosure following disafforestation.[41] Prior to enclosure the Frith had been used as common waste to which access was *de facto* unrestricted.[42] Although improvement writers extolled the social and economic benefits of forest enclosure, the commission to enclose Duffield Frith failed to rehearse the usual improving rhetoric, and made no promises of the advantages that would accrue to commoners or commonwealth. It emphasized, instead, the strictly fiscal nature of this project: the Frith was to be 'inclosed and improved for our [i.e. royal] use and benefitt'.[43] In fact, no 'benefitt' ensued for, rather than generating a cash income, when the crown's thirds were leased to Edward Syddenham, esquire, the initial payment of over £2,000 was reimbursed because previously he had lent the king a similar sum.[44] Local responses to the enclosures were unfavourable, surfacing before they were even ratified, and rolling on for more than 30 years.[45] Indeed, William Jordan would probably have declined the task of surveying the Frith in 1633 had he been aware of the stonewalling in which the inhabitants of Duffield had engaged some 40 years earlier when, in 1592, the Duchy had sought information about the boundaries of the Frith. This earlier episode is worth considering briefly since it is indicative of local attitudes towards surveyors and demonstrates that local memories of those boundaries were highly selective.

By the late sixteenth century Duffield Frith was divided into three wards – Duffield (or Chevin), Belper and Hulland – which together covered about 5000 acres in 1633.[46] 'Woodgrounds' (wooded areas) within the wards not only supplied the crown with timber and wood, its main source of income from the Frith, but also provided commoners, both *de jure* and *de facto*, with particularly sheltered and lush areas for animal grazing. The extent of the woodgrounds was not recorded; consequently the absence of fences on the ground, and lines on paper, allowed inhabitants considerable latitude to exploit these spaces. In 1592 the Duchy's attempt to delineate these boundaries met with stubborn resistance from local manorial jurors, who comprised a court of survey, claiming disingenuously that the woodgrounds could not be measured because some areas did not actually contain any

Note 38 *continued*
chaces wastes &c', undated but before 24 May 1612 (Cecil Papers, Hatfield House, Herts., 132, no. 145; microfilm at British Library). This paper is similar to the project that Norden sent to Sir Julius Caesar at about the same time, cited in the previous note.

[39] Crown policy in this regard is discussed in detail in Hoyle, 'Disafforestation and drainage'.

[40] DL 44/1117, includes the final, signed agreements for all three wards.

[41] Hoyle, 'Disafforestation and drainage', pp. 369–70.

[42] Falvey, 'Custom, politics and resistance', pp. 87–89.

[43] DL 44/1117, document 1.

[44] DL 12/31/86, 31 Aug. 1634.

[45] Falvey, 'Custom, resistance and politics', ch. 4.

[46] The measurement is in DL 44/1127, document 2. The medieval Frith had included a fourth ward, Colebrook ward, nearly all of which lay in Wirksworth parish. During the reign of Henry VIII it was granted to the Lowe family; thereafter it was a separate entity. (*VCH Derbyshire*, I, p. 418.) For a detailed study of the medieval Frith, see M. Wiltshire, S. Woore, B. Crisp and B. Rich, *Duffield Frith: history and evolution of the landscape of a medieval Derbyshire forest* (2005).

wood.[47] Even if the extent of the woodgrounds were simply marked out rather than fenced in, or entrenched, the commoners' virtually unlimited usage would inevitably be circumscribed. Foreseeing this, the jury failed to co-operate with the Duchy's officers on three separate occasions. As long as the boundaries remained unmarked except in living memory, they were moveable. Indeed, locals could conveniently forget them, since, as Fentress and Whickham have observed, memory 'is not a passive receptacle, but instead a process of active restructuring, in which elements may be retained, reordered, or suppressed'.[48] This wilful failure to define the boundaries of the woodgrounds was one of several occasions when the commoners of Duffield indicated their preference to retain customs of the forest in their memories rather than to delineate them, either in writing or in markers on the ground, since the fluidity of their customs would be prescribed forever by such inscription.[49]

Nevertheless, at enclosure, by definition, boundaries within the Frith needed to be fixed and marked. The task began in March 1633, when, having procured agreements from the leading commoners in each ward, the Duchy set about identifying the areas to be enclosed and issued a commission to mark out the boundaries of the thirds.[50] Assisted by 'one or more skilfull and experte surveyors or admeasurers of landes', the commissioners were to 'sett out and devide by meetes, stakes and boundes' each ward into three parts as equal as possible with regard to 'value quantitie, quallitie and goodnes of soyle'. The surveyor was to mark out clearly the boundaries of the divisions, along which hedges, fences, mounds or ditches would subsequently be set or dug to fix them permanently. Such an apparently simple task, however, was fraught with difficulties for the Duchy's officers and agents. Indeed, it is clear that from the very start the Duchy anticipated that there would be problems: the enclosure commissioners had been instructed to report anyone who was caught 'fillinge upp of holes, removinge of stakes, stones or other markes wich have been digged upp, sett or placed by the Surveyor' to mark the divisions. Perhaps the Duchy had encountered this form of pre-emptive resistance elsewhere: the explicit instructions certainly suggest painful past experience. No other references to resistance of this kind have been found, either in primary sources or in published studies; nonetheless, the Duchy's commission suggests very strongly that it had been encountered in other forest enclosures. The nightmare recurred at Duffield.

In September 1633 the Duffield commissioners reported that they had met several times in the Frith with William Jordan, whom they had appointed as 'a surveyer and a measurer of ground'.[51] During these meetings the new divisions within the wards had been agreed upon and Jordan, with 'the consent of many of the best sorte of the commoners', had physically set them out. Although the commoners who participated in this process were not identified in the

[47] DL 44/484. The commission is dated 14 June 1592. The names are given of the 23 men who comprised the 'Jury of her maiesties copyholders and freholders of the saide mannour of Duffield'.

[48] J. Fentress and C. Wickham, *Social memory* (1992), p. 40.

[49] See H. Falvey, 'The articulation, transmission and preservation of custom in the forest community of Duffield (Derbyshire)', in R. W. Hoyle (ed), *Custom, improvement and the landscape in early modern Britain* (2011), pp. 65–100.

[50] DL 44/1127, document 1. The commissioners appointed were nearly all the same as those named in the original enclosure commission of 1632 (DL 44/1117), but on this occasion only two local men, Timothy Pusey and Thomas Gilbert, actually implemented the commission.

[51] DL 44/1127, document 2.

report, they were almost certainly among those who had signed the enclosure agreements.[52] These *ad hoc* meetings, it seems, occurred instead of any kind of formal court of survey. Despite encountering various set backs, to be discussed below, Jordan completed the work of surveying all 5000 acres of the Frith in under six months. The detailed records of his survey indicate that although he recruited local men as assistants, Jordan was the only trained surveyor employed at Duffield.[53] The commissioners noted that he had 'sett out and devided every of the said several warde, into three partes' and had transferred the measurements thus obtained onto 'plottes' that he had drawn of the Frith.[54] Just as Jordan used red, green and violet to delineate the different thirds in each ward, so when Braydon was disafforested and enclosed, specific areas were delineated in green, red, blue and brown on the 'Plott' returned by the commissioners there.[55] At Enfield Chase, the boundaries of the new allotments were drawn on a map and subsequently marked on the ground, but it is unclear what form this marking took.[56] Under normal circumstances, a surveyor would simply make holes in the ground to show where the fences, hedges, mounds or ditches marking the enclosure should subsequently be placed. Initially Jordan had proceeded in exactly this way, with the assistance of the father and son both named John Lane but, on riding through the wards, the commissioners found that this work had been sabotaged.[57] The commissioners were therefore obliged to instruct Jordan to 'sett stakes or stones … where he had made holes' because 'troublesome people' had 'filled [them] upp' with earth.[58]

In much the most comprehensive study of the mechanics of early modern enclosure, Nicholas Blomley has suggested that there is 'little evidence that protestors targeted either surveyors or maps', although he does concede that 'the defensive tone of the surveyor's manuals' suggests they were unlikely to be welcomed by the rural poor.[59] Specific instances of harassment are now in fact coming to light as more detailed work on individual forest enclosures is published.

[52] The names of those who signed the original enclosure agreements are recorded in DL 44/1117, documents 4–8; documents 4, 6 and 8 are the signed agreements for the three wards; documents 5 and 7 are rough drafts of the agreements for Belper and Chevin wards. The rough draft for Hulland ward has not survived; only six men signed the final agreement for that ward, including two county magnates, John Curzon and John Gell.

[53] A record in the Duchy court later stated that 'his Maiestie hath paid for the surveye of the said wards threescore pounds to other Surveyours' but there is no other record of these surveyors, or of what they had done. (DL5/32, fo. 229v.) It is Jordan's measurements and plots that were used. Perhaps these payments were made to the commissioners, or even to Jordan's assistants and workmen.

[54] DL 44/1127, document 2; this gives Jordan's detailed measurements and describes his 'plottes'. It is clear from the commissioners' report that the purpose of the plots was to record and clarify the positions of the new boundaries. These plots were drawn up and submitted as a record for the Duchy.

[55] Manley, 'The disafforesting of Braden', pp. 565–67; the map is reproduced, with the coloured boundaries, between pp. 564 and 565.

[56] Pam, *Enfield Chase*, p. 73. Pam implies that the boundaries were drawn on the map prior to them being marked on the ground.

[57] TNA, DL 44/1127, document 2.

[58] Exactly when these activities had occurred is not recorded, but John Lane indicated that it was not until 18 Sept. that workmen were employed in Hulland ward to set stakes as markers in place of the hole. He also implied that similar resistance had occurred in the other two wards, but gave no details. DL 44/1127, document 4.

[59] N. Blomley, 'Making private property: enclosure, common right and the work of hedges', *Rural Hist.* 18 (2007), pp. 1–21. The only evidence that Blomley cites is the harassment of 'a surveyor in Derbyshire'; actually this was William Jordan. (Blomley acknowledges Steve Hindle as his source for the Derbyshire surveyor; his source was my thesis.)

In May 1657 at Needwood, for example, the surveyor George Sargeant and his colleagues, asked for the assistance of 'a doozen or fourteene Horses' (i.e. mounted soldiers), without the protection of whom they could not carry out their survey.[60] Sargeant complained that 'without a partie of horse quartering neere us, we are neither able to secure the forest from continuall depredacions, nor our selves at least from interruption threatened by them'.[61] The opposition at Needwood appears to have been manifested both as damage to the timber and physical intimidation of the surveyors. At Duffield, as well as reporting the 'great wast and spoyle' made of the woods by inhabitants, the commissioners also reported the more subtle technique of in-filling the holes which marked the new boundaries.[62]

In Needwood, when allotments were made to individual commoners, the freeholders of Barton ward, perhaps surprisingly, asked Sargeant to set out their allotments for them.[63] Sargeant asked them to provide their own stakes, personalized with branded marks, and made each man responsible for accompanying the surveyor and noting where his stakes were to be driven.[64] This personal involvement in the process of marking the boundaries was intended to ensure co-operation between the tenants and the surveyor: those who failed to accompany Sargeant 'would find their stakes driven into the least attractive spots furthest from home'.[65] At Duffield, although William Jordan had met with leading tenants to discuss the location of the divisions within the wards, neither the main body of tenants nor the poor commoners who took piecemeal advantage of the benefits of the Frith had been consulted about the new boundaries. Resistance to the enclosure of the wards of Duffield Frith accordingly targeted the physical restrictions that would inhibit customary local access in the future. Whether a more broadly based consultation would have led to a more general acceptance of the enclosure is matter of conjecture, since even then an apparently consensual enclosure by agreement might subsequently unravel.[66]

The additional work of re-digging and staking the boundary holes required more time, more labour and more expense. On 18 September, Jordan employed Francis Johnston and William Underwood to fell trees, make stakes and drive them into the holes in Hulland ward, and left his employees the Lanes to oversee the workmen.[67] Later that morning, Richard Taylor, one of the Duffield commoners asked the workmen to stop setting the stakes in the holes, but they ignored the request. He later returned, accompanied by William and Thomas Webster who were armed with bills and a pitchfork. Taylor once more demanded that the workmen desist

[60] SP 18/155 no. 18, letter from the commissioners of survey, dated 9 May 1657. See Bendall, 'Mapping the English forests', p. 27; Tringham, 'Needwood Forest', p. 32; J. Thirsk, 'Horn and thorn in Staffordshire: the economy of a pastoral county', *North Staffordshire J. of Field Studies*, 9 (1969), pp. 4–5.

[61] SP 18/155/18.

[62] DL 44/1127, documents 2 and 3.

[63] No allotments for individual Duffield commoners were even planned, let alone made.

[64] Bendall, 'Mapping the English forests', p. 28, referring to BL, Ms Stowe 880, fo. 104.

[65] Ibid., p. 28.

[66] See, for example, M. Beresford, 'The decree rolls of Chancery as a source for economic history, 1547-*c*.1700', *EcHR 32* (1979), pp. 1–10; H. Falvey, 'Crown policy and local economic context in the Berkhamsted common enclosure dispute, 1618–42', *Rural Hist*., 12 (2001), pp. 123–58; S. Hindle, 'Persuasion and protest in the Caddington Common enclosure dispute, 1635–39', *Past and Present* 158 (1998), pp. 37–78; S. Hipkin, '"Sitting on his penny rent": conflict and right of common in Faversham Blean, 1595–1610', *Rural Hist.* 11 (2000), pp. 1–35.

[67] The following account is taken from DL 44/1127, document 4.

and all three allegedly threatened them with 'very ille wordes and threates callinge them sorie beggarlie fellowes', thus criticizing them for accepting wages for work detrimental to their own community. Lane sen. intervened, asking that the workmen be allowed to continue. The three troublemakers left, seemingly persuaded.

Later that day, as both Lanes were supervising further work on the boundaries, four women appeared, and not only threatened and reviled the labourers, but also removed the 'meare stones' and flung down the stakes. The women were later identified as Ellen and Grace Webster and Alice Taylor, the wives of the three earlier protestors, and Joan Osbeston, wife of Robert.[68] Although no men acted with them, Thomas Webster was apparently 'standing afar of reedy to asist them'. It is worth clarifying exactly what was happening here. These women were not the original 'troublesome people' who had disrupted Jordan's preliminary work. They were not simply filling in holes but were actively removing stones and stakes that had been set up following the commissioners' subsequent advice to their surveyor. Their actions were evidently part of an on-going process of pre-emptive resistance that was offered long before the physical boundaries of the enclosure were actually erected and was intended to obscure the very outline of those boundaries.[69]

That afternoon a further confrontation occurred between John Lane jun. and Richard and Alice Taylor, and their son, Edward. Before leaving for Belper to inform Jordan of the morning's events, Lane and one of the workmen began resetting some of the stakes that had been thrown down by the women. Seeing the Taylors arrive, Lane mounted his horse and met them on the highway. Husband and wife, armed with a bill and stones respectively, struck him and swore at him. Lane rode on and left the scene, Richard Taylor making as if to throw his bill at the horse and swearing that he would kill Lane. Taylor then turned on the workman, threatening to strike him and slandering both workmen as 'theeves'. Taylor, his wife and the other three women spent most of the following day, 19 September, in Hulland Ward, watching the workmen making stakes. Alice Taylor verbally abused them and their wives but no physical assaults occurred that day on either the men or their work.

The incidents recounted by Lane in his report, dated 20 September, so outraged Duchy officials that, just over two months later, on 28 and 29 November, Richard Taylor and William and Thomas Webster appeared at Westminster to answer for their actions.[70] All three men, it transpired, were legal commoners in the Frith: details of their landholding were noted on the commissioners' report. Richard Taylor was a copyholder, whose land was worth £20–30 per annum; William Webster was a freeholder, with land worth £30–40 per annum; Thomas Webster had recently acquired copyhold land in Hulland and was reeve and headborough (constable) there.[71] This evidence throws valuable light on the debate over the social status of those who opposed forest enclosures. In his wide-ranging study of enclosure riots in the West Country forests, Buchanan Sharp concluded that most of the rioters were 'marginally poor and landless, including artisans' and that, contrary to earlier findings, there was no

[68] Grace Webster was the wife of Thomas; Robert Osbeston was a tailor.

[69] The implications arising from fact that women were removing the markers will be discussed below.

[70] DL 4/85/64, 'Taylor *et al* examined uppon a contempt in Duffeild Frith', Nov. 1633.

[71] DL 44/1127, document 4.

mass participation by yeomen and husbandmen urged on by gentry.[72] These particular conclusions, however, have since been challenged and later work on specific enclosure riots in various landscapes has shown that the social status of participants might vary widely.[73] That the miscreants in Hulland ward were local landholders and included a local officer should, therefore, come as little surprise.

From the interrogatories that were subsequently administered to the three men, it is clear that the authorities construed the harassment of the surveyor, his assistants and workmen by definition as direct opposition to the king since 'the said worke and service [were] for his Maiestye'.[74] Rather than being thereby cowed into submission, however, the Duffield commoners' wily and evasive responses demonstrate that they had been soundly advised. Discrepancies between the two narratives reveal that the Duffield men understood precisely how prosecution for riot might be evaded: indeed, it is clear that they had also received advice on orchestrating the earlier protests. The tone of the men's depositions emphasizes their refusal to be overawed by Duchy officials, and their determination to repulse this attack on their perceived rights. Set alongside John Lane's account, their answers offer a competing narrative of the events in Hulland ward.[75]

In his deposition, Richard Taylor disingenuously claimed that all of the incidents had occurred because Jordan had set out unequal 'thirds' in Hulland ward. Taylor believed that the ward contained 1200 acres and that 400 acres should therefore have been set out for the king, whereas Jordan had told him that he had laid out 490 acres for the king.[76] He and the other commoners had accordingly requested a meeting with the commissioners to discuss this discrepancy. This was why, together with four other men, he had asked the Lanes and the workmen to stop marking the boundaries until the misunderstanding had been resolved. Jordan had indeed made unequal divisions but he was actually following the instructions in the enclosure agreement that the wards should be divided into three equal parts 'respect being had both of the quantity and quallity of the soyle thereof'.[77] Knowing that the land within the wards varied in quality, the commoners, in their negotiations prior to signing the enclosure agreements, had stipulated that rather than exact thirds, differences in soil quality should be reflected in the proportions of the division: the 'thirds' that Jordan laid out in Hulland ward accordingly measured 490, 525 and 604 acres.[78] Jordan had not therefore defrauded the commoners by laying out unequal areas. The Duchy itself, by contrast, had deceived them.

[72] Sharp, *In contempt of all authority*, p. 127. Sharp was questioning the findings of Allan and Kerridge. (Allan, 'The rising in the West, 1628–31'; E. Kerridge, 'The revolts in Wiltshire against Charles I', *Wiltshire Natural History and Archaeological Magazine*, 57 (1958), pp. 64–75.)

[73] For a refutation of Sharp's work, see, for example, D. Underdown, *Revel, riot and rebellion: popular politics and culture in England 1603–1660* (1985), p. 109. For detailed local studies of enclosure riots, see, for example, Falvey, 'Crown policy and local economic context'; Hindle, 'Persuasion and protest'; Hipkin, '"Sitting on his penny rent"'; B. McDonagh, 'Subverting the ground: private property and public protest in the sixteenth-century Yorkshire Wolds', *AgHR* 57 (2009), pp. 191–206.

[74] DL 4/85/64, interrogatory 8.

[75] DL 44/1127, document 4; DL 4/85/64. For the concept of competing narratives, see D. Cressy, *Travesties and transgressions in Tudor and Stuart England* (2000), p. 281.

[76] It is not clear from whence Taylor obtained his figures. Jordan's measurements for Hulland ward are noted below.

[77] DL 44/1117, documents 4, 6 and 8.

[78] DL 44/1127, document 2.

The enclosure agreements had stated that the measured thirds would be allocated by casting lots; the enclosure commission, however, stated that choice of the thirds for the king would be made exclusively by the Duchy.[79] Jordan may even have been instructed to select and mark out the ground for the king during the course of his survey. That the king had been allocated the smallest 'third' was an allocation of some significance, because the divisions took account of the quality of the soil, so it follows that the smallest 'third' in each ward would contain the best quality land. The commoners were well aware of this implication.[80] Taylor further defended his actions by claiming that since none of the workmen had been willing or able to produce evidence of their authority to set the stakes, he had equivalent authority to remove them.[81] With a final flourish, he claimed that neither he nor any of his associates had either abused or threatened those working on the boundary markers but conceded only that four or five women had pulled up the stakes. He named four of them but denied that he, or anyone else, had procured or encouraged their actions.

William Webster's testimony confirmed that of Taylor.[82] Regarding the women, he professed ignorance of either their actions or their words. On meeting them he had asked his own wife to 'goe back with him' but she answered only 'that shee would presentlie followe him'. He denied any knowledge of where the women were going or 'to what purpose', again isolating the women's actions. Thomas Webster claimed that the men's approach to John Lane had been 'in a neighbourlie and freindlie manner'.[83] He too admitted meeting the named women but he was ignorant not only of their actions and words but also of their presence in the ward till he met them 'by chaunce'. He emphasized that they were acting independently of their menfolk; he had not encouraged them either then or earlier to remove the stakes or fill up the holes. Clearly Duffield's inhabitants knew that there was a blind spot in the law regarding the actions of women. Indeed, their actions throughout the whole affair exemplify the popular legalism current in early modern England: a growing participation in, and knowledge of, the law at all levels of society and in all areas of the country, however remote.[84]

[79] DL 44/1117, documents 4–7; DL 44/1127, document 1. Kerridge has argued that the casting of lots for enclosed portions of land was normal practice. E. Kerridge, *Agrarian problems in the sixteenth century and after* (1969), p. 106.

[80] DL 1/370, answer of Robert Mellor *et al.* to the information presented by the Attorney General by the relation of Edward Syddenham esquire, 26 May 1642.

[81] DL 4/85/64, examination of Richard Taylor, 29 Nov. 1633.

[82] DL 4/85/64, examination of William Webster, 29 Nov. 1633.

[83] DL 4/85/64, examination of Thomas Webster, 29 Nov. 1633. For neighbourliness, see K. Wrightson, 'The "decline of neighbourliness" revisited', in N. Jones and D. Woolf (eds), *Local identities in late medieval and early modern England* (2007), pp. 19–49.

[84] See, for example, C. W. Brooks, *Pettyfoggers and vipers of the Commonwealth: the 'lower branch' of the legal profession in early modern England* (1986); id., *Law, politics and society in early modern England* (2008); S. Hindle, *The state and social change in early modern England, c.1550–1640* (2000), pp. 87–93; J. A. Sharpe, 'The people and the law', in B. Reay (ed.), *Popular culture in seventeenth-century England* (1985), pp. 244–70; Wood, *Riot, rebellion and popular politics*; id., *The politics of social conflict: the Peak Country, 1520–1770* (1999).

III

It is now a historiographical orthodoxy that women were active participants in popular protest and a great deal is known about both their likely motives and the reactions of the authorities.[85] Women's involvement in anti-enclosure protest was entirely logical since 'the pasturing of animals such as cattle and sheep was the province of women in the rural sector', and pasturing was directly threatened by many enclosures.[86] It is known, for example, that women were involved in enclosure rioting at Berkhamsted (Herts.), in 1620, because a warrant was issued for five women, 'taken in a late greate ryott in cutting downe certaine pales in that parke', to be taken into custody.[87] Neither their names nor their punishments (if any) found their way into the archive of prosecution. By contrast, in April 1638 at Caddington on the Hertfordshire/Bedfordshire border, Elizabeth Birchmore and Alice Gazeley, together with their husbands and another man, were committed to the Fleet for destroying enclosure fences.[88] On many occasions female participation was encouraged by the 'ambiguous position of women in the eyes of the law and the magistrate'.[89] On several occasions some men apparently tried to appropriate women's supposed invisibility before the law by wearing women's clothing when participating in enclosure riots. In Braydon Forest in 1631, for example, three of the leaders of the riots there wore female apparel. From a distance, such a disguise might fool those attempting to quell the unrest and so avert, or at least postpone, the perpetrators' arrest.[90]

In some respects the pre-emptive strikes in Hulland ward were similar to enclosure protests that occurred in 1604 at Shepshed (Leics.), where female protestors apparently acted on their own initiative. Martyn Bennett has noted that there more than half of the principal activists were women, only some of whom were married to men involved in the disturbances. 'Both the men and the women acted in single-sex teams in a systematic manner. There is no suggestion that the women were working at the behest of the men involved, they seem to have organized themselves and to have provided their own impetus'.[91] In the accusations that he levelled

[85] See, for example, R. A. Houlbrooke, 'Women's social life and common action in England from the fifteenth century to the eve of the Civil War', *Continuity and Change* 1 (1986), pp. 171–89; J. Walter, 'Grain riots and popular attitudes to the law: Maldon and the crisis of 1629', originally published in J. Brewer and J. Styles (eds), *An ungovernable people: the English and their law in the seventeenth and eighteenth centuries* (1980), pp. 47–84, and now repr. in J. Walter, *Crowds and popular politics in early modern England* (2006), pp. 27–66.

[86] M. Bennett, '"And these without number": riot and rough grazing; Shepshed, Leicestershire, 1604' (unpublished paper), p. 8. The account is based on the documents that comprise TNA, STAC 8/219/23. I am very grateful to Dr Bennett for resurrecting this paper for me. John Walter makes a similar case for women's involvement in grain riots (Walter, 'Grain riots', p. 40).

[87] PC 2/30, p. 550. The riots at Berkhamsted are discussed in Falvey, 'Crown policy and local economic context'.

[88] Hindle, 'Persuasion and protest', p. 57. Indeed the two women, with many others, had re-entered the newly-made enclosures in between their first protest and committal to the Fleet.

[89] B. Capp, 'Separate domains? Women and authority in early modern England', in P. Griffiths, A. Fox and S. Hindle (eds), *The experience of authority in early modern England* (1996), pp. 117–145, p. 121.

[90] Sharp, *In contempt of all authority*, p. 105. Christina Langert has discussed at length the concept of cross-dressing during enclosure rioting, although nowhere does she suggest that it might have been done to avoid capture or prosecution. C. B. Langert, 'Hedgerows and petticoats: sartorial subversion and anti-enclosure protest in seventeenth-century England', *Early Theatre*, 12 (2009), pp. 119–35.

[91] Bennett, '"And these without number"', p. 8.

against the female offenders, the landowner at Shepshed, Roger Manners, earl of Rutland, treated them as both *femmes covert* (married women) and as disorderly persons. On the one hand he claimed that they were acting on their husbands' instructions; on the other hand he suggested that they had gone beyond the bounds 'fitting their sex'.[92]

Although events at Shepshed and Duffield emphasize the autonomous involvement of women in enclosure protest, the nature of the prosecution differs. At Shepshed the landowner presented a complaint in Star Chamber accusing the perpetrators of rioting. Interrogatories were subsequently administered to, and answered by, many local people, both men and women.[93] At Duffield, the Duchy court examined only men; the women identified by John Lane were never questioned. The men asserted that Alice Taylor and her associates had been acting entirely on their own initiative, without any prompting from them.[94] The truth of these claims, however, is difficult to gauge. On the one hand, the women themselves may well have chosen to act as they did; on the other, considering the weight of the law that would bear down on the men if they admitted instigating the destruction, it is logical that they would have blamed the women.

The strategies employed by the Duffield men in their depositions demonstrate an awareness of the limitations of the law. At no point did they explicitly voice opposition to the enclosures *per se*, but merely stated that they were unhappy with the amount of land allotted for the various enclosures. Unsurprisingly, they were keen to deny any heated verbal exchanges with, let alone any physical violence against, the crown's agents and their workmen. Rather than deny that any illegal acts had taken place, however, they denied the involvement of any legally responsible persons. They were almost certainly testing the water to see how far the crown was prepared to pursue the matter. Their strategy seems to have been vindicated, since the crown fought shy of investigating to the bitter end. Despite John Lane's identification of the women who had been removing the surveyor's markers, and despite the deponents' admissions that four or five women had indeed done so, the Duchy court failed to pursue them. Indeed, the final outcome of suit against the husbands of three of them is unknown.[95]

The campaign to remove the stones and posts marking out the thirds in Hulland ward could not succeed indefinitely, not least since their boundaries were now recorded on Jordan's 'plottes'. Nevertheless, the erection of the fences – a generic term which might encompass mounds, ditches, hedges, pales or walls, as well as actual fences – encountered continued resistance which dragged on until 1637.[96] In 1642 and 1643 rioters destroyed the enclosures and, despite the thirds coming into the hands of new lessees in 1651, the commoners had access to the whole of the Frith until the early 1660s, when the thirds were re-enclosed by subsequent lessees.[97] Although both legal and physical challenges were mounted, these enclosures became permanent; nevertheless inhabitants retained access to over 3300 acres in the Frith. Indeed, in 1742, Exchequer deponents stated that the remainder of each ward was still 'uninclosed and

[92] Ibid., p. 5.

[93] On many occasions the people of Shepshed acted in pairs and so, technically, could not be accused of riot.

[94] DL 4/85/64.

[95] A search of the Duchy's order book covering 1631–34 (DL5/31) has proved fruitless; perhaps the suit was dropped.

[96] DL 5/32, fos 133r, 215r, 329r.

[97] For the riots in the 1640s, see Falvey, 'Custom, resistance and politics', pp. 199–210; for the leasing of the Frith in the 1650s and 1660s, see ibid., pp. 240–51.

depastured by great flocks of Sheep and cattle by those having right of common' and that cottagers had been permitted to make encroachments.[98]

IV

Having finished measuring and mapping the divisions, William Jordan's work at Duffield was complete. His story does not, however, end there because remuneration for that work was not immediately forthcoming. From the Duchy's records, it appears that Jordan was to have been paid not by the Duchy itself but proportionately by the crown's lessee, Edward Syddenham, and by the commoners, the former paying one third of the cost and the latter two thirds (although the commoners initially claimed that the whole sum should be paid by Syddenham).[99] In February 1636, nearly three years after he had first visited the Frith, Jordan commenced a suit in the Duchy court against Syddenham and the commoners, pursuing them for the non-payment of the significant sum of £45 for his efforts and costs in measuring, 'plottinge' and setting out the Frith.[100] The claims and counter-claims regarding the fees that were made in the Duchy court are tortuous, to say the least.[101]

It was conventional for surveyors to provide their own measuring instruments, while their employers provided the necessary materials such as parchment, oils, ink and colours.[102] Syddenham and the commoners would therefore have been expected to pay Jordan both for his time and his materials. As we have already seen, whereas in the 1600s crown surveyors were expected to pay their clerks and other expenses, in the 1650s disbursements by the surveyors in Needwood and the other forests were met by the Trustees for sale of the Forests. In the absence of any detailed record of Jordan's expenses, we do not know if, like earlier surveyors, he was responsible for the costs of recruiting labour at Duffield. Whether he was only claiming his own fees, at 15*s*. per day, or he was claiming additionally for labourers and messengers when applicable, it is not hard to see how he might have racked up an account of £45 during his employment in the Frith, which probably lasted nearly six months.[103] Orders made by the Duchy court relating to the on-going saga of Jordan's claim can be traced through the court's order and decree books until June 1637, by which time Syddenham had paid at least £12 but the commoners had paid nothing.[104] The matter reappears in the court records in 1640, but by this time the complainant was Jordan's widow, Mary.[105] Far from being sympathetic towards her, the commoners refused to pay her any of the monies that the court had ruled were due to her late husband. Arguing over a technicality, the three Duffield men who were summoned

[98] E 134/18Geo2/Mich1, depositions of Peter Alsop of Chevin ward; John Holbrook of Hulland ward; Laurence Peach of Hulland ward.

[99] See, for example, DL5/32, fo. 310r.

[100] DL5/32, fo. 160v. The actual sum owed is given in DL5/32, fo. 229r.

[101] DL5/32, fos 160v, 212r, 229r, 310r, 327v, 336v.

[102] P. Eden, 'Three Elizabethan estate surveyors: Peter Kempe, Thomas Clerke and Thomas Langdon', in S. Tyacke (ed.), *English map-making 1500–1650* (1983), pp. 73–4; S. Tyacke, 'Introduction', in Tyacke (ed.), *English map-making*, p. 15. When working for the Duchy of Cornwall, Norden was allowed £1 6*s*. per day for expenses with an additional allowance for the tools of his trade. Kitchen, 'John Norden', p. 56.

[103] The commissioners' report does not say for how long Jordan was working in the Frith, but given its size, and the fact that he was the only surveyor, it is likely that he commenced almost immediately. (DL 44/1127, documents 1 and 2.)

[104] DL5/32, fos. 212r, 229r, 310r, 327v, 336v.

[105] DL5/33, fos.431v, 445r, 448v.

to appear claimed that the court had never served them with any order concerning *Mistress* Jordan.[106] Indeed, rather than her action against them for contempt succeeding, she was ordered to pay costs of 20*s*. to one of them and the other two were discharged.

That Mary Jordan had tried to recoup the unpaid fees is unsurprising since the £30 still due from the commoners was a not inconsiderable sum. Furthermore, her husband's probate inventory indicates either that he was not a wealthy man, or (more likely) that he had died whilst away from home.[107] Out of the total inventory value of £4 10*s*. 8*d*., his purse, girdle and apparel were valued together at £3 6*s*. 8*d*. The items that were worth the remaining £1 4*s*. were described as 'the tooles of surveying and all other implementes belonging to his science with some certaine bookes'. The lack of a detailed description of these 'tooles of surveying' and books is disappointing, but Jordan would doubtless have owned some instruments similar to those that Rathborne described in *The Surveyor*: 'the Theodelite, the Playne table, and Circumferentor, … an absolute Instrument, which I call the Peractor, together with … the Decimal Chayne, used only by my selfe'.[108] The paucity of his inventory suggests that Jordan had died whilst on a surveying commission, and, because he had died intestate, it was necessary to value what items he had with him at his death. Although in theory probate inventories valued all of the moveable goods and chattels of the deceased, in practice it is clear that many inventories were only partial records of the deceased's belongings.[109] As a married man, it is hardly likely that Jordan would have owned no household goods at all. Furthermore, had she been on hand when the inventory was made, his widow Mary would surely have insisted that the outstanding debt of £30 from the Duffield commoners was recorded – if only as 'desperate'.

To be sure, this account of the events in Hulland ward in 1633 casts new light not only on subtle expressions of opposition that might be employed against enclosure but also on the role played in that opposition by women. Its main contribution, however, arguably concerns the work of the forest surveyor. The tribulations of William Jordan in the 1630s, and also of the surveyors in Needwood in the 1650s, were probably not uncommon and suggest that work such as theirs was an entirely thankless task. Indeed the vilification of these new professionals is scarcely surprising. In the late sixteenth and early seventeenth centuries the economic pressures of inflation and of a rising population was forcing widespread change in the agrarian economy. As a result of the quest by landowners to increase production and therefore profit, more and more land was being brought into cultivation. Unable to comprehend the actual

[106] DL5/33, fo. 448v, 1 Dec. 1640.

[107] Nottinghamshire Archives, PRSW 65/27a, inventory of William Jordan of Southwell, dated 23 Apr. 1638.

[108] Rathborne, *The Surveyor*, p. 121, introduction to 'the third Booke', 'The exact operation of instrumental dimensions by divers meanes'. Rathborne's book includes illustrations. For other illustrations of various surveyors' instruments see, for example, J. A. Bennett and O. Brown, *The Compleat Surveyor*, published to accompany a special exhibition at the Whipple Museum of the History of Science (1982); J. A. Bennett, *The divided circle: a history of instruments for astronomy, navigation and surveying* (1987).

[109] This point about truncated inventories is not mentioned specifically, but for discussions of the shortcomings of inventories in general see M. Spufford, 'The limitations of the probate inventory', in J. A. Chartres and D. Hey (eds), *English rural society, 1500–1800* (1990), pp. 140–74; L. Orlin, 'Fictions of the early modern English probate inventory', in H. S. Turner (ed.), *The culture of capital: property, cities and knowledge in early modern England* (2002), pp. 51–83. Thanks to Ken Sneath for discussing this problem with me.

causes of the consequent upheavals, inhabitants lashed out at those men whom they saw in their neighbourhood bringing about those upheavals. McRae's analysis of the evolution of the meanings of improvement and of property during the period emphasizes the ambiguous role of the estate surveyor in these processes: an agent of change, one might say, in retrospect, of progress, who was reviled by those who paid the price of that progress.[110] But whereas the estate surveyor defined existing albeit previously fluid boundaries, at enclosure forest surveyors marked boundaries where none had ever existed before. These men encountered obstruction or even physical abuse from those inhabitants whose traditional livelihood was threatened with extinction by enclosure. Like the land surveyors in Ireland, forest surveyors perforce needed to be 'men of activitie, that could leap hedge and ditch, and could alsoe ruffle with the severall rude persons in the country, from whome they might expect to be often crossed and opposed'.[111]

[110] McRae, 'To know one's own'; id., *God speed the plough*.

[111] T. A. Larcom (ed.), *The history of the Survey of Ireland, commonly called the Down Survey, by Doctor William Petty, A.D. 1655–6* (1851), pp. xiv-xvi, cited in Bendall (ed.), *Dictionary of land surveyors*, I, p. 34. To 'ruffle' = contend, struggle (*OED*).

‘Living at their own hands’: policing poor households and the young in early modern rural England*

by Tim Wales

Abstract

Under the Statute of Artificers, the youthful poor could be prosecuted for living out of service. This article explores the implementation of that law in rural England, especially in Norfolk and Essex, and at the contexts in which the fact of living out of agricultural service – frequently in the family home – became an offence to be prosecuted. It traces change over time and discusses the shifting tensions between the priorities of masters, parish officers, the young and their parents over such issues as economic need, the definition of work, and the policing of behaviour. The significance of the prominence of young women amongst the prosecuted in the seventeenth century is explored. The article suggests that the increased, if still patchy, concern with the offence after 1650 forms part of a contest in the redefinition of standards of living in the changed demographic circumstances of the later seventeenth century.

At some point in the early 1660s the landowner and magistrate Robert Doughty of Hanworth recorded his thoughts on the implementation of the Statute of Artificers, the Elizabethan legislation which regulated labour, in his corner of north-east Norfolk. He gloomily reflected on problems which, he concluded, the existing legislation was inadequate to police: one major concern was the problem of young men and women who chose to live out of service.[1] To his mind, the Statute had failed to control the spread of apprenticeships to village trades, drawing in countrymen’s sons who served for less than the statutory term of seven years. Those tradesmen who had not failed worked only three or four days a week, which he saw as the result of glutted trades, although it could plausibly be an example of ‘Saint Monday’, the taking of a further day of leisure to be made up later in the week. They and their journeymen

* The origins of this paper lie long ago in a paper delivered at a conference on child labour at the University of Essex in 1986. Early versions of this paper, explicitly structured around a contrast between pauper apprenticeship and living out of service (‘Work, learning and the fear of God: The English poor law and the young, 1570–1700’ and ‘Child-begging, pauper apprenticeship and service in early modern England’) have been deposited in the library of the Cambridge Group for the History of Population and Social Structure. Versions of this paper have been delivered at the Universities of Reading, London and Cambridge. I am grateful for comments made on these occasions and for the advice and help of Judith Bennett, John Morrill, John Walter and Anne Williams. In quotations, capitalization has been modernized, ampersands converted to ‘and’, and punctuation inserted.

[1] Norfolk Record Office (hereafter NRO), AYL 304/4. The memorandum is one of a number of Doughty’s notes in this file. It is untitled but has in the top left-hand corner ‘5 Eliz c. 4’ (that is, the Statute of Artificers).

chose to 'Spend the beginning of every weeke, if not the Sundayes and holydayes', in alehouses, drawing in 'other mens sons and servants', their evil example occasioning, 'the corrupting, depraving and debauching of all youth'. This line of thought reflected on the corruption of the young in alehouses by the idleness and malign example of tradesmen. A second theme reflected more generally on the opportunities afforded day labourers in agriculture by labour shortage: '(heretofore we had enough for o[u]rselves and others) now they be very scarce, will have great wages, and scarce do one dayes worke in two'.

These two complaints – one about perceived threats to stable employment structures and the proper socialization of the young, and the other about opportunities for higher wages and general stroppiness afforded the labouring poor by changing circumstances – came together in Doughty's discussion of those young women and men who chose alternative means of employment rather than hiring themselves into farm service by the year. Probably significantly, he noted young women first:

> And for houswifry such wenches (or maydes) as are ablest to performe services, because they can by spinning and knitting, gleaning and stealing in harvest, and perhaps by secrett whoredomes all the yeare, make far better earnings then by wages, give over service, and gett into their friends howses and there live at their owne handes. And many that hold their services most part of the yeare, either bargaine att firste to goe away, or els quarrel with their M[istres]s and dames and so breake away in or about harvest, when their service is most needed.

Doughty then turned to young men:

> Our servants neare the coastes of best skill and ablest bodyes, give over service and go to sea, where they make good voyages and best earninges though with other marryners they may in the winter play, smoake and slaver away a great part of all, if not all or more than all, than they get in the summer.

His general conclusion for both young men and women was stark:

> So as now both for husbandry and huswifry, masters, mistresses and dames are brought to that passe they can scarce gett servants to those they can gett they must give great wages and give them, or permit them to take what libertyes they list, And upon any checkques or discontent, they are gone.

Furthermore, 'Single persons begin to give over serving by the yeare, to live by day labour'.

At one level, Doughty is merely engaging in the perennial whinge of the employing classes: that you (literally) just cannot get the servants. But peeling away at the significance of both what he is saying and precisely when he is saying it opens up a host of themes in the relationship between authority and the young in early modern rural England – about tension points between the priorities of local officers and employers on the one hand, and poor householders and their children on the other – which were both perennial and recast by processes of demographic and economic change that were in play from the mid-seventeenth century onwards. It points to the changing ways in which parish officers and magistrates engaged with the family lives of the poor; about the ways in which the laws allowed their sometimes brutal intervention, but also about the limits of their authority.

It is important to emphasize here that the agricultural service of which Doughty was writing was not some marginal category but a central experience in the life cycle of many of the youthful poor (and indeed at times not-so-poor). From work on parish listings between the late sixteenth and early nineteenth centuries, Ann Kussmaul estimated that 'servants, most of whom were youths, constituted around 60 per cent of the population aged fifteen to twenty-four'.[2] It was also a system of labour relations in which the assumed norm was service for a year although contracts – let alone the actions of masters or servants – would often be for somewhat shorter terms. Service involved board and lodging and payment according to age at the end of the year. It was a significant tool for employers trying to negotiate the structure of their workforce against seasonal needs and shifting standards of living, balancing the costs of labour against the need to guarantee its supply. For servants themselves it provided a route for acquiring the skills and savings to set up a household upon marriage. Kussmaul found the most frequent age at entry into service in eighteenth-century settlement examinations to be in the early and mid-teens: she found that 23 per cent of her sample entered service at 13 or 14, and an additional 22 per cent at 15 or 16.[3] Service could, then, encompass the lives of the young poor generally from the early and mid-teens to the late twenties and exit into marriage.[4]

When he referred to servants out of service, Doughty was talking about a legal offence under the Statute of Artificers of 1563, an offence which, with its medieval predecessors, can be seen being policed with varying degrees of rigour from the mid-fourteenth to the mid-eighteenth century. It was part of a package of policies concerned with setting wage rates and policing master-servant relations.[5] It should be emphasized that much of what follows is less about innovations in policy and more about the enforcement of longstanding statutory measures in changing contexts. It should also be emphasized that this paper is about policing rural service. The chronology and meaning of the offence was significantly different in, say, London, Norwich or Southampton, as the offence was used as a weapon in the response to rapid urban growth in the decades around 1600.[6]

The Statute of Artificers of 1563 laid down various conditions for compulsory service. With some oversimplification, these were: all single persons between 12 and 60 (with some property and trade exemptions) could be compelled to serve in agriculture; all single persons under 30 could be compelled to serve in their trades, and all unmarried women between 12 and 40 could be compelled into service.[7] In the clarifications provided in Nelson's JP's manual of 1718, single persons under 30 could be compelled to serve in husbandry, whilst the broader category of

[2] A. Kussmaul, *Servants in husbandry in early modern England* (1981), p. 3.

[3] Ibid., pp. 70–1.

[4] Ibid., pp. 70–93.

[5] For the late medieval enforcement of the Statute of Labourers, see especially L. R. Poos, 'The social context of Statute of Labourers enforcement', *Law and History Rev.*, 1 (1983), pp. 27–52 and J. M. Bennett, 'Compulsory service in late medieval England', *Past and Present*, 209 (2010), pp. 7–51. J. Whittle, *The development of agrarian capitalism: land and labour in Norfolk, 1440–1580* (2000), pp. 224–304, is now the most important work on the sixteenth-century context. For a wide-ranging survey of labour policy after the Statute of Artificers, D. Hay and P. Craven (eds), *Masters, servants and magistrates in Britain and the Empire, 1562–1955* (2004).

[6] P. Griffiths, *Lost Londons: change, crime and control in the capital city, 1550–1660* (2008), pp. 134, 456; A. M. Froide, 'Marital status as a category in early modern England', in J. Bennett and A. M. Froide (eds), *Singlewomen in the European past, 1250–1800* (1999), pp. 239–44; P. Crawford and S. Mendelson, *Women in early modern England* (1998), pp. 96–7.

[7] 5 Eliz., c. 4, clauses 5, 3, 17.

menial servants encompassed all single persons under 30 and all unmarried women between 12 and 40: as a model warrant Nelson provided put it, 'a person of able body and not having any visible means to maintain herself but at her own hands', the same phrase which Doughty also deployed, and a highly suggestive one.[8] One of the most powerful ways in which the social order of early modern England could be conceptualized was the language of callings, placing householders in the hierarchy according to the means whereby they secured their livelihood, whether it be by their estates, by their trade or (for the poor) by their 'hand labour'.[9] To describe the youthful poor as 'living at their own hands' (or more rarely, but even more evocatively, 'living at loose hand') was to describe them as outside this ordered world of householders living according to their vocation.[10] In such a world, the offence was that these poor 'live idley at their own handes, and out of service'.[11]

A central concern of early modern authority was how to discipline the perceived vices of the young through the authority of a master. Forcing the young to be servants also served to maintain the supply of labour. (The Statute of Artificers was born in the period of labour shortage which followed the influenza epidemics of the 1550s.[12]) Living out of service was in both theory and practice an offence where the youthful poor of both sexes denied their obligation to work in a structured and disciplinary context. The enforcement of the Statute was one of a number of resources available to local officers for policing the households of the poor in place by the early seventeenth century. It needs to be seen alongside a repertoire of policies which dealt with different stages of childhood and youth, from children too young to maintain themselves, through the dangerous teens and the twin problems of inadequate socialization and the burden children placed on their parents, to concern with the moments at which youth gave way to social adulthood. Preventing marriages among the poor, and controlling settlement to prevent or monitor newly-weds setting up home in your parish, were attempts to police the boundaries between youth and adulthood, and head off the creation or settlement of young families which within a few years might themselves become families 'overburdened with children'.[13] In targeting vagrancy, the authorities were targeting the mobile, masterless, and again largely youthful poor.[14] The deployment of these policies varied over time and place, according to local context and broader economic and demographic trends.

Doughty's complaints called upon some very familiar early modern themes. The economic

[8] W. Nelson, *The office and authority of a justice of peace* (1718), pp. 44–53 (the warrant quoted is on p. 51).

[9] For the language of labour, see A. Shepard, 'Poverty, labour and the language of social description in early modern England', *Past and Present* 201 (2008), pp. 51–95, esp. 63–5.

[10] NRO, NAS 1/1/2/60/5, constables' return, Bunwell, for 'loose hand'.

[11] This particular variant of the phrase is lifted from a printed Kentish quarter sessions order of 1693, BL, Add. Ms. 45296, fo. 116r.

[12] F. J. Fisher, 'Influenza and inflation in Tudor England' *EcHR* 18 (1965), p. 128; D. Woodward, 'The background to the Statute of Artificers: the genesis of labour policy, 1558–1563', *EcHR* 33 (1980), pp. 32–44.

[13] For instance, in 1630 the inhabitants of Hempton protested to the Norfolk quarter sessions: they were already 'a towne of great povertye and much surcharged', yet Francis Randoll was putting up in a chamber, 'onn Fauxe … a very poore man havinge a wyfe and onn child alredye, and beinge bothe yonge people are lyke to increase o[u]r charge'. Norfolk RO, C/S 3/28A.

[14] K. Wrightson, *English society, 1580–1680* (1982), pp. 166–7; K. Wrightson and D. Levine, *Poverty and piety in an English village: Terling 1525–1700* (1979), p. 133; W. Hunt, *The Puritan moment: the coming of revolution in an English county* (1983), pp. 64–84.

independence of the young from the discipline of the master is threaded into a vision of youthful immorality. But his account points to the complexities about what independence from the economic and social authority of a master meant. When he speaks of them getting 'into their friends howses', he is almost certainly using the early modern definition of 'friend' as close relation or parent. Though some contemporary complaints were broadly or individually about the young living by themselves or together in lodgings, many seem to have been, both at county (magistrates) and parish (local officers) levels, about youths living with their parents. These were frequently, although far from exclusively, about young women. Doughty's complaint here, then, is about the young *at home*.

Connected with this was Doughty's concern about the types of work they were doing. The choices of the young fitted very well into the makeshift economy of poor households, but not into the priorities of farmers who wanted workers throughout the year and especially a guaranteed labour force at the peak time of harvest. It would be difficult to argue that fishing was some alien intrusion into the economy of north-east Norfolk; similarly if one strips away Doughty's more feverish fear of sexual disorder, women are left spinning and knitting – essential to the booming New Draperies of East Anglia – and gleaning, a longstanding customary harvest right, and its feared twin, stealing in harvest time. The fishing and textile industry which Doughty abhorred were sources of joy to Daniel Defoe 60 years later. He praised the fruitfulness and fertility of the country between Cromer and Norwich, but concluded that 'that this part is so entirely given up to industry, that what with the seafaring men on the one side, and the manufactures on the other, we saw no idle hands here, but every man busie on the main affair of life, that is to say, getting money'.[15] Even in Doughty's day, this was an area able to support strikingly high levels of exempt poor – over 50 per cent of householders – without, apparently, a corresponding heavy level of pauperism.[16]

The opportunities provided for the youthful poor in later seventeenth-century Norfolk, part of the increasing diversification and complexity of the early modern economy, provided one point of tension. But the precise timing of Doughty's complaint in the early 1660s is also significant. After more than a century of population growth, England's population of some 5.3 million declined between the mid-1650s and the mid-1680s by almost 8 per cent, and thereafter rose only modestly until the mid-eighteenth century.[17] That decline came after the heavy losses of the Civil War through death and out-migration, and with the pull of towns in the late seventeenth century.[18] As an employer, Doughty had cause to mourn that the once plentiful supply of day labourers in an overstocked labour market had ceased, making employing servants more attractive, both to guarantee a work force and try to keep employment costs down.

[15] D. Defoe, *A Tour thro' the whole Island of Great Britain*, ed. G. D. H. Cole (2 vols, 1927), I, p. 72.

[16] Calculated from TNA, E 179/154/697, Hearth Tax roll, 1672, and E 179/335–7, Norfolk Hearth Tax exemption certificates. For comparison with overseers' accounts, noting the low levels of pauperism in the villages (and significantly higher in the market towns), see T. Wales, 'Poverty, poor relief and the life-cycle: some evidence from seventeenth-century Norfolk', in R. M. Smith (ed.), *Land, kinship and life-cycle* (1984), pp. 357–8.

[17] E. A. Wrigley and R. S. Schofield, *The population history of England, 1541–1871: A reconstruction* (1981), esp. chs 7 and 10.

[18] For the possible death-toll in England, see I. Gentles, *The English Revolution and the wars in the Three Kingdoms, 1638–1652* (2007), pp. 432–9. M. Braddick, *God's fury, England's fire: A new history of the English Civil War* (2008), pp. 397–401, also suggests the opportunities provided for the enlisted.

Doughty's private thoughts were echoed by a number of county benches: for instance, Wiltshire in 1655, Cambridgeshire in 1664, Kent in 1682 and 1693 and the North Riding of Yorkshire in 1681.[19] To the Hertfordshire Bench in 1687, orders to reinforce the Statute of Artificers (which included draconian penalties against workers' combinations) portrayed farmers trapped in a squeeze between diminished agricultural profits and the demands of servants for higher wages and more expensive diet (an intriguing claim as Kussmaul has plausibly argued that in a period of rising real wages, providing food to in-house servants was a way of cutting the cost of labour):

> Whereas the licentious humours of some servants have prevailed so far upon the lenity and good nature of their masters, that they have advanced the charge of their wages and the expence of their diet above the rents of their masters' farmes; and to heighten this grievance they have been soe exorbitant in their severall services, that they will not worke but at such times, and in such manner as they please; and when their worke is most necessary, they oftentimes leave the same, if not their services; all which unreasonable and unlawfull doeings are become the generall complaint of the inhabitants of the county, and in all probability will utterly ruine the husbandmen, if some effectuall course be not taken to prevent theis growing mischiefes.[20]

This late seventeenth-century concern has long been known, since the pioneering works of Tawney and Kelsall on the Statute of Artificers.[21] It is a trend supported by the, admittedly problematic, evidence of court records in both Norfolk and Essex.

In what follows I shall look at what can be said, very provisionally, about trends over time. I shall then contrast the very patchy campaigns against living out of service with the more concentrated assault on poor families in the campaign driven by Charles I's Book of Orders. Building on this, I shall focus on the ways in which the offence of living out of service illuminates tensions between authority and the priorities of the poor, looking especially at how far young women were targeted. I shall reflect on the apparent anomaly that fears of the young living out of service were at their sharpest when apparently the young were increasingly going into service after 1650. Finally, I shall argue that, when set within the context of other aspects of the Statute of Artificers and changes in poor relief, one can see the post-Restoration concern with living out of service as part of a reshaping of social relations.

[19] E. Bland, P. A. Brown and R. H. Tawney (eds), *English economic history: select documents* (1919), p. 360; Cambridgeshire Archives (hereafter CA), Q/SO1, unfol. (Easter 1664); D. C. Coleman, 'Labour in the English economy in the seventeenth century', *EcHR* 8 (1955–6), p. 290; BL, Add. Ms. 45296, fo. 116r; J. C. Atkinson (ed.), *Quarter sessions records* (North Riding Record Society, 9 vols, 1884–92), VII, pp. 48, 51.

[20] W. Le Hardy (ed.), *Hertfordshire county records: calendar to the sessions books, sessions minute books and other sessions records, 1658 to 1700* (1930), p. 405 (part of general order for regulation of wages and employment, pp. 400–8); Kussmaul, *Servants in husbandry*, pp. 101–3.

[21] R. H. Tawney, 'The assessment of wages in England by the justices of the peace' (first published in 1913 in *Vierteljahrdcrift fur sozial – und wirtschaft-geschichte*) and R. K. Kelsall, *Wage regulation under the Statute of Artificers* (1938), both conveniently reprinted in W. E. Minchinton (ed.), *Wage regulation in pre-industrial England* (1972). Both essays briefly deal with the policing of living out of service as a complementary aspect of their concern with wage assessment. See also M. Roberts, '"Words they are women, and deeds they are men": images of work and gender in early modern England', in L. Charles and L. Duffin (eds), *Women and work in pre-industrial England* (1985), pp. 122–81.

I

First, then, to chronological trends. Jane Whittle's work on Norfolk has shown the policing of service remained an important concern at quarter sessions in the mid-sixteenth century, but with a striking falling-off after 1563.[22] In the early seventeenth century, the offence was of only slight concern to the local worthies sitting on the county's hundredal juries, who presented regulatory offences at quarter sessions. In Restoration Norfolk the modified system of presentment – by the chief constables of hundreds from the returns made by parish constables – may have produced only a small crop of prosecutions, but it was one of the four main offences (the others were unlicensed alehousekeeping, religious nonconformity and failure of the parish constables themselves to make their returns).[23] In Essex, where the earlier evidence is not unproblematic, the offence declined in significance over the late sixteenth century.[24] William Hunt found a peak of 663 people presented at quarter sessions for living out of service in the decade 1571–80, admittedly in part a function of the inclusion of high constables' returns of their statute sessions which later, probably significantly, disappear from sessions rolls in Essex (as they also did in Norfolk), and which may have inflated numbers by conflating the registration of those fit to be employed alongside those to be presented for not living in service. In fact, Emmison, in his survey of high constables' petty sessions, found very few men reported for 'working at their own occupation' or persons 'out of covenant' after 1574. In the 1590s a mere 23 were presented, and though 124 were presented in the first decade of the seventeenth century, between 1620 and 1650 a mere 20 cases were prosecuted. By contrast, Jim Sharpe's work shows little concern with the idle and out of service at quarter sessions and assizes before 1640, but finds them to be much more significant after the Restoration, with some 200 presentments at assizes between 1670 and 1674. Peter King found the offence still coming before the Essex courts in the mid-eighteenth century: there were 32 indictments to force unmarried people into service between 1748 and 1753, but thereafter decline, with only three cases – the last three – between 1754 and 1757. The pattern for the seventeenth century – especially after 1660 – marries well both with the timing of county bench orders and with the broad demographic pattern; the sixteenth-century pattern also does, but rather more problematically. In practice levels of presentment of those living out of service in the countryside seem to have generally moved in line with periods of labour glut and labour shortage, being lower when labour was more plentiful and higher when it was scarcer.

Those trends need, however, to be qualified: these were offences which could be – and almost certainly most often were – dealt with outside these courts. In Kent, Wingham petty sessions

[22] Whittle, *Agrarian capitalism*, pp. 275–96, esp. 278–82.

[23] These generalizations are based on the Norfolk quarter sessions rolls, 1601–1701, NRO, C/S 3/boxes 14–58 (excluding boxes too fragile to consult).

[24] The overall trends in Essex are derived from Hunt, *Puritan moment*, pp. 64–5; F. G. Emmison, *Elizabethan life: home, work and land* (1976), pp. 147–64; K. Wrightson, 'Two concepts of order: justices, constables and jurymen in seventeenth-century England', in J. Brewer and J. Styles (eds), *An ungovernable people: the English and their law in the seventeenth and eighteenth centuries* (1980), Tables 2 and 5, pp. 302, 305; J. A. Sharpe, *Crime in seventeenth-century England: a county study* (1984), pp. 45, 197–8 and tables, pp. 183–4. King's figures are reported in K. D. M. Snell, *Annals of the labouring poor: social change and agrarian England, 1660–1900* (1985), p. 100.

ordered ten people to get a service between 1706 and 1709; Malling, 15 between 1749 and 1752.[25] A quarter of the 66 committals to the house of correction made by the Suffolk JP Devereux Edgar between 1700 and 1716 were for idleness or refusing to go into service.[26]

At a local level the offence can appear more significant in the early seventeenth century than would appear from quarter sessions. On 5 January 1624 the town meeting of the hard-pressed weaving centre of Braintree in Essex ordered, 'Notice to be given to suche as keepe their children at home with them out of service, that they put them abroad to service presentlie, or else to attend the justices when they come to town'.[27] On top of this order, between 1619 and 1634 at least 17 people were dealt with who were out of service.[28] But in Braintree this concern was only part of a broad approach which included binding out pauper apprentices and placing poor children with other families or in the local hospital.

The 1630s also present a varied picture. The evidence of presenting juries at Norfolk quarter sessions virtually ignoring the offence needs to be balanced by evidence of local magistrates in their divisions pursuing those living out of service. The Book of Orders issued by the Privy Council in 1631 embodied a three-pronged approach towards the young: pauper apprenticeship, vagrancy and labour law.[29] It was responded to by magistrates in their divisions in the light of local anxieties. One group of Norfolk magistrates in 1631 sent to the house of correction 'divers young women unmarried (that have had bastards) and others liveinge idly out of service, and refusing to attende the petty sessions (where masters are)', opining that, 'by that example caused manie for feare to seeke out services who beinge growne too bigg for apprentizes lived at large, likely to gett an habitt of laziness or to burthen the parishe with bastardie, a disorder now aboundinge'.[30]

An extreme response came from a Somerset division in April 1634, when the JPs reported their activities over the past six months: 140 'younge people [were] enforced to take Maisters', 16 servants able to take masters were placed; 20 people were committed to the house of correction for not taking masters, 21 covenant servants refusing to live with their masters or who had run ran away from them were punished. They also reported six parents for refusing to suffer their children to go to service (an ambiguous phrase here that could mean either service or apprenticeship), and one man 'that hath meanes that suffer[s his] children to go abegging'.[31] Yet this return is striking because it is so exceptional. It hints at what could be achieved by a sharp implementation of the law, but it makes most sense as a particular reaction to the licence perceived to be afforded the young at churchales and wakes by Charles I's Book of Sports, which had been issued a few months earlier and was itself the culmination of disputes within the county.[32]

However, living out of service generally came very much third to other priorities in the 1630s. Cambridgeshire magistrates in 1632 frankly admitted that:

[25] N. Landau, *The justices of the peace, 1679–1760* (1984), pp. 215–17.

[26] J. Innes, 'Prisons for the poor: English bridewells, 1555–1800', in F. Snyder and D. Hay (eds), *Labour, law and crime: an historical perspective* (1987), p. 85.

[27] F. G. Emmison (ed.), *Early Essex town meetings: Braintree, 1619–36, Finchingfield, 1626–34* (1970), pp. 23–4.

[28] Calculated from ibid., pp. 1–96.

[29] B. W. Quintrell, 'The making of Charles I's Book of Orders', *English Hist. Rev.* 95 (1980), p. 569.

[30] TNA, SP1 6/197, fo. 22r.

[31] TNA, SP 16/265, fo. 138 r–v.

[32] T. G. Barnes, 'County politics and a puritan *cause célèbre*: Somerset church ales, 1633', *Trans. Royal Historical Society*, 5th ser., 9 (1959), pp. 103–22.

> For the statute of laborers, retayneinge of servants and orderinge of wages, we have taken it into our consideracon, but have perfected nothinge, the care of the poore and puttinge forth of apprentices hath imployed soe much of our tyme.[33]

Although the constables of Depwade Hundred in south Norfolk, for instance, presented at least 44 people over the course of the early 1630s for living out of service, well over half of these came from three presentments from two villages; a number of constables simply denied that were there were any living out of service in their parish. And when Carlton Rode in one return listed ten young men and women fit to go to service, the constables at the same time recorded 31 children fit to be apprenticed, each with their age given. In early 1630 the constables of Bunwell listed 14 women and men who went at their own hands, but 44 poor children fit to be bound apprentice.[34] Even more indicative of local priorities is the return of the constable of Forncett St Peter in January 1633: he carefully listed the eight children who were fit to be apprenticed, but then sweepingly and vaguely reported that, 'We have many single persons live out of service with there poore parentes able of body fitt for service': hardly the presentment of offenders, rather a bland statement of fact.[35]

II

Living out of service was, by and large, an offence in the 1630s which, so far as it was an seen as an issue, was piggy-backed onto other more pressing preoccupations. The authorities' concern in the 1630s with vagrancy – the young out of any place – and pauper apprenticeships, at least initially, met with a responsiveness on the part of JPs and parish officers in a stressed economic and demographic context. Pauper apprenticeships reflected the familiar theme of concern with the socialization and discipline of the young, getting them under a master whilst they were still seen as tractable. It was also a policy which could command local support – at least in its early years – because it spoke to the problem of the poverty of poor households in the straitened circumstances of that decade. In the context of demographic increase driven by fertility, of declining real wages and the problem of households overburdened with children, even children who could perhaps contribute something to their upkeep but by no means all, the option of decanting children from their parents' home into those of their masters was one which could command local support.

Formally pauper apprenticeship covered the age range from seven to 16. In Depwade it was rarely applied to those under ten, with a bunching in the early teens; whatever the precise ages it hinged on a particularly problematic age group, more cost than advantage, because of their limited earning potential. Apprenticing poor children might also serve to reduce the potential commitment of parish relief to households made indigent through the burden of children whilst also providing an alternative form of authority and work. It highlighted the ambiguous place of poor parents: were they honest parents maintaining their children as best they could or were they rather maintaining their children in habits of idleness?

[33] TNA, SP 16/216, fos 76v–77r, quoted in E. M. Leonard, *The early history of English poor relief* (1900), pp. 359–60.

[34] NRO, NAS 1/1/2/75, 1/1/2/60/5.

[35] NRO, NAS 1/1/2/100.

The ages for pauper apprenticeship and compulsory service overlapped. In practice, such implementation of compulsory service as there was in the 1630s – and indeed later – shared with pauper apprenticeship an attitude to poor parents which veered from the ambiguous to the downright negative. Thus in 1634 JPs in East Norfolk complained about masters who had been making private contracts of service unregistered by petty sessions:

> by delusion to take children from their parentes seemingly to be their servantes to shadow idleness, and after such reteinders have permitted them to retourne to their parentes again whereby many inconveniences have ensued, as by junkettinge at their parentes howses in the neight time being poor people and other idle meeteings at unseasonable times, whereby many maid servantes have been gotten with childe and other mischeivous actes committed.[36]

However, the offence of living out of service but would seem to have been targeted largely at a slightly older age group, as implied by the careful recording of ages for apprentices in Depwade and the total silence about ages for those living at their own hands. They were, as noted above, those grown too big for apprenticeship. The campaign for pauper apprenticeship was sweeping, and cut deeply into the families of the poor. Parental hostility was reported from a number of counties: 'parents … not willing to leave their children, though they have not meat to feed them at home', according to the Lord Keeper in 1635.[37] In the early 1720s, when pauper apprenticeship lacked the intensive drive and attack on poor labouring households of the 1630s, Thomas Hadley of Banham (Norfolk), a husbandman and chimney-sweep who was poor enough to be living in the parish almshouse, chose to go to the house of correction rather than let the overseers bind out his son.[38] At stake was the identity of the labouring poor as parents, challenging their ability to maintain their children and to set them forth into the world of employment. It was also about a challenge to a less structured world of work, where spinning, gleaning, gathering food more generally, stone-picking and local begging could be combined with other household tasks. As we shall see, these are also themes to be found in concern with living out of service.

Pauper apprenticeship in the 1630s also needs to be set in the context of the character of poor relief. In Norfolk rate-based parish relief developed very rapidly after the statute of 1598. In many parishes it took on almost immediately or at least by 1620, and had evidently spread across much of southern and eastern England, and well beyond, by the 1630s. But, through

[36] TNA, SP 16/281, no. 83 (fo. 220r).

[37] The charge of Lord Keeper Coventry to the Assize Judges, 17 June 1635, J. Rushworth (ed.), *Historical collections: the second part containing the principal matters which happened from the dissolution of the Parliament … until the summoning of another Parliament* (1721), pp. 296–97.

[38] NRO, DEP/53: Colby v. Leech, Deposition of Thomas Hadley. There is very little on pauper apprenticeship in the century after the Book of Orders, and nothing which adequately ties together the experience of the 1630s with what came after. P. Sharpe, 'Poor children as apprentices in Colyton, 1598–1830', *Continuity and Change*, 6 (1991), pp. 253–70, is an important and valuable exception. My own reading of the Norfolk materials is that after 1660 it was a low priority for parish officers, except for when dealing with orphans. What is striking about Doughty's paper, discussed at the beginning of this article, is that, especially when compared with his predecessors a quarter of a century earlier, he is almost wholly uninterested in the question of pauper apprenticeship. He mentions the Poor Law only in passing as another statute which covers apprenticeship but he is only really concerned with the implications of private apprenticeships for trades, service and labourers.

a combination of the continuing vitality of informal relief and the lack of political will to shift more towards the parish, formal relief and neighbourly charity at the house door seem to have co-existed until a decisive shift, probably in the late 1640s and 1650s, but which is to be found to have happened by the later seventeenth century, by which time formal parish relief had taken the dominant place in the relief of the poor. After 1650, with an ageing population structure, poor relief was easier to delimit to the elderly poor and the widowed until the closing years of the century when a further ratcheting up of relief evidently widened it to a broader group of the poor. In the late seventeenth century, the parish was to take over the predominant share of relieving the poor: it monopolized the relief of the pauper, whilst in many areas demographic and economic changes served to lessen the need for relief and charity for young families whilst rendering less problematic questions of defining who (and for how much) was needing relief.

This picture applies most clearly to lowland counties such as Norfolk and Hertfordshire. As yet we know too little about other areas, though the pattern in upland and heavily urbanized areas is likely to be rather different. Before 1650, the same level of commitment would have demanded a closer attention to the problem of another group of the conventionally deserving, male-headed families overburdened with children.[39] Tolerated local begging by young children was one response to their poverty; pauper apprenticeship, which simply removed poor children from their parents' households and stigmatized those who objected, was another.

In this context magisterial concern with the vicious potential of these older youths living at home was blunted by the reality of labour glut. 'We have manie young people w[hi]ch live out of service by reason of the multitude of them, there not being services for them, but worke is provided for them in their parishes', noted the justices of West Norfolk in March 1638.[40] Living out of service, made an issue for magistrates and constables by its place in the Book of Orders, was one leg of the policy for disciplining the young into ordered households. As such, it chimed in to a degree with local anxieties. But it fell between the contradictory pull of two forces: the desire for order and the actual labour requirements of employers. Older youths compelled to seek services in 1630s would have been looking for masters in a labour market that was not only glutted, but also distorted by the compulsory billeting of apprentices.

From the mid-1650s, the constant concern with the social and moral discipline of the household fused with the economic concern of labour shortage. In Kent in 1682, the Bench inveighed against young men and women who avoided a yearly hiring and preferred to go into service for only part of the year, thereby 'getting a habit of idleness, laziness and

[39] For the period before 1690, Wales, 'Poverty, poor relief and the life-cycle', pp. 351–404, esp. pp. 355–400; W. Newman Brown, 'The receipt of poor relief and family situation; Aldenham, Hertfordshire, 1630–1690', in Smith (ed.), *Land, kinship and life-cycle*, pp. 405–21; T. Wales, 'The parish and the poor in the English Revolution', in S. Taylor and G. Tapsell (eds), *The nature of the English Revolution revisited* (2013), pp. 53–80. J. Kent and S. King, 'Changing patterns of poor relief in some English rural parishes, *c*.1650–1750', *Rural Hist.*, 14 (2003), pp. 119–56, presents evidence of a shift in relief in rural England in the late 1680s and 1690s as it was increasingly targeted at labouring families rather than the widowed and aged, identifying increasing levels of both regular and casual payments. L. A. Botelho, *Old age and the English poor law, 1500–1700* (2004), pp. 59, 137–9, suggests a move away from the aged, and stronger evidence of this is to be found in an unpublished paper by Richard Smith on early eighteenth-century Kent (I am grateful to him for me providing me with a copy of this paper).

[40] TNA, SP 16/385, fo. 60r.

debauchery'.[41] When the Cambridgeshire Bench ordered all unmarried able-bodied persons who could not maintain themselves but by their labours into service, their argument was framed in terms of such young impoverishing those with whom they lived, competing on the labour market with established households, and picking up habits of idleness.[42]

III

Broad economic and demographic trends may explain why the offence looms larger after 1650 than before, and here it is significant that some of the best evidence comes from Norfolk and Essex, two counties where a thriving textile industry offered opportunities, especially for young women, to earn money from spinning. The broad trends do not, however, necessarily explain the individual circumstances underlying presentment. Economic and demographic trends go far to explain the greater prominence of prosecutions after 1660. But to explain who was prosecuted – and why some were prosecuted and many not – we need to look at the assumptions about the household and behaviour which created points of conflict. Living out of service had a useful flexibility for local authorities. In August 1665 Robert Doughty granted a warrant against John Welden, who 'live in the town house with women with whom he is suspected to be incontinent being about 21 and fit for service, forthwith to provide himself a service and abiding elsewhere as he would avoid Bridewell, where he will find both'.[43] Also in Restoration Norfolk John Hayward, 'a younge lusty fellow fitt to goe to service', found himself evicted from his house for his combination of insubordination and illegally setting up a cottage on the common. An order from the Cambridgeshire Bench ordering five young women of Soham in 1667 into service might well have been a response to a recent riot.[44] In March 1670 the one man and four of the six women presented for not living in service by the constables of Brentwood, Essex, were also presented for having failed to attend the last three parish communions.[45]

Most of this concern about the young out of service was apparently about those who remained at home; much of it – though by no means all – was about young women. Certainly lodgers – especially young women lodgers – could be the target of complaint or presentment. In Bradford, Yorkshire, in 1687 the court leet wove together social and sexual fears of independent women with the competition for labour between agriculture and the textile industry: 'many young women, healthful and strong combine and agree to cot and live together without government and refuse to work in time of harvest and give great occasion for lewdness'.[46] In Bunwell, Norfolk, in 1630, one of those living at their own hands was Katheryne Sherwyne, 'who keepeth scandalously at one Jessye Lyncolns'.[47] In April 1685 the constable of Wanstead, Essex, presented both men and women who were both lodgers and who lived at their own hands.[48]

[41] Coleman, 'Labour', p. 290.

[42] CA, Q/SO1, unfol. (Easter 1664).

[43] J. M. Rosenheim (ed.), *The notebook of Robert Doughty, 1662–1665* (Norfolk Record Soc., 54, 1989), p. 61.

[44] E. M. Hampson, *The treatment of poverty in Cambridgeshire, 1597–1834* (1934), p. 55.

[45] TNA, ASSI 35/112/9: constables' presentments.

[46] J. James, *The history and topography of Bradford* (1841), p. 121.

[47] NRO, NAS, 1/1/2/60/5.

[48] Essex RO, Q/SR 447/14, petty constables' presentment, Easter quarter sessions 1685 (from the Essex RO online catalogue, SEAX).

In both the orders and individual presentments from Braintree in the 1620s, Norfolk in the 1630s and Essex in the 1670s, those who lived at home often loom large. (Co-residence with parents is either explicitly stated or implied through shared surnames.) As well as Doughty, one might cite, for instance, the Wiltshire order from 1655: 'young people, both men and maids, fitting for service, will not go abroad to service without they may have excessive wages, but will rather work at home at their own hands'. Unless their parents were 'of ability to keep them', they were instructed to go into service.[49] In 1681 the North Riding officers explicitly directed their order against the young living at home.[50] Or one might cite – to take Essex examples – individuals such as the sons of Widow Cranford, in 1621, or the daughters of Howell, Minnom and Stanton, in 1630 (all from Braintree); Mary, Susan and Sarah Holding from Dedham, in 1670, 'living out of service idly and wantonly in their father's house'; Ann Cobb from Ulting, in 1672, out of service and living with her widowed mother Grace.[51] In 1671, at Purleigh, Anthony Franke was presented for not letting three of his daughters go to service, whilst at Chrishall the son and two daughters of Widow Tabitha Gaure had not provided themselves with services despite being warned to do so.[52] It is suggestive that in the bloated pit village of Bedworth, Warwickshire, in 1674, out of 53 presented as single people, fit to go into service and of evil behaviour and leading an idle life, there were nine clusters of two or three people sharing a common surname, 20 people in all.[53] In Carlton Rode, Norfolk, in the 1630s, there were two groups of sisters amongst the nine women and a single man presented as living at loose hand and fit to go to service, the mother of three of them living in the town house.[54]

When individual parish officers were picking off individuals for exemplary punishment, one should be cautious of making too much of a gendered pattern. It is easy, for instance, to find examples of two or three men being prosecuted. However, as one moves into the seventeenth century it does seem likely, especially when there was a sweep of prosecutions, that more women than men were prosecuted. This does not seem to have been the case in the sixteenth century. The figures from a number of Essex hundreds show women in a distinct minority: in the textile hundred of Lexden only 66 of the 295 presented as masterless between 1568 and 1589 were women (22.4 per cent); in 1572, in a group excluded from this total, women formed only 14.7 per cent (eight out of 56) of those ordered to serve or find masters. Returns from Freshford and Uttlesford hundreds in 1602 show constables returning much smaller numbers of offenders – 26 and 29 respectively. In both cases there were 11 women returned: so a larger proportion, though still a minority in each case: 42.3 per cent and 37.9 per cent.[55] But thereafter women tend to predominate. Table 1 suggests the high proportions of women amongst those presented or prosecuted. In Essex in the early 1670s, men outnumbered women amongst those presented at the assizes on one occasion, Lent 1670, when 50 of the 90 prosecuted (55.6 per cent) were male. But generally women formed the majority: for instance at both the Summer 1670

[49] Bland, Brown and Tawney (eds), *English economic history*, p. 360.

[50] Atkinson (ed.), *Quarter sessions records*, VII, pp. 48, 51.

[51] Emmison, *Early Essex town meetings*, pp. 9–10, 69; TNA, ASSI 35/112/10: constables' presentment, Dedham; TNA, ASSI 35/113/2: constables' presentment, Ulting.

[52] TNA, ASSI 35/112/9: constables' presentment.

[53] S. C. Ratcliff and H. C. Johnson (eds), *Warwick county records: Warwickshire quarter sessions of the peace* (9 vols., 1935–64), V, p. 217.

[54] NRO, NAS 1/1/2/75.

[55] Emmison, *Elizabethan life*, pp. 152, 161. See also Whittle, *Agrarian capitalism*, pp. 260, 280–2.

TABLE 1. Numbers of those reported or committed for living out of service, and proportions female and male

Location	*Years*	*Total*	*Male*	*Female*	
				n	%
Lexden Hundred, Essex, petty sessions:					
Masterless men and women	1568–1589 (exc. 1572)	295	229	66	22.4
Orders to serve or find masters	1572	56	48	8	16.7
Freshford Hundred, Essex, petty sessions:					
'Not retained in service'	1602	26	15	11	42.3
Uttlesford Hundred, Essex, petty sessions:					
'Masterless'	1602	29	18	11	37.9
Braintree, Essex, town meeting orders:					
	1619–1634	17	6	11	64.7
Depwade Hundred, Norfolk, constables' presentments:					
	*c.*1630–*c.*1635	44[a]	17	26	61.5
Made up of:					
Bunwell	*Feb. 1630*	*14*[a]	*5*	*8*	*66.7*
Carlton Rode	*n.d. [1630s] and Jan. 1634*	*13*	*3*	*10*	*76.9*
Other parishes	*c.1630–c.1635*	*17*	*9*	*8*	*47.1*
Eynsford and South Erpingham Hundreds, Norfolk:					
House of correction committals	1634	34[a]	8	25	73.5
Essex, constables' presentments:					
Lent Assizes	1670	90	50	40	44.4
Summer Assizes	1670	46	17	29	63.0
Bedworth, Warwicks., Quarter Sessions order:					
	1673	53	11	42	79.2
West Lavington, Wilts., petty sessions order:					
	1744	29[a]	0	28	96.6

Note: [a] Includes one of unknown gender.

Sources: F. G. Emmison, *Elizabethan life: home, work and land* (1976), pp. 152, 161; F. G. Emmison, *Early Essex town meetings* (1970), pp. 1–96; NRO, NAS 1/1/2 (with individual call numbers for entries within Frere collection of Norfolk manuscripts); Depwade Hundred; TNA, SP16/281, fo. 223r; ASSI 35/111/11, indictment no. 62 (Lent 1670); TNA, ASSI 35/111/12, indictment no. 33 (Summer 1670); S. C. Ratcliff and H. C. Johnson (eds), *Warwick county records: Warwickshire quarter sessions of the peace* (9 vols, 1935–64), V, p. 217; E. Crittall (ed.), *The justicing notebook of William Hunt, 1744–1749* (Wiltshire Record Soc. 37, 1982), p. 73.

and Summer 1672 assizes women formed a little over 60 per cent of those indicted (respectively 29 out of 46 and 25 out of 40).[56]

What needs emphasizing, especially given the scattered sources deployed and the problems with any record of prosecution of early modern petty offences, is not so much the absolute numbers as the general consistency of the proportions, with men generally a minority, albeit usually – as in Restoration Essex – a significant minority. In Depwade hundred in Norfolk in the early 1630s, 26 out of 44 presented (61.5 per cent) were women. When one looks at the 17 presented from all but two of its parishes over several years, there is no great difference: eight women to nine men. But in Bunwell in 1630 eight of the 14 were women and at Carlton Rode women made up ten of the 13 named in two presentments. Later examples can be more extreme.[57] In Bedworth in Warwickshire in 1673, 42 out of 53 reported (79.2 per cent) were women.[58] At West Lavington in Wiltshire, all, or all but one, of the 29 presented in 1744 were women.[59]

Young people, and especially young women at home, indicate tensions which need exploring. Parents who kept their children too long at home were much more vulnerable to threats of loss of relief because they could be perceived as encouraging idleness and need not have them there anyway. In 1701, the parish vestry of Aldenham (Hertfordshire) laid down that if Widow Dickenson 'doth not forthwith put her daughter to service … she shall be stricken out of the monthly collection and be wholly excluded from any further relief'.[60] In 1704 the Buckinghamshire Bench – which also threatened the withdrawal of parish relief – explicitly framed their attack on children of poor parents in Brill who were refusing to go into service and living with parents in terms of the poor rate bill: 'that thereby the Collection is likely to be increased to the greate prejudice of those whoe are the proprietors and farmers of estates in that parish'.[61]

An emotional edge can be discerned in some conflicts over service. In 1657 a mother's concerns clashed with a different ideal of proper work when the Baptist Congregation at Fenstanton, Cambridgeshire supported Thomas Green against his wife in his desire to put their daughter into service:

> And further it was declared, that their daughter being kept at home was a great occasion of offence to many; in that she was tolerated to steal wood, etc. Which things the congregation taking into consideration, did resolve that it was unlawful for them to keep a daughter at

[56] TNA, ASSI 35/111/11, indictment no. 62; ASSI 35/111/12, indictment no. 33; ASSI 35/113/11, indictment no. 170.

[57] NRO, Depwade hundred Papers (with individual numbers) in series NAS 1/1/2.

[58] Ratcliff and Johnson (eds), *Warwick county records*, V, p. 217. For Bedworth, see VCH *Warwickshire*, VI, p. 30.

[59] E. Crittall (ed.), *The justicing notebook of William Hunt, 1744–1749* (Wiltshire Record Soc., 37, 1982), pp. 33, 73.

[60] Newman Brown, 'Poor relief', p. 418.

[61] W. Le Hardy and G.Ll. Reckitt (eds), *County of Buckingham: calendar to the sessions records* (6 vols., 1933–53), II, p. 399. The order is quoted, and its context discussed, in J. Broad, 'The smallholder and cottager after disafforestation – a legacy of poverty?' in J. Broad and R. Hoyle (eds), *Bernwood: The life and afterlife of a forest* (Harris Paper 2, University of Central Lancashire, 1997), pp. 90–107, esp. pp. 102–4. Precisely because of the ambiguities around poor children still at home, arguments portraying poor relief (and its withholding) as a behavioural sanction are somewhat more convincing for them than for other groups of the life-cycle poor, such as the elderly.

> home, maintaining her in idleness to their own prejudice, who is able to earn her own living, and to suffer her to do other unlawful things.[62]

In 1600 the exasperated minister of Banham in Norfolk inveighed against a parishioner who was refusing to put her daughter out to service, apologizing to the local JP:

> that yo[u]r wor[ship] is trobled with the complaynts of this perverse woman, who cannot bee any waye intreated nor urged to have hir daughter (a forlorne wretch) brought to any goodnes; but thus, from tyme to tyme molesttethe them who indevour to fitt hir for summ servise; whearefore I beseach you Sir, lett hir bee sharpelye rebukede, and hir child left to my disposinge, and I will asswere you I will see that she shalbee brought upp to sum state of life whearby to earne hir livelyehood in sum sorte: lest yf she have anye dealings with hir, our towne be forthwith pestered with hir begerye.[63]

Yet what was idleness to some in authority may have been a looser work structure which could be integrated into the needs of the family: in the East Anglian textile areas spinning and knitting alongside childcare of younger siblings or support of an elderly parent. When Thomas Tusser's early eighteenth-century editor attacked the custom of poor labourers keeping cows on the common, his targets were childminding and looking after the family livestock:

> it is but very poor milk that a common cow gives, when she bites near the ground: his wife trudges morning and night, sometimes a mile, and more, and if he has children, the eldest to be sure is kept from going to service, or apprentice, till they are good for nothing, and all for to fetch up this cow, or look after the house and the younger children, when father is gone to work, and mother a milking.[64]

The question of why more young women than men feature in the (admittedly patchy) prosecution of those living out of service particularly highlights these issues. Insofar as most presentments of any offence in the seventeenth century tended to be targeted selectively on the individuals who caused most concern to prosecutors, fear of the social dangers of women outside the authority of a master may be enough to account for the bias in prosecutions, as generalized fears were applied to individual cases or as delinquent women were a particular target. Together with evidence of greater, or at least longer, retention of teenage daughters in rural households, there may not be much to explain: more potential women targets for prosecution and greater anxiety about the woman out of service means more young women than men prosecuted.[65] Nevertheless, the neatness of that equation is misleading in a society where there was nothing automatic about the prosecution of most offences. At the least, it is worth thinking about this issue in terms why living out of service was, in practice, sometimes a gendered point of conflict between authority and the poor, at other times not.

[62] E. B. Underhill (ed.), *Records of the Churches of Christ, gathered at Fenstanton, Warboys, and Hexham, 1644–1720* (Hanserd Knollys Society, 1854), p. 210 (and see also p. 207).

[63] BL, Egerton Ms. 2714, fo. 90r: Daniel Reve to Sir Bassingbourne Gawdy, 1600.

[64] T. Tusser, *Five Hundred Points of Good Husbandry* (1984), p. 276.

[65] R. Wall, 'Leaving home and the process of household formation in pre-industrial England', *Continuity and Change* 2 (1987), pp. 77–101, esp. 90–7; Crawford and Mendelson, *Women*, pp. 94–6, 98–9.

It is unlikely that a purely economic explanation will suffice to explain the greater preoccupation with young women: in Norfolk, they predominated in the years of labour glut in the 1630s as in those of labour shortage in the 1690s, and the evidence is not strong enough across the county to make much of differences in local economies. Nevertheless, in Norfolk and Essex, an economic explanation does have an important place, especially in the light of Craig Muldrew's work on the increasing income to be gained from spinning by 1700.[66] It is certainly likely that the female predominance reflects the bias in the evidence used here towards areas in East Anglia where spinning provided greater leeway for young women to make a living, or part of a living, out of service (at least when combined with other makeshifts such as gleaning and charring).

An economic explanation can explain why young women might be able to make a living out of service in the late seventeenth century. It may also explain why officers trying to enforce service after 1660 are rounding up more young women when faced with a general labour shortage: there was a relatively greater shortage of them in the countryside of them with the pull of many young women into domestic service in the towns.[67] However, in trying to specify the selection of those prosecuted, economic arguments must be combined with an awareness of the moral priorities of magistrates and parish officers, and perhaps even more with different attitudes of the poor to the work of their sons and daughters.

IV

One part of the explanation for the greater incidence of girls being prosecuted is the fear of unmarried single women, of bastardy and of the presumed licence linked with their state of independence: 'Idle wenches that live at their own hands, who serve to no purpose but the debauching of the youth and bringing charge to parishes', as the chairman of the Norfolk Bench fulminated in 1709.[68]

Again, this seems to be only a partial explanation: most individual presentments of young women do not overtly focus on matters of sexual behaviour, although it is more than possible that in many cases fears and assumptions were too commonplace to need articulating. In north Norfolk, 60 years earlier than Doughty, daughters at home with their parents provided day labour on the estate of Sir Nathaniel Bacon at Stiffkey.[69] But in other contexts, negative assumptions could be drawn on: the daughter living with her mother, outside the authority of a paterfamilias, seems to have been particularly vulnerable to such readings. A Suffolk husbandman charged with assault in 1704 can be seen weaving together the negative images around living at home spinning against his accusers:

[66] C. Muldrew, '"Th' ancient Distaff" and "Whirling Spindle": measuring the contribution of spinning to household earnings and the national economy in England, 1550–1770', *EcHR*, 65 (2012), pp. 498–526, esp. pp. 517–22.

[67] P. Sharpe, 'Population and society, 1700–1840', in P. Clark (ed.), *The Cambridge urban history of Britain*, II, *1540–1840* (2000), pp. 495–9.

[68] G. Lamoigne (ed.), *Charges to the grand jury, 1689–1803* (Camden Society, 4th series, 43, 1992), p. 70.

[69] A. Hassell Smith, 'Labourers in late sixteenth-century England : a case study from north Norfolk', *Continuity and Change* 4 (1989), p. 370.

> [Joanna and Mary Box] are two lusty young wenches, and fare well and plentifully, and will not go to service, but live with their said mother, in a little house, and occupy no land, nor having any visible estate or stock to live upon in an honest way, except spinning which is a miserable trade now since the wars.

Further, he claimed, men of no very good fame sometimes frequented their company.[70]

I would suggest a further explanation for the greater prominence of women amongst the presented. This would emphasize the differential attitude of the poor to male and female work, in which the imperatives to push girls out into the world were weaker than for boys. The nature of the local economy would largely dictate when, and if, girls and boys left home, but the question here is the related but different one of where conflict arose over children still at home. Here the tensions arose more often over daughters. The ways in which male and female work was assessed may often have diminished the perceived need for daughters to go out into service, or at least delayed the moment when it was considered necessary. Service was partly about the acquiring of skills, but the extensive range of work undertaken by women in agriculture may still have been seen as essentially unskilled. The detailed lists of specialized jobs for men in agriculture found in justices' wage assessments were not matched by those for women.[71] The woman married to a farm labourer would be firmly tied to the casual makeshifts that supplemented the seasonal work of the husband. Therefore, one can argue for relative disincentives over service in agriculture for young women. Service was as important for girls as for boys for acquisition of skills and opportunities for savings, but the skills that girls could pick up there were possibly more limited and just as likely to be picked up in the less formal sector in which they worked as children and to which they would return upon marriage. Women's and children's work was often described by contemporaries as the same, and clearly there was a considerable degree of overlap in areas such as spinning and gleaning. If one adopts a distinction between child labour orientated towards the present welfare of the child or youth (makeshift and casual work) and towards its future (apprenticeship or other forms of training), then one element in the higher proportion of girls presented for living out of service may be that boys' labour was (or became sooner) more future-orientated. For the girls of labouring families, their present work and its skills were not significantly different from their future. In Norfolk and Essex the skills of spinning for the New Draperies could help maintain the young unmarried woman just as they underpinned married women's contribution to household incomes.[72]

These were, of course, decisions based on how they regarded their children's prospects and what they regarded as suitable work for girls and boys. These perceptions of work would, however, colour the emotional bonds between parent and child: potentially impeding the break from home for young women rather than young men. This perhaps made it emotionally more difficult, as the examples of Mary Green or the Banham woman suggests.

Other daughters at home were drawn into fulfilling familial obligations. Lynn Botelho has found suggestive evidence amongst the Suffolk poor just outside the ranks of parish paupers

[70] E. P. Thompson, *Customs in common* (1993), p. 501 (quoting TNA, KB2/1, Part 1: Affidavits, Miscellaneous, Regina v. William Copsey) [now in Part 2]).

[71] J. C. Tingey (ed.), 'An assessment of wages for the county of Norfolk in 1610, *EHR* 13 (1898), pp. 522–7.

[72] Muldrew, '"Distaff"', pp. 520–2.

of several single woman evidently living with aged parents.[73] Yet again, the meaning of such arrangements was potentially ambiguous: they could be taken to indicate idleness and indiscipline as much as familial duty and responsibility. Sara Mendelson has drawn attention to a defamation case from the Diocese of Exeter in 1635 to show how a woman who shifted between service and living with her sick mother could be stigmatized as being of little credit and threatened with the bridewell to force her into service.[74] In 1697 the Buckinghamshire Bench supported two widows who had appealed to them to squash overseers' attempts to slap the parish badge onto the daughters who cared for them. One, Elizabeth Miles, 'above four score yeares of age and is visited with the palsy', was refused parish relief unless her daughter, who 'payes her house rent and administers to her without any relief from the said parish' wear the badge, until the Bench ordered the overseers to pay her *9d*. a week without insisting on it.[75]

There is a further possibility which would turn the moral preoccupations of local governors on their heads. They were concerned with the perceived independence of young women living out of service, sometimes lodging together but more often at home, where they were perceived as inadequately disciplined. Local governors' perspectives were obscured by fears of bastardy and visions of the dangers of independence and lax control: but parents whose daughters were still at home might have been exercising the same combination of supervision and tolerated independence that seems to have been so characteristic of the wide band of society below the ranks of the gentry. Similarly – and more certainly – the evidence of parents keeping children at home or supporting or encouraging them to leave their masters before their time was out shows the poor adopting much the same role in setting their children forth into the world as the middling sort. In Cambridgeshire in 1661 John Stonbridge of Grantchester took out a warrant against Robert Fuller for refusing to pay his son his wages. In Kent in 1698, one Jordain also obtained a warrant on behalf of his son for unpaid wages, whilst Sarah Kitchin complained against the master who had turned away her daughter.[76] Such conflicts suggest that the policing of those living out of service may often have been about the locus of household authority over the young, and the protectiveness of parents.

V

Yet looking at these conflicts, particularly after 1650, one faces a contradictory picture. They present elite fears of the opportunities offered the young, of enhanced bargaining positions and alternative economic opportunities, which could better meet their own and their parents' priorities. These alternatives could undermine the drive for service, and – importantly – may have produced different outcomes in different local economies. But at the same time, as Kussmaul's imaginative work has shown, the young were moving in greater

[73] Botelho, *Old age*, pp. 98–100.

[74] S. H. Mendelson, '"To shift for a cloak": disorderly women in the Church courts', in V. Frith (ed.), *Women and history: voices of early modern England* (1995), pp. 3–17, esp. pp. 7–8, 12–3.

[75] Hardy and Reckitts (eds), *Buckinghamshire sessions records,* II, p. 144.

[76] Bodleian Lib., Ms. Rawlinson C 948 (Thomas Sclater's justice's notebook, 1660–67), p. 14; BL, Add. Ms. 42598 (William Brockman's justice's notebook, 1689–1702, 1713–21), fos 53v, 61v.

numbers into service in the late seventeenth century – or at least the male young.[77] In the southern and eastern counties of rural England in the late seventeenth century, the lives of labour of the poor were increasingly structured. Alongside the evidence of opportunities to live at one's own hands, service was increasingly prominent in marking out the entry of the poor into the formal labour market for the young: higher proportions were entering service, and the institution seems to have become more stable as labour shortage increased the demand of rural masters for servants over labourers. The economic and social motives encouraging the young into service drew them increasingly into what was relatively a much more stable institution for them than in the late sixteenth and early seventeenth centuries. As servants, their legal rights against abuse and non-payment of wages at the end of their term were guaranteed by law: and a law to which both magistrates concerned with social and political order and employers faced with a more constricted labour force in a stronger bargaining position now had greater reason to pay attention. Here the economic reading of why more women were prosecuted gains force from the opportunities provided by spinning and stocking knitting.[78] The obverse of Robert Doughty's hostility to the young living out of service was his care in hearing servants' appeals against their employers and his desire that the law to compel the latter to pay up detained wages should be strengthened.[79] Thus the young entering the labour market were increasingly moving in through service, and the law afforded them a considerable degree of protection.

There was continuity in a vision of family order, combined with a defensive response to the threat posed to agricultural wage bills and the changing balance between employer and employee. This was backed up by the threat of hard labour in the house of correction. Prosecutions after 1650 seem to have been real but patchy. Some of this is no doubt simply that much of early modern presentment *was* patchy and exemplary in intent. But it also reflects tensions in policing the poor by local officers who, as farmers, may have been concerned with those who chose to live out of service, but who as ratepayers were more worried about families staying off poor relief: a practical response which could draw on a more positive set of stereotypes about the poor family maintaining itself. When Nicholas Blunt of Horningsea was brought before the Cambridgeshire JP Thomas Sclater in October 1661 with a warrant ordering him into service, the parish constable spoke up for him: 'hee [is] laborious … His mother is ancient, hath 3 Acres of land, and will come to the parish if hee bee taken'.[80] When many constables in Essex in early 1670s simply returned, blandly, 'that there are no young men or maids that are fitting to go forth to service', it may well not simply have been inertia, but that in the balance of local needs, this was indeed the case.[81] Moreover the needs of individual farmers for a workforce may have undercut their desire or ability to hold the

[77] Kussmaul, *Servants in Husbandry*, pp. 97–119.

[78] Kussmaul noted that her methodology, exploiting the seasonality of marriages to infer work patterns or employment structures, was poor at capturing the impact of women's work in arable areas, where the timing of marriage would reflect the higher male earnings. A. Kussmaul, *A general view of the rural economy of England, 1538–1840* (1990), pp. 17–8.

[79] For examples, see Rosenheim (ed.), *Doughty Notebook*, pp. 31, 34, 43, 51, 64.

[80] Bodleian Lib., Ms. Rawlinson C 948, p. 9.

[81] TNA, ASSI 35/112/9: Henham constables' presentment, one of several using the same phrase, obviously parroting the articles of enquiry to which they were replying.

defensive line. Doughty, in his grand jury charge in 1664, was of course concerned with the faults of labourers and servants, but in a position echoed by the Hertfordshire Bench in 1687, was similarly was concerned with a lack of employer solidarity, condemning in one inclusive phrase, 'Servants, masters, mistresses and dames as to undue retaining into, departing or putting out of service, or giving or taking of excessive wages'.[82] Thus he condemned those employers who undermined the legitimacy of the system of labour authority by not fulfilling their side of the contract, but also those who failed to show sufficient solidarity with their fellow employers.

In this context, the concern with the young living at their own hands was part of an attempt – of questionable success – to counter the spaces for negotiation opening up in the changing circumstances after 1660, to redress some of the implications of what seems to have been the customary conclusion to wage-bargaining in Restoration Norfolk when the new employee, in words which blended social deference and market equality, assured the new employer, that 'they should not then differ for wages'.[83] The perceived problem may have been less the recalcitrance of the young to enter into service than the enhanced elements of choice and bargaining in their position. In reinforcing attempts to police the youthful poor in order to regulate living standards and wage rates, prosecutors were drawing on long-standing tensions between authority and poor households, with an (arguably) increasingly gendered dimension, but at a time when – for the poor, for the young, and indeed for many non-farming employers – economic circumstances were strengthening the position of (particularly) daughters who chose to stay at home for part of their youth, whether avoiding or delaying service or moving back and forth between parental home and service. The offence evidently became more significant after 1650, a response to labour shortage in a changing demographic and economic context and as part of a nexus of changes in social policy which served to focus attention on the definition of labour and living standards for the poor. A related story could be told about poor relief. Despite the consolidation and reinforcement in the 1690s of parish power, the nature of relief disbursements, individual petitioning and rising levels over time in the decades around 1700 all suggest a story of negotiations and confrontations. There also the agency of the poor, official ambivalences and overlapping expectations all served to shape and provide some constraint on the decision-making of local officers and employers.[84] In this context, the directives and prosecution targeted at those living out of service have much to say not only about the dynamics of the relationship of the poor, as youths and as householders, with local officers, but also the limits of the latter's power.

[82] Rosenheim (ed.), *Doughty notebook*, p. 115. For Hertfordshire, Hardy (ed.), *Hertfordshire county records*, p. 408.

[83] Norfolk RO, AYL 347, certificate of Thomas Jackson, July 1664. For a similar example of wage-bargaining before witnesses from the West Country, see Devon RO, Chanter 880, fo. 177r.

[84] A related story, addressing the shift in power at high constables' petty sessions and hiring fairs (and attempts to counter that shift), is discussed in the important essay by Michael Roberts, '"Waiting upon Chance": English hiring fairs and their meanings from the fourteenth to the twentieth Century', *J. Hist. Sociology*, 1 (1988), pp. 119–158, esp. pp. 131–3, 154.

Land under pressure: The value of Irish land in a period of rapid population growth, 1730–1844*

by Peter M. Solar and Luc Hens

Abstract

This paper uses information on almost 5000 leases to arrive at estimates for the trends in current land values in County Armagh from 1730 to 1844. The estimates control for the length of the lease, the holding size, and the quality of land in the townland where the property was located, the last relying on information from the General Valuation of Ireland. They show growth in nominal rents up to the early 1770s, a plateau in the 1770s, 1780s and 1790s, an increase to the early 1810s, followed by a fall to the early 1820s and another plateau thereafter, stretching until the famine of the late 1840s. Taken together with information on wage and price trends, the new estimates show little change in real rents and negative total factor productivity growth from the 1780s to the 1830s.

The Irish economy in the eighteenth and early nineteenth centuries was predominantly agricultural. In 1841, 53 per cent of the labour force worked on the land, and in the early eighteenth century the share was probably higher.[1] The timing and direction of change in the intervening years are a matter of dispute, which is unlikely ever to be resolved fully in the absence of sufficiently reliable statistical information.[2] Ireland was also experiencing one of the highest population growth rates in Europe: from the early 1750s until the 1820s upwards of 1.4 per cent per annum.[3] The natural rate of population growth remained relatively high into the 1830s and early 1840s, with the actual rate slowing only with the beginnings of mass emigration. Such rapid population growth should have put upward pressure on the relative price of land, unless there existed an abundant supply of unexploited land and/or there was productivity growth sufficient to counter the effects of increasing population density. There was indeed extensive reclamation of marginal lands as cultivation spread up hills and into bogs,

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[1] F. Geary, 'Deindustrialization in Ireland to 1851: some evidence from the census', *EcHR* 51 (1998), p. 517.

[2] F. Geary, 'The Act of Union, British-Irish trade, and pre-Famine deindustrialization', *EcHR* 48 (1995), pp. 68–88; A. Bielenberg and F. Geary, 'Growth in manufacturing output in Ireland between the Union and the Famine: some evidence', *Explorations in Economic Hist.* 43 (2006), pp. 119–52.

[3] S. Daultrey, D. Dickson and C. Ó Gráda, 'Eighteenth-century Irish population: new perspectives from old sources', *JEcHist* 41 (1981), p. 625.

but the increasing share of tillage on existing agricultural land and especially the greater use of the potato certainly suggests the intensification of land use. Despite the spread of cultivation to poorer lands and more intensive land use, average crop yields seem to have been maintained from the 1780s to the early 1840s.[4] Whether this was the result of increased labour inputs or of improvements in productivity remains an open question.

In any agrarian society the value of land is a key indicator, though only when taken in conjunction with other indicators such as wage rates and the prices of agricultural produce. The price of land relative to that of labour signals relative factor scarcities that may influence the direction of innovation, the choice of technique, and the structure of agrarian social relations.[5] The price of land relative to the prices of agricultural produce, or real rent, can be an indicator of the productivity of the agricultural sector.[6] Changes in overall productivity can also be estimated by comparing changes in the prices of land, labour and other inputs to changes in output prices.[7] Reliable information on the trends in Irish land values would thus help address the question of how Ireland was able to sustain such high rates of population growth. Although new information on agricultural wages and prices has recently become available, it is good evidence on the trends in land values that is wanting.[8]

The Irish agrarian system was, like that in England, based on landlords and tenants. Most of the country was owned by several thousand proprietors who farmed little, if any, of their land. They let it to tenants, who either farmed it themselves or sublet to those who did. It is not possible to track land values on the basis of property sales because before the 1850s not much land was sold and those sales that did take place have left little in way of detailed and comparable documentation. However, surviving estate papers contain an abundance of information on the bargains struck between landlords and tenants. Whilst there have been some previous efforts to use leases to track rents, the results were disappointingly imprecise, with the consequence that little research on this subject has been done since the 1970s.

This paper argues that it is time to return to the estate archives. It shows that more precise estimates for the movements in rent can be achieved by using statistical methods that exploit the information available in leases. These methods allow researchers to move beyond the estate as the unit of study and to use readily available information to control for features of the property being let and the nature of the lease. One aspect of the paper is

[4] R. C. Allen and C. Ó Gráda, 'On the road again with Arthur Young: English, Irish and French agriculture during the industrial revolution', *JEcHist* 48 (1988), p. 107

[5] On technical choice and innovation, see P. A. David, *Technical choice, innovation and economic growth: essays on American and British experience in the nineteenth century* (1996). On agrarian social relations, see E. Domar, 'The causes of serfdom or slavery: A hypothesis', *JEcHist* 30 (1970), pp. 18–32 and J. Conning, 'On the causes of slavery or serfdom and the roads to agrarian capitalism: Domar's hypothesis revisited', Hunter College Department of Economics Working Paper no. 401 (2004)

[6] R. C. Allen, *Enclosure and the yeoman* (1992), ch. 11.

[7] P. T. Hoffman, 'Land rents and agricultural productivity: the Paris basin, 1450–1789', *JEcHist* 51 (1991), pp. 771–805; G. Clark, 'Land rental values and the agrarian economy: England and Wales, 1500–1914', *European Rev. of Economic Hist.* 6 (2002), pp. 281–308.

[8] L. Kennedy and M. W. Dowling, 'Prices and wages in Ireland, 1700–1850', *Irish Economic and Social Hist.* 24 (1987), pp. 62–104; L. Kennedy and P. M. Solar, *Irish agriculture: a price history* (2007).

thus methodological with relevance for research on England, which had a similar agrarian structure.[9]

The new method for tracking Irish rents is applied to County Armagh. Armagh is by no means a typical Irish county, if such a creature even exists. It is in the north of Ireland, off the fertile limestone-based soils that characterize much of the island. In the eighteenth and early nineteenth centuries most farmers combined tillage and dairying on holdings that were of modest size, generally less than 50 acres and often less than 20 acres. The main tillage crops were oats, potatoes and flax; relatively little wheat or barley being grown. There were few sheep, except in mountainous areas in the south of the county. Livestock was composed mainly of cows, used principally for producing butter, and pigs, which were increasingly exported to the British market either live or as bacon. Poultry, which, like pigs, could be fed on potatoes, was also common.[10]

In the eighteenth and early nineteenth centuries County Armagh was at the heart of Ireland's major industry, the domestic production of linen cloth. In 1800 Charles Coote noted that 'since the pursuits of husbandry, exclusively occupying the attention of the people, are scarcely to be found anywhere in this county, it is difficult to point out the farmer unconnected with manufacture'.[11] It had experienced very rapid population growth, even for Ireland, and was in the early nineteenth century one of the most densely populated counties. Although there was reclamation of marginal land in the county, the main way in which population grew was through subdivision of holdings and the proliferation of small plots of only a few acres. Armagh's experience may not be typical of Ireland, but it may be representative of other counties in the northeast and is at least a first step toward the bigger picture.

I

The standard source for the current value of land ought to be the lease rather than the rent roll, though both sources have their weaknesses. The rents due to landlords and those received by them depended on when and how the land was let. They look toward the past, and sometimes far into the past. In England until the mid- to late eighteenth century leases for lives or for periods of 21 and 31 years were common. The lives, if well chosen, could last for decades. In eighteenth-century Ireland the three-life lease was the most common form of tenure, and could often last for 30 to 50 years. Though there was some movement away from leases in Ireland, a sample of properties put up for sale in the 1850s showed that almost three-quarters of the land was under lease and that the average age of leases in force was around 25 years, with over a tenth of leases having been taken out more than 50 years earlier.[12] Perpetual and renewable leases, given in both England and Ireland, could essentially fix the rent for all time. The rents owed to landlords could thus deviate significantly from the current value of the land, particularly after periods of inflation or deflation. As can be seen in the series collected for

[9] It should be noted, as well, that Hoffman, 'Land rents', has used a similar approach in tracking the movements of rent in the Paris basin between the fifteenth and eighteenth centuries.

[10] C. Coote, *Statistical survey of the County of Armagh* (1804), pp. 161–244.

[11] Ibid., pp. 138–9.

[12] J. Mokyr, *Why Ireland starved* (1983), pp. 91–9.

England by Turner, Beckett and Afton, rents due, if no leases expired, could remain unchanged for years, even decades, and they could change markedly if many leases came due at the same time.[13]

The lease then is a better indicator of the current value of land, though it is important to be careful about the meaning of current value. The lease was a contract freely entered into. The extent to which there was competition for land may have been constrained by the claims of sitting tenants, but such claims certainly did not prevent landlords from increasing rents. Where long leases were common, the terms of the lease were necessarily influenced by expectations about future returns. Since agricultural productivity growth was relatively slow, expected output was probably based on an average of recent experience. More important was the future level of agricultural prices. Prices could fluctuate wildly from year to year, so expectations were likely to have been shaped by the experience of the previous five to ten years. These expectations could prove disastrously wrong, as is witnessed by the extensive renegotiation of rents in the late 1810s and early 1820s. Nonetheless, if landlord and tenant expectations were based on the levels, rather than the trends, in prices, the rent contracted for should reflect what they saw as the revenue potential of the land with a lag of a few years.

It should be clear from this discussion that, where long leases were common, an index of estate income (rents paid) or potential income (rents due) could differ markedly from an index of current values based on the leases being granted. This was quite clear to contemporary land owners who commissioned surveys of their property either during the wartime period to see how their income could be increased or during the post-war deflation to figure out how to deal with tenants who complained that their rents were too high.[14] It has been less clear to the participants in the recent debates about rent movements in England. There is no reason to expect that the shorter-term movements in estate income or potential income, as measured by Beckett, Turner and Afton, need correspond exactly to the movements in current value indices, as constructed by Allen and Clark.[15]

Eric Kerridge seems to have pioneered the construction of land value series based on lease-like evidence. In his 1953 study of several Wiltshire estates during the sixteenth and seventeenth centuries, Kerridge used periodic manorial surveys which recorded the terms of leases in force at a given date.[16] Kerridge remained a lonely pioneer until the 1970s when series were put together for a number of large Irish estates. Maguire tracked rents at new lettings

[13] M. E. Turner, J. V. Beckett and B. Afton, *Agricultural rent in England, 1690–1914* (1997). The data underlying Turner, Beckett and Afton's series are available from the UK Data Archive, SN 3691.

[14] As examples of the former, see the surveys of the Erne and Hamilton estates (PRONI, D/1939/18/9/34 and D/1939/14/2). For the latter, the outstanding example is Gregg's report on the Gosford estate in Co. Armagh (W. Gregg, *General Report on the Gosford Estates in County Armagh 1821* (introduction by F. M. L Thompson and David Tierney, 1976)).

[15] Clark, 'Land rental values' and id., 'The Charity Commission as a source in English economic history', *Research in Economic Hist.* 18 (1998), pp. 1–52; R. C. Allen, 'Community and market in England: open fields and enclosures revisited', in M. Aoki and Y. Hayami (eds), *Communities and markets in economic development* (2001), p. 49; Turner, Beckett and Afton, *Agricultural rent*, p. 57, n. 18.

[16] E. Kerridge, 'The movement of rent, 1540–1640', *EcHR* 6 (1953), pp. 16–34. Kerridge's data has recently been reworked by Richard Hoyle, 'Estate management, tenurial change and capitalist farming in sixteenth-century England', in S. Cavaciocchi (ed.), *Il mercatao della terra secc. XIII–XVIII* (2004), pp. 353–82.

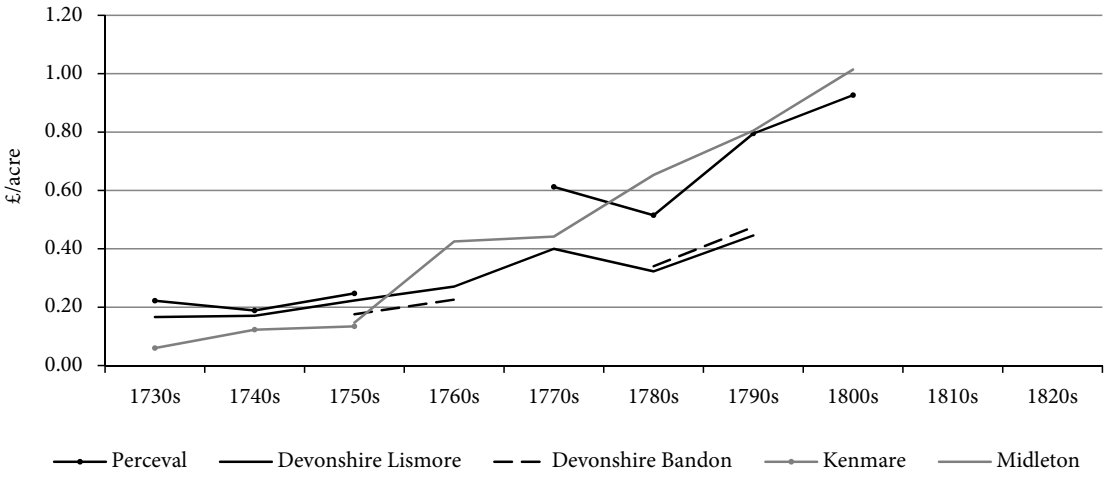


FIGURE 1. Current land values in Munster, 1680–1809

Source: Dickson, *Old world colony*, pp. 643–45.

on the Downshires' Kilwarlin estate in County Down from 1740 to 1845.[17] Crawford did so for the Brownlow estates in County Armagh from 1650 to 1799.[18] Dickson produced series for several estates in counties Cork and Waterford: the Devonshire estates from 1690 to 1797, the Perceval/Egmont estates from 1680 to 1810, the Browne/Kenmare estates from 1720 to 1759, and the Brodrick/Middleton estates from 1750 to 1814.[19] Roebuck extended coverage of Ulster estates to the Sandwich (co. Armagh, 1730–1806), Erne (co. Donegal, 1730–1810), Hamilton (co. Fermanagh, 1760–1810), Balfour (co. Armagh, 1760–1815) and Charlemont (co. Armagh, 1740–1820) estates.[20]

This work on Ireland, whilst pioneering, turned out to be disappointingly imprecise in the statistical sense. Figures 1 and 2 show the results for the Munster and Ulster estates. In Munster land values were clearly rising over the eighteenth century, but it is difficult to pick out the timing of any acceleration. In Ulster the variance across estates is so great that all one can really say is that rents were rising. The reasons for this imprecision are several. First, the sample sizes for some periods on some estates are very small and the sampling design is by convenience (i.e., taking whatever observations that happened to be available) rather than randomized. For the outlying Erne estate in Ulster there is just one letting in the 1750s, four in the 1760s and two in the 1810s. Note as well that for some estates in both Munster and Ulster there are decades in which no land was let. Second, the size of the holdings being let could vary from period to period. On the Hamilton estate the average size of holding let in the 1760s

[17] W. A. Maguire, *The Downshire estates in Ireland, 1801–1845* (1972), p. 39.

[18] W. H. Crawford, 'Landlord-tenant relations in Ulster, 1609–1820', *Irish Economic and Social Hist.* 2 (1975), p. 13.

[19] David Dickson, *Old world colony. Cork and south Munster, 1630–1830* (2005), pp. 643–45. These series were long only available in D. Dickson, 'An economic history of the Cork region in the eighteenth century' (Ph.D. thesis, Trinity College Dublin, 1977).

[20] P. Roebuck, 'Rent movement, proprietorial incomes and agricultural development, 1730–1830', in P. Roebuck (ed.), *Plantation to partition* (1981), p. 88.

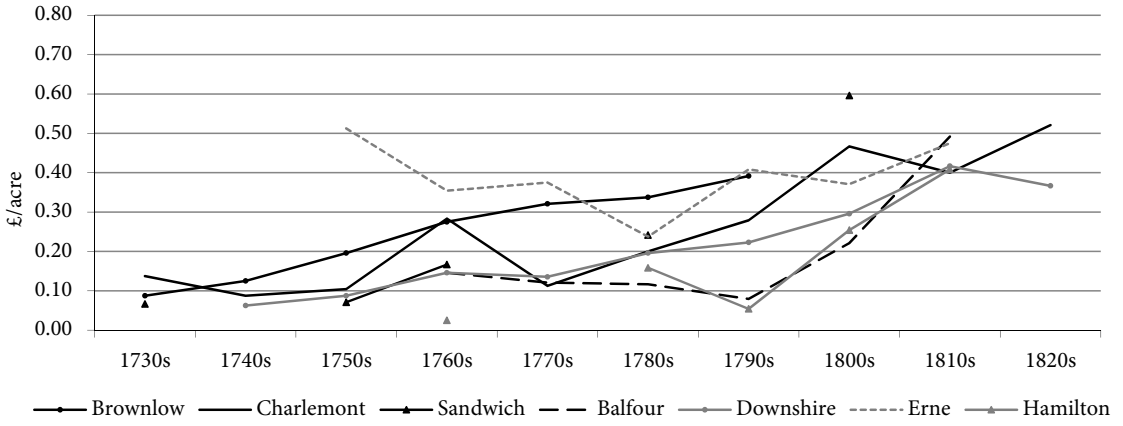


FIGURE 2. Current land values in Ulster, 1730–1829

Source: Roebuck, 'Rent movement', p. 88.

was 1617 acres and in the 1790s 567 acres, decades with particularly low average current values. Third, the quality of the land being let could also vary from decade to decade. More generally, the variance in land quality, as evidenced by the range of values observed at any one time, was large both within and across estates.

Mokyr, as a part of his work on land tenure in Ireland, departed from the usual practice of taking the estate as the unit of analysis. He drew data on land tenure from the sale notices issued by the Landed Estate Court Rentals in 1850.[21] Although his main interest was in the prevalence of leases, he also generated a retrospective series for rents per acre on a countrywide sample of 1288 holdings. Mokyr's series is subject to many of the same sources of imprecision as the estate studies. In addition, his series may not be very reliable for the first two decades of the century, when rents on new lettings were very high, since his sample will necessarily contain only leases that were not renegotiated in the aftermath of the wars.

In England Kerridge seems to have had no followers until very recently. Clark has, like Mokyr, moved outside the confines of the individual estate and constructed a large, countrywide sample of current land values drawn from information furnished to the Charity Commissioners.[22] Clark, following on Hoffman's work on France, has also innovated by using regression methods to control for various characteristics of the property or the location. He incorporates variables that indicate the presence of buildings and common rights, whether the size of the holding is greater or less than 20 acres, and the population density of the parish. His only control for land quality, though it might also refer to demand conditions, is a set of dummy variables for five broad regions of England and Wales.

The use of regression methods represents a fundamental change in the way in which the

[21] Mokyr, *Why Ireland starved*, pp. 88–99.

[22] Clark, 'Land rental values' and 'Charity Commission'. Clark's sample has been criticized as being biased toward atypically small and higher valued properties, but that is not to deny his methodological advances (Allen, 'Community and market', p. 49; Turner, Beckett and Afton, *Agricultural rent*, p. 57, n. 18).

information in leases is regarded. In most of the research cited above the average land value for a given period has been arrived at by dividing the total value of the land being let by the total acreage let. This implicitly weights the average values on larger properties more heavily, which might be appropriate if the sample of land being let were anywhere near the total area of estate. But given the long terms of many leases, the share of an estate being let in any given decade could be modest, the evidence on four Irish estates indicating somewhere between 10–20 per cent, at most.[23] Regression methods, by contrast, treat each lease as an equally weighted observation on the value of land.

The work reported in this paper, like Clark's, goes beyond the individual estate and uses regression methods.[24] It is more thorough-going in controlling for the characteristics of the property being let and the characteristics of the lease. It makes use of information that can be found in all leases: the location of the property, its owner, its area and the length of the lease. The regression equation to be estimated is:

$$\ln(\text{rent per acre})_i = \Sigma\alpha_j \text{Time}_{ij} + \Sigma\beta_k \text{Estate}_{ik} + \gamma \ln(\text{size plot})_i + \delta \text{ Length lease}_i + \eta \ln(\text{townland value})_i + \mu_i \quad (1)$$

where the rent per acre on a given parcel is a function of a series of time dummies indicating when the lease was signed; a series of estate dummies intended to capture any differences in leasing practices across estates; the size of parcel being let; an indicator of the length of the lease being granted; and the average value of land in the townland in which the parcel was situated. The specification is in logarithms because the price level varies a good deal over this period and the effects of the dependent variables are likely to be proportional to the level of prices. The time path of rents can be calculated from the coefficients on the time dummies. (For want of data in the leases it was not possible to control, as Clark does, for buildings.)

The distinctively Irish element in this estimating equation is the use as a control for land quality of the average townland value from the General Valuation of Ireland conducted in the 1850s and 1860s.[25] It is, in general, impossible to match properties being let over the previous century or more to the holdings in the General Valuation. But it is relatively easy to match townlands, the basic administrative unit in Ireland. Since the townland was relatively small, averaging only 300–400 acres, its average value should give a pointer to the quality of the land on a given holding. There was considerable variation across townlands, on the order of a tenfold difference in average values in the case of County Armagh. There could, of course, still be a good deal of variation in land quality and valuation per acre within townlands.

As a control for land quality, the average townland value is a cross-section at the end of a long period. Its usefulness assumes that the relative valuations of townlands did not change dramatically during the preceding century. This is probably a reasonable assumption. Even upland and bog areas that were brought into cultivation during the late eighteenth and early nineteenth centuries generally remained relatively low value land.

[23] Roebuck, 'Rent movement', pp. 85–6.

[24] Some unpublished work along these lines preceded Clark's by more than a decade (P. M. Solar, 'Growth and distribution in Irish agriculture before the famine', Ph.D. thesis, Stanford University, 1987, ch. 7).

[25] *General valuation of rateable property in Ireland: County of Armagh* (1864)

II

Land holding in Ireland had some particularities that may have implications for the measurement of land values from lease data. One is the subdivision of holdings, usually among family members. As population grew, parents with sufficient land under lease made room for their married children to establish households.[26] From generation to generation holdings became smaller and smaller. Whilst subdivision did occur, it should not be overestimated. As late as the early 1840s most of the good land in Ireland was still occupied in holdings of 20 acres or more, with Ulster, and especially County Armagh, being exceptional in having a prevalence of small holdings. Subdivision was also a phenomenon that took place over a long time horizon, and is really only conceivable under the very long leases that prevailed in Ireland. As such, it is not clear that it would have a great influence on the rents at which such leases were contracted. The value to the tenant of an option to subdivide at some distant time in the future could not have been very large. Moreover, if what matters is the trends in land values, then it is how this option value changed over time that matters. If during the eighteenth and early nineteenth centuries, this option value increased, then it would tend to bias the observed growth in land values upward.

A related, and perhaps more important, feature of the agrarian economy in Ireland was subletting. Some sorts of subletting can be set aside immediately as disguised wage payments. Labourers in Ireland were often paid in short-term access to land, being given parts of the farmer's potato field in return for their labour on his grain crops. A similar, though somewhat more permanent, arrangement involved farmers letting marginal land in small plots, with the rent often being paid in labour. Any farmer taking out a lease on a holding large enough to require extra-familial labour would have had to take this cost of labour into account.

The more relevant sort of subletting involved 'middlemen', individuals who farmed little of the land that they held under lease, instead letting it out in smaller parcels to subtenants.[27] In the seventeenth and early eighteenth century some Irish landowners, particularly those who had received recent grants of confiscated land, took the easy option of letting it out in blocks of hundreds and even thousands of acres. When they did so on leases in perpetuity or renewable forever, they effectively alienated the property to these large tenants. But many of the leases to middlemen were of shorter duration: in the eighteenth century leases for three lives were commonly given to Protestants, whilst the Penal Laws restricted the length of leases given to Catholics to 31 years. From the late eighteenth century landowners started eliminating the middlemen when they had the opportunity. If middlemen paid particularly low rents, either because they were favoured individuals or because they were taking over the effective management of the estate from the landowner, then their progressive elimination would tend to make any rise in rents appear larger.

In practical terms the phenomenon of subletting by middlemen is unlikely to affect the estimates made here. Since leases in perpetuity or renewal forever often involved fines, they

[26] K. H. Connell, *The Population of Ireland, 1750–1845* (1950), ch. 6.

[27] D. Dickson, 'Middlemen', in T. Bartlett and D. Heyton (eds), *Penal era and golden age* (1979), pp. 162–85.

have been excluded from the data set. (Indeed some of the observations used in this study come not from the records of the original landlords but from those of the effective landlords.) In the case of County Armagh the dataset contains very few leases for large holdings susceptible of being those of middlemen. Out of 4746 observations only 44, less than one per cent, refer to holdings of a hundred acres or more. Moreover, these holdings tended to be located in townlands that had low valuations in the mid-nineteenth century, hence they may have been contained large tracts of marginal land.

A third particularity of land tenure in Ireland was tenant right, which needs to be distinguished from the customary arrangements of the same name are found in parts of England.[28] The meaning of tenant right, or Ulster custom, has been an historiographical morass, so one needs to tread with care.[29] It does seem clear that from at least the early eighteenth century tenants in Ulster were able to sell their 'interest' in a holding. In the nineteenth century the payments for tenant right could be substantial. Two Armagh witnesses before the Devon Commission in the early 1840s put forward estimates of £10 per acre and £5–18 per acre, and similar figures were cited for the neighbouring counties of Down and Monaghan.[30] What is most relevant to this study, and by no means clear, are the trends in the value of tenant right. It is striking that tenant right was mentioned by neither Arthur Young in the 1780s nor Edward Wakefield *c.*1810, both of whom were very interested in land tenure and both of whom produced estimates for the rental of Ireland.[31] Nor does it get a single mention in Charles Coote's 1801 statistical survey of the county.[32] This might suggest that the large payments for tenant right were a creation of the early nineteenth century. They certainly became more prominent in estate management, as the rise in emigration made actual payments more frequent. However, the few estate studies available for Ulster suggest that payments for tenant right were already well established by the late eighteenth century.[33] Also, Dowling argues that tenant right simply became more prominent as landlords, in the interests of more rational estate management, tried to monitor and regulate such transactions.[34] It also became more visible as tenants increasingly used the sale of tenant right as a means of financing emigration.

III

The data on which the regression is estimated constitute what was once described by a colleague as an 'convenient sample'. It is essentially all the lease information that could be

[28] J. A. Perkins, 'Tenure, tenant right, and agricultural progress in Lindsey, 1780–1850', *AgHR* 23 (1975), 1–22.

[29] For extended discussions of tenant right, see W. H. Crawford, 'Landlord-tenant relations in Ulster', pp. 5–22; W. E. Vaughan, *Landlords and tenants in mid-Victorian Ireland* (1994), ch. 4; and Martin W. Dowling, *Tenant right and agrarian society in Ulster, 1600–1870* (1999).

[30] [Captain Kennedy], *Digest of Evidence taken before the Commissioners of Inquiry into the law and practice in respect of the occupation of land in Ireland* (2 vols, 1847), I, pp. 294–5, 299, 301, 305–6.

[31] Arthur Young, *A tour in Ireland: with general observations on the present state of that kingdom …* (1780); Edward Wakefield, *An account of Ireland, statistical and political* (1812).

[32] Coote, *Statistical Survey.*

[33] Maguire, *Downshire Estates,* pp. 140–7; William H. Crawford, *The management of a major Ulster estate in the late eighteenth century* (2001), ch. 2.

[34] Dowling, *Tenant right and agrarian society,* ch. 5.

found for estates in County Armagh. Most is held among estate papers and collections of solicitors' records in the Public Record Office of Northern Ireland. Some material was found in estate papers held by the National Library of Ireland. The Landed Estate Court rentals, held in the National Archives of Ireland, were also consulted. Altogether there are just shy of 4750 observations from 49 different estates (see Appendix for sources and numbers of observations by estate). Four estates predominate in the data set, which is essentially split into five parts: the Charlemont, Brownlow, Gosford and Manchester estates, and the rest. Some rough calculations suggest that on average the dataset covers 7–10 per cent of the land in the county that came up for letting in a given year.[35]

A worry with a sample of this sort is that the surviving records may not accurately reflect the general population of estates. As noted above, the sample certainly overrepresents very large estates: the big four were indeed the four largest estates in the county.[36] One defence is that, unlike in previous studies, the method at least allows for the inclusion of leases from some smaller properties. That leases have survived more frequently from large estates might also mean that they were better managed, though better management may mean more bureaucratic rather than more progressive or more able to extract the full rental value of the land. The same charge might not be so easily levelled at the smaller estates, since many of their records survive because they found their way, usually for unknown reasons, into solicitors' storerooms. These concerns about the representativeness of the sample need to be signalled, though in practice there is little that can be done about them.

In general, only a small share of the information comes from the sort of estate surveys used by Reobuck or the sale records used by Mokyr. Most of the data comes from leasebooks, in which the terms of leases granted were recorded, or from individual original or copy leases kept in estate archives. Not all leases were included. Perpetual and renewable leases were excluded, as were leases at will, though none of these was very important in the sources. The standard Irish lease in this period was quite simple: it involved the annual or semi-annual payment of a fixed money rent for the term of lease. The payment of fines at the onset or the renewal of a lease was rare. Small holdings were also excluded since the object of the exercise is to trace the value of land for agricultural purposes and small holdings may have been valued more for housing or domestic industry. The threshold for inclusion was five statute acres.

The big four estates accounted for about a fifth of the county's land area, so it is not surprising that they account for a large share of the data set. The representation of the estates in the data set does vary over time, as is shown in Figure 3. This results in part from the irregular survival of the documentation and in part from the peaks and troughs in letting activity on the estates. On the Charlemont estate, for example, it would seem that there were no leases given in the late 1770s and very few in the 1780s. In the late 1770s and early 1780s there are no new leases recorded for the Manchester estate, yet 150 were granted in the late 1780s.

[35] Excluding mountain, bog and water, the surface area of County Armagh is 267,317 acres. If the average lease ran for 30 years, then 8910 acres would have been let each year. If the average lease lasted 40 years, then it would have been 6683 acres. For the entire sample the average amount of land let per year is 639 acres.

[36] J. Bateman, *The great landowners of Great Britain and Ireland* (4th edn, 1883 repr. 1971)

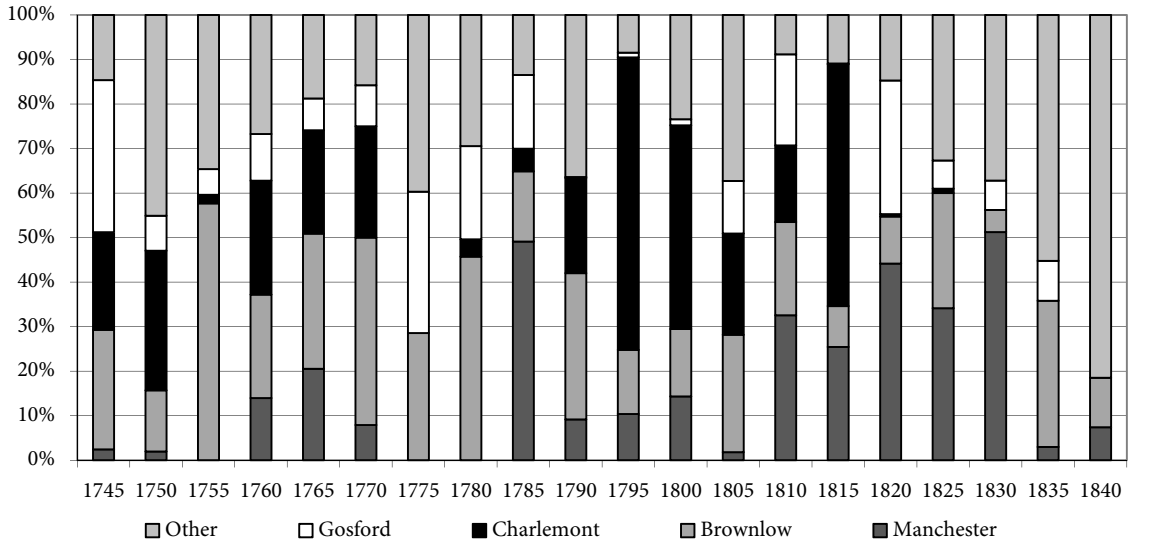


FIGURE 3. Composition of data set by estate

Source: Armagh rents data set (see Appendix).

Summary statistics are shown in Table 1 for the sample as a whole and by five-year period. The length of lease variable needs some explanation. The variety of terms to be found in leases were coded into a variable that takes integer values from 1 to 4 based on the following schema:

Length of lease variable	Lease terms
4	(3 lives AND >20 years) OR (>50 years)
3	(3 lives) OR (2 lives AND >20 years) OR (32–49 years)
2	(2 lives) OR (1 life AND >20 years) OR (23–31 years)
1	(1 life) OR (<23 years)

The number of observations in the sample is low for the earliest and latest years, so the estimates for the 1730s and early 1740s and for the early 1840s should be less precise. Most of the observations are concentrated between 1780 and 1839. The lower numbers in the early years, especially before 1750, are almost certainly due to lower survival rates of estate documentation. The falling off in numbers after 1830 may not be a quirk of the sources, but may reflect the movement away from leases for lives or long terms of years and toward tenancies at will. The surviving leases suggest that there were two periods of intensive letting, in the late 1780s and 1790s and in the late 1810s and 1820s. The smaller numbers of surviving leases in the intervening years from 1800 to 1814 might be explained in two ways. One is that landlords and tenants were reluctant to agree terms in these years of high and volatile prices. The other is that landlords and tenants did conclude leases, but these were torn up and renegotiated when prices fell sharply in the aftermath of the wars.

TABLE 1. Summary Statistics (averages)

	Observation (no.)	*Size of holding (acres)*	*Lease length (= 1, 2, 3 or 4)*	*Townland value (£ per acre)*
1730–4	12	54	3.2	1.06
1735–9	7	25	3.0	1.17
1740–4	13	29	2.4	1.14
1745–9	30	36	3.1	1.10
1750–4	92	33	2.9	1.06
1755–9	57	39	2.9	1.07
1760–4	90	30	3.1	1.07
1765–9	131	32	3.0	1.11
1770–4	77	33	3.0	1.14
1775–9	87	22	2.9	1.01
1780–4	188	20	3.0	1.11
1785–9	415	15	2.5	1.06
1790–9	534	18	2.6	0.96
1795–9	448	15	2.9	0.84
1800–4	321	14	3.0	0.92
1805–9	132	14	2.8	1.02
1810–4	267	13	2.0	0.99
1815–9	592	12	2.0	0.93
1820–4	348	13	2.0	1.03
1825–9	467	14	2.1	0.88
1830–4	183	16	1.9	1.00
1835–9	179	19	1.9	0.82
1840–4	76	20	1.8	0.70
Entire sample	4746	17	2.4	0.97
Standard deviations		32	0.76	0.28

Source: Armagh rents data set (see Appendix for estates and sources)

The average size of the holdings let fell steadily until the 1810s, then rose modestly. Figures 4 and 5, drawn for periods with relatively stable average land values, show that land values per acre show some tendency to fall with the size of the holding. Hence the changes in average holding size over time are likely to bias the trend in average land values upward during the late eighteenth century and downward in the 1830s and early 1840s.

Over the period as a whole the average length of leases fell, which largely reflects the transition from leases for three lives to leases for one life and 21 years. If higher rents were associated with longer leases, then this would have the opposite effect to the trend in holding

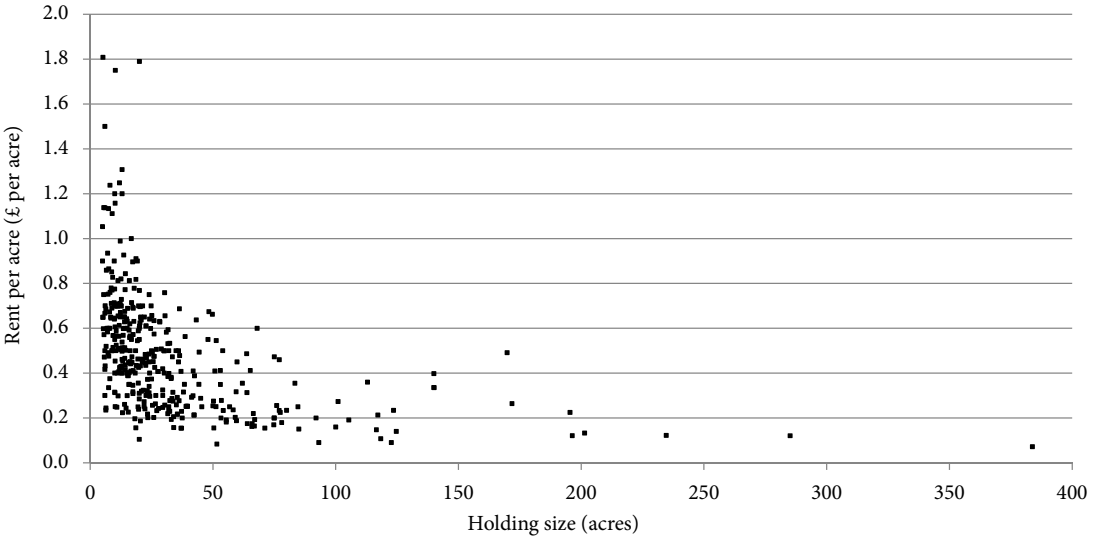


FIGURE 4. Average land values by holding size, 1730–1769

Source: Armagh rents data set (see Appendix for estates and sources).

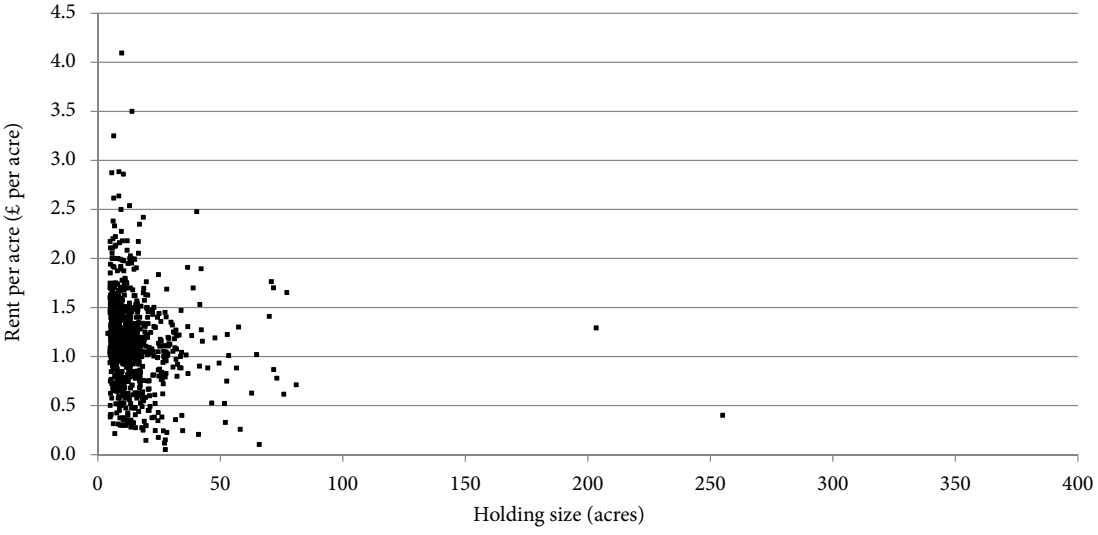


FIGURE 5. Average land values by holding size, 1820–1844

Source: Armagh rents data set (see Appendix for estates and sources).

size. It would tend to bias the trend in land values downward. The average townland value of the properties let fell somewhat over the entire period. If this represents a fall in average land quality up for letting, then it would also bias the trend in land values downward.

IV

The estimates based on equation (1) are shown in Table 2. Since for a number of estates there were very few observations (see Appendix), all estates with six or fewer observations were lumped together into an 'other estates' dummy. The share of the variance in rents per acre explained by the dependent variables is relatively high, at 75 per cent. An analysis of variance shows that the time dummies do about half of the work, the townland value a quarter and the holding size about a tenth. The estate dummies make only a small contribution, and the length of the lease very little at all.

The coefficient on the townland value shows that, other things being equal, the higher the townland value, the higher will be the rent per acre. That the coefficient is less than 1 suggests that actual rents varied somewhat less than did the valuations. The coefficient on holding size confirms that, controlling for other factors, the larger the holding, the lower the rent per acre. Given the logarithmic specification, the coefficient can be interpreted as an elasticity. The value of −0.13 means that doubling the holding size (a 100 per cent increase) would produce a 13 per cent lower rent per acre. This effect is fairly strong. A 40-acre farm would have a rent per acre about a quarter lower than a 10-acre farm. The coefficient on the length of the lease indicates that, other things being equal, the longer the lease, the lower the rent per acre. This is not the expected sign, but the estimated effect is very small in practice. The move from a lease for three lives to one for one life and 21 years, the typical change over the period, would produce only a two per cent fall in rent per acre.

The estate dummies show remarkable variation. They should be read as indicating the level of rent on a given estate relative to that on the Charlemont estate, the largest in the data set and the estate variable that has been deliberately omitted. Only two of 25 estates show lower levels of rent than that which prevailed on the Charlemont estate, and those differences are not statistically significant. Half of the other 24 estates had rent levels more than 20 per cent higher. Rents on the Charlemont estate seem to have been low for the county.

The variance in rent levels across estates may reflect differences in land quality not captured by the townland valuation variable, but it would be surprising if they were so large. Alternatively, there may have been large differences in the quality of estate management, though two aspects of management are already controlled for by the plot size and lease length variables. But landlords could have had different strategies toward their tenants, ranging from auctioning off tenancies to the highest bidder to charging artificially low rents in order to attract progressive or content tenants, as Allen has suggested some English landlords did.[37] The degree to which tenant right was established could also have varied across estates. Another old war horse of Irish history – absentee landlords – could also be a factor in explaining differences across estates, though there is not sufficient information to test this systematically. Moreover, as Malcomson has shown, absenteeism is not as simple a phenomenon as contemporary pamphleteers suggested.[38] Differences in rent levels across estates could be seen as an argument

[37] Allen, *Enclosure*, pp. 181–2.

[38] A. P. W. Malcomson, 'Absenteeism in eighteenth-century Ireland', *Irish Economic and Social Hist.* 1 (1974), pp. 15–34.

TABLE 2. Determinants of rent per acre

	Estimated Coefficient	*Standard Error*	*t-value*	
Townland value	0.786	0.018	43.45	**
Size of plot	−0.127	0.008	−16.41	**
Lease length	−0.026	0.009	−2.83	**
Time effects:				
1730–4	−0.996	0.097	−10.23	
1735–9	−1.112	0.120	−9.28	
1740–4	−1.036	0.091	−11.33	
1745–9	−0.901	0.067	−13.41	
1750–4	−0.745	0.048	−15.47	
1755–9	−0.541	0.055	−9.90	
1760–4	−0.567	0.050	−11.43	
1765–9	−0.266	0.045	−5.86	
1770–4	−0.074	0.049	−1.50	
1775–9	−0.070	0.048	−1.45	
1780–4	−0.183	0.042	−4.39	
1785–9	−0.242	0.036	−6.66	
1790–4	0.028	0.036	0.79	
1795–9	−0.032	0.036	−0.90	
1800–4	0.221	0.037	5.98	
1805–9	0.415	0.042	9.89	
1810–4	0.626	0.034	18.29	
1815–9	0.547	0.030	18.33	
1820–4	0.360	0.033	10.97	
1825–9	0.299	0.032	9.29	
1830–4	0.396	0.037	10.60	
1835–9	0.344	0.038	9.01	
1840–4	0.321	0.046	6.98	
Estate effects (with respect to Charlemont estate):				
Manchester	0.217	0.016	13.66	**
Brownlow	0.153	0.016	9.29	**
Gosford	0.050	0.015	3.26	**
Cremorne	0.115	0.034	3.39	**
Barton	0.123	0.036	3.44	**
Sandwich	−0.032	0.037	−0.88	
Maxwell Close	0.044	0.037	1.17	

	Estimated Coefficient	*Standard Error*	*t-value*	
Cope	0.635	0.035	18.04	**
Kilmorey	0.152	0.040	3.77	**
Verner	0.398	0.041	9.58	**
McKinstry	0.195	0.046	4.21	**
Graham	0.058	0.044	1.33	
Caledon	0.028	0.049	0.58	
McGeough	−0.059	0.055	−1.08	
Ker	0.029	0.060	0.48	
Wakefield	0.365	0.058	6.29	**
Valentine Wilson	0.199	0.066	3.01	**
Landed Estate Court VI	0.670	0.116	5.75	**
Burges	0.298	0.069	4.34	**
Smyth	0.329	0.074	4.46	**
Simpson	0.218	0.088	2.48	*
Blacker	0.070	0.073	0.96	
Fane	0.197	0.097	2.04	**
Landed Estate Court I	0.083	0.068	1.22	
Trevor	0.026	0.152	0.17	
Other estates	0.255	0.036	7.09	**

Residual standard error: 0.301 on 4694 degrees of freedom
Multiple R-squared: 0.75
Adjusted R-squared: 0.75
F-statistic: 275 on 52 and 4694 DF, p-value: <0.0000000000000002

** statistically significant at 1 per cent level
* statistically significant at 5 per cent level

Note: The levels of statistical significance have no real meaning for the time dummies.
Source: Armagh rents data set (see Appendix)

against pooling observations from many estates, but this need not be the case if policies on individual estates were consistent over time.

The trends in rents as indicated by the time dummies are shown in Table 3 and Figure 6, along with 95 per cent confidence intervals (dashed lines) for the estimates. (The level of this series was set by evaluating the estimating equation at the mean values for the other independent variables.) Rents at new lettings grew steadily from the early 1740s until the early 1770s, increasing by about 170 per cent. In the 1770s, 1780s and 1790s there was little upward movement. The wartime rise in rents, of about 80 per cent, took place from the late 1790s to the early 1810s. By the early 1820s rents had fallen to about 75 per cent of the wartime peak, and they remained at that level through the early 1840s. The postwar level of rents was still about 50 per cent higher than that which had prevailed in the late eighteenth century.

TABLE 3. Rent per acre in County Armagh, 1730–1844 (£ per acre)

Five year interval beginning	*Regression method*	*Mean of mean rent per acre*	*Total rent divided by total area*
1730	0.26	0.24	0.21
1735	0.23	0.30	0.24
1740	0.25	0.32	0.30
1745	0.29	0.32	0.27
1750	0.34	0.36	0.28
1755	0.42	0.44	0.33
1760	0.40	0.43	0.38
1765	0.55	0.62	0.41
1770	0.66	0.78	0.48
1775	0.67	0.66	0.63
1780	0.59	0.68	0.60
1785	0.56	0.66	0.62
1790	0.73	0.81	0.60
1795	0.69	0.64	0.59
1800	0.89	0.98	0.87
1805	1.08	1.24	1.15
1810	1.33	1.56	1.43
1815	1.23	1.36	1.28
1820	1.02	1.25	1.13
1825	0.96	1.00	0.95
1830	1.06	1.19	1.13
1835	1.01	0.95	0.95
1840	0.98	0.81	0.76

Source: Armagh rents data set (see Appendix for estates and sources).

Figure 6 also shows the rent movements as estimated from the same data set by two much simpler methods. One is that used in the earlier work cited above: the 'overall average' is the total rent observed in a given period divided by the total area let. The other is the 'simple average' of the rents per acre for all lettings in a given period. Since larger holdings tended to rent for less per acre and the 'overall average' gives larger holdings greater weight, this measure of rent change is always below the 'simple averages'. The estimated rent movements differ from these simpler measures in two main respects. First, they are generally less volatile. Second, the wartime inflation and the post-war deflation in rents are less prominent. These differences are due to additional variables in the regression which control for changes in the composition of the properties observed from period to period. For example, the simpler methods show a sharp fall in rents from the early 1830s to the early 1840s, which could, mistakenly, be taken as a sign

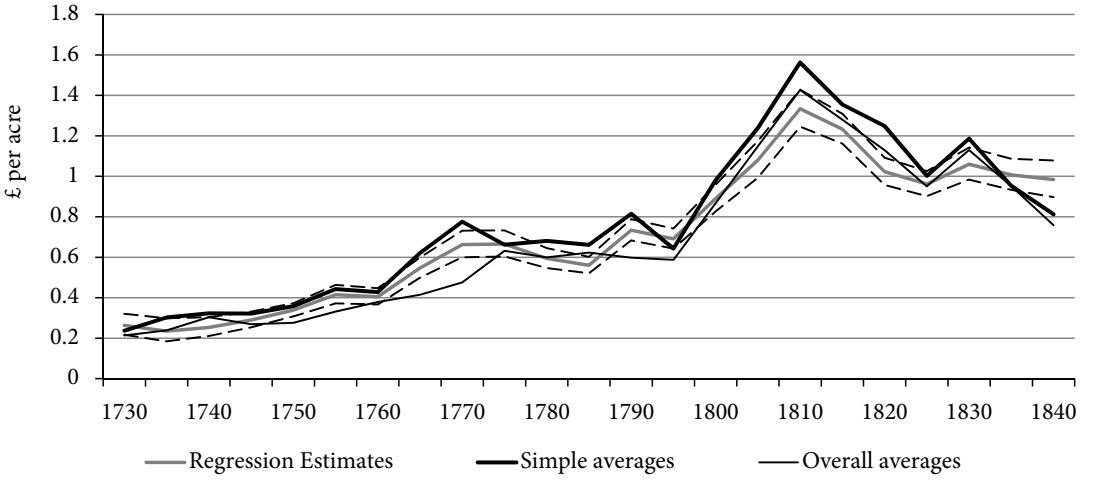


FIGURE 6. Rent movements, 1730–1844

Source: Table 3.

of the impending crisis. The regression estimates control for rising holding size, falling lease length and falling townland value during this period, all factors which would tend to depress the average rent. They show instead that rents were relatively stable in the two decades before the famine.

V

Real rents, which show the rent in terms of the prices of agricultural produce, are presented in Figure 6. The northern price indices (based on Belfast and Londonderry prices) suggest that real rents increased only modestly from the 1780s to the early 1840s. If southern prices (based on Cork and Waterford prices and well correlated with the northern prices) were used to extrapolate the northern series backward to the late 1760s, it would seem that real rents hardly changed between 1770s and the famine. In the late 1790s and early 1800s real rents appear to decline by about 20 per cent, but most of this fall can be attributed to the extraordinarily high prices in 1799 and 1800.

The series in Figure 7 begin in the late 1760s because good agricultural price indices are wanting for prior years. The oats price series assembled by Kennedy and Dowling shows an increase of about 65 per cent between the 1730s and the 1770s.[39] Given the increase in nominal rents of around 170 per cent, this implies an increase in real rent during the middle of the eighteenth century of roughly 64 per cent (270/165 = 1.64).

Allen shows how in theory changes in productivity translate into increases in Ricardian rent. These are magnified by the inverse of the land share in agricultural income.[40] In the Armagh case the lack of any significant growth in real rents suggests that total factor productivity growth in agriculture could only have been modest at best.

[39] Kennedy and Dowling, 'Prices', pp. 99–100.

[40] Allen, *Enclosure*, pp. 229–31.

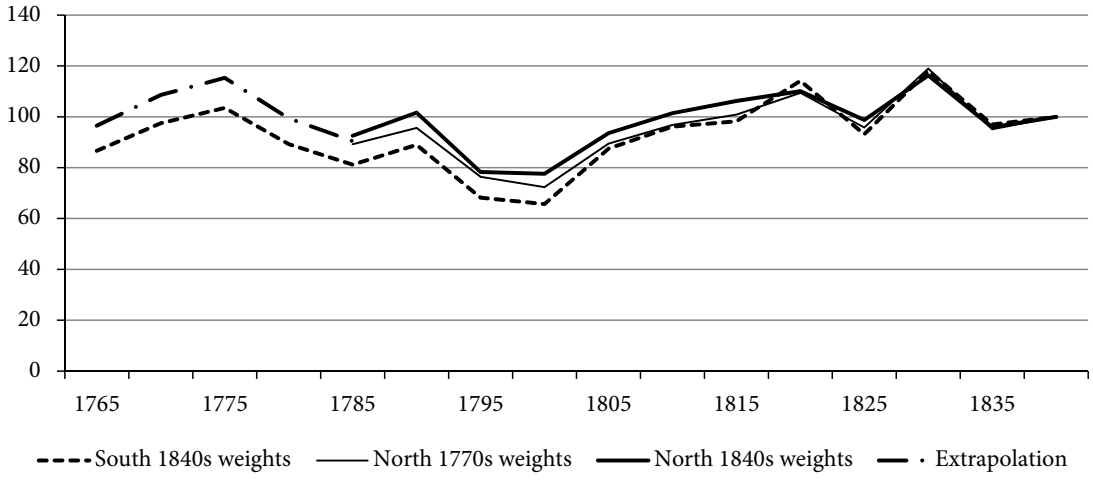


FIGURE 7. Real rents, 1765–1844 (1840–4 = 100)

Sources: rents: Armagh rents data set (see Appendix for estates and sources); prices: Kennedy and Solar, *Irish agriculture*, pp. 184–91.

It is feasible to attempt a direct, albeit rough and ready, calculation of total factor productivity growth between the late eighteenth century and the decades before the famine. For want of reliable information on output and input quantities, this can be done by comparing the changes in the price of output to the changes in the prices of the major inputs, land and labour. (We have no prices for capital inputs for Ireland, but these are unlikely to have been large for the small-scale, mixed farming characteristic of County Armagh.) If input prices rose faster than output prices, then this indicates increased efficiency at transforming inputs into output. If they grew more slowly, then it means reduced efficiency. The intuition behind these calculations is that the only way that the payments to those supplying the inputs to agriculture can grow faster than prices is if output is growing faster than the inputs being used.

The information on agricultural prices is relatively good. That on wages is more spotty, but the notorious stickiness of nominal wages is a help. Scattered observations on several Ulster estates, collected by Kennedy and Dowling, suggest that the levels of rural wages in the 1770s and 1780s and in the 1820s and 1830s were quite stable and that the increase from the late eighteenth century to the decades just before the famine was about 50 per cent.[41] Geary and Stark draw on Bowley's work to show an increase in Irish agricultural wages from the late 1780s to the 1820s and 1830s of about 30 per cent.[42] Comparing the average of 40 observations on wages in Arthur Young's tour in the late 1770s with Mokyr's estimate for the national average wage in the 1830s gives an increase of 50 per cent.[43] In the calculations below alternative values corresponding to wage increases of 30 and 50 per cent will be used.

Weights for the input prices are also needed. In the early 1840s rents accounted for 25–30 per

[41] Kennedy and Dowling, 'Prices', pp. 94–96, 98.

[42] F. Geary and T. Stark, 'Trends in real wages during the Industrial Revolution: a view from across the Irish Sea', *EcHR* 57 (2004), pp. 392–3.

[43] Solar, 'Growth and distribution', p. 256.

TABLE 4. Calculations of Total Factor Productivity Growth, 1765–1789 to 1820–44 (per cent per annum)

Land share	20		30		40	
Labour share	80		70		60	
Rents	0.90	0.90	0.90	0.90	0.90	0.90
Wages	0.48	0.74	0.48	0.74	0.48	0.74
Prices	0.90	0.90	0.90	0.90	0.90	0.90
Total factor productivity	−0.34	−0.13	−0.29	−0.11	−0.25	−0.10

Note: Total factor productivity is calculated as the difference between the weighted sum of the growth rates of the input prices minus the rate of growth of the output prices.
Sources: rents: Table 3; wages: see text; prices: Kennedy and Solar, *Irish agriculture*, pp. 184–191.

cent of agricultural output, but the calculations below are made for land shares ranging from 20 to 40 per cent.[44] It turns out that these alternative assumptions about the factor shares do not have a major influence on the results.

The calculations of total factor productivity are shown in Table 4. As an illustration of how the figures for productivity growth are arrived at, the figure at the bottom of the first column is calculated as:

Weighted sum of input price growth		Output price growth		Total factor productivity
((0.2 * 0.9%) + (0.8 * 0.48%))	−	0.9%	=	−0.34%

The results for all configurations of assumptions about wage growth and factor shares indicate that agriculture in County Armagh was becoming less efficient in its use of resources during the late eighteenth and early nineteenth centuries. Since crop yields remained relatively constant over the period, this means that more and more inputs, notably labour inputs, were needed to maintain yields at the same level. In so far as there were economies of scale, the fall in the average size of holdings may have contributed to the loss of efficiency.

The calculation of total factor productivity from input and output prices assumes that factor markets were competitive and that the input prices reflect the marginal productivity of labour and land. The existence of tenant right, by which tenants retained part of the economic value of the land, might seem to compromise the results, but this need not be the case. First, it is clear that tenant right existed throughout the period. If its share in the value of land remained relatively constant, then the trends in rents estimated here would still be valid. Second, even if there were changes in the share kept by the tenants, it might not make all that much difference to the conclusions. The estimates for tenant right in County Armagh cited above indicate that it might have been worth eight to ten years' rent. In the mid-nineteenth century land in Ireland

[44] Ibid., pp. 371–2

sold for about 25 years' purchase, which suggests that its value may have been understated by as much as 40 per cent. Suppose, to take an extreme case, that there were no tenant right in the late eighteenth century and that it grew to reach 40 per cent of what the landlord could capture before the famine. The effect would be to increase the rate of growth of rents as well as the growth of total factor productivity, but it would change total factor productivity growth from −0.11 per cent per annum to just 0.08 per cent per annum.

Negative total factor productivity growth is not such an unusual phenomenon. It has been the case for many sub-Saharan African countries during the last 40 years, a sign of the economic deterioration that has widened the gap between incomes in Africa and those elsewhere in the world.[45] Singapore, despite its remarkable growth, has had negative total factor productivity growth.[46] Its problem was that vast amounts of capital were used to little effective gain. But in western European agriculture during the eighteenth and early nineteenth centuries total factor productivity growth was generally positive and contributed to overall growth. In late eighteenth-century France total factor productivity growth in the Paris basin was on the order of around 0.3 per cent per annum.[47] For late eighteenth-century England Crafts puts it at 0.2 per cent per annum.[48] For the eighteenth century as a whole Allen gives a figure for England of about 0.1 per cent per annum.[49] Crafts' estimate for England during the first three decades of the nineteenth century is much higher, at 0.9 per cent annum.[50] Ireland, thus, was not keeping up with the improvements in agricultural efficiency being made elsewhere and may even have been regressing.

The rent and wage trends shown in Table 4 imply that the relative price of labour was falling over this period. This is consistent with the increased intensity of land use. Widespread potato cultivation required large inputs of labour for manuring, planting and harvesting. This was not only the case for subsistence farming. Land used by labourers for potatoes often formed part of crop rotations on larger holdings, with spade cultivation of potatoes serving as an important soil preparation for cereal crops.

The movements in land values also had important implications for the distribution of income, particularly during and after the French Wars. Since Irish leases were long, adjustments to new levels of land values were very slow. If the nominal value of land was rising, as measured by the new lettings, then tenants with old leases would capture more and more of the return to land. When prices fell, returns from the land shifted back to the landlords. The experience on two County Armagh estates is shown in Table 5. On both the Cremorne and Gosford estates the rent due to landlords fell seriously behind land values during the French Wars, though by the 1820s and 1830s both estates were able to reclaim their real losses as prices fell and as old, eighteenth-century leases fell in and property was re-let at higher rents. Note too that in terms of agricultural prices these landlords' real incomes rose very little between the 1780s and the 1830s.

[45] S. L. Baier, G. P. Dwyer and R. Tamura, 'How important are capital and total factor productivity for economic growth?', *Economic Inquiry* 44 (2006), pp. 33, 36.

[46] Alwyn Young, 'A tale of two cities: factor accumulation and technical change in Hong Kong and Singapore', *NBER Macroeconomics Annual 1992* (1992), p. 35.

[47] Hoffman, 'Land Rents', p. 795.

[48] N. F. R. Crafts, *British economic growth during the Industrial Revolution* (1985), p. 84.

[49] Allen, *Enclosure*, p. 228.

[50] Crafts, *British economic growth*, p. 84.

TABLE 5. Rents due and land values on Armagh estates, 1780s–1830s (1780s =100)

Cremorne				Gosford			
Year	*Rent due (£)*	*Index of rent due*	*Index of land values*	*Year*	*Rent due (£)*	*Index of rent due*	*Index of land values*
1787	1282	100	100	1789	3444	100	100
1812	2125	166	235	1814	6238	181	235
1838	2212	173	179	1828	6789	197	171

Sources: rents due: Cremorne: National Library of Ireland, MSS 3183, 3188–3189; Gosford: Public Record Office of Northern Ireland, D.1606/7A/73, 8, 38 (31 townlands); land values: Table 3.

VI

This paper has used new evidence and new (to Ireland) methods to trace the path of rents at new lettings in one part of Ireland during more than a century leading up to the famine of the late 1840s. The large sample, with information from nearly 5000 leases in County Armagh, and the use of controls for land quality, the size of holding, the length of the lease, and estate leasing policy have made it possible to make more precise estimates of rent movements. These estimates show growth in nominal rents up to the early 1770s, a plateau in the 1770s, 1780s and 1790s, an increase to the early 1810s, followed by a fall to the early 1820s and another plateau thereafter, stretching until the famine of the late 1840s.

For most of the period, certainly from the late 1760s, land values in County Armagh just kept pace with agricultural prices, which suggests that there were few gains in productivity and that the benefits to landlords of increases in output and trade were limited. When taken together with wage and price trends, the rent estimates imply negative total factor productivity growth, which meant that in order to maintain yields and output farmers and labourers had to put in more and more labour inputs to counter this loss of efficiency. Whether this rather dismal view of agricultural development in pre-famine Armagh is indicative of the situation in the rest of Ireland can only be determined by further research on rent movements in other parts of the country.

Appendix: Sources of Land Value Data

The following gives the estate name, the number of leases drawn from it and the archival reference using the following abbreviations; PRONI, Public Record Office of Northern Ireland; NLI, National Library of Ireland, Manuscripts Department; NAI, National Archives of Ireland; LEC, Landed Estate Court rentals

Charlemont, 1270, PRONI, T/1176/3, D/266/360A; D/1644/1–30; Manchester, 888, PRONI, D/1248/L; Brownlow, 776, PRONI, D/1928; Gosford, 774, PRONI, D/1606/3; Cremorne, 117, NLI Special List 86; Barton, 86, PRONI, D/294; Sandwich, 86, PRONI, D/763/2; Maxwell Close, 83, PRONI, T/3097; Cope, 82, PRONI, D/1252/21/1, D/1345/1, 2, 4, 5, 8, 9, 10; Kilmorey, 62, PRONI, D/2638/B; Verner, 61, PRONI, D/236; McKinstry, 58, PRONI, D/266/344; Graham, 57, PRONI, D/943/2; Caledon, 43, PRONI, D/2433/4/1, D/2433/AA/5/11B; McGeough I, 34, PRONI, D/288; Ker, 30, PRONI, D/1747/1–4; Wakefield, 28, PRONI, D/1252/7/6, D/959/5/1/1–58; Valentine Wilson, 22, PRONI, D/462/1–215; LEC Misc VI, 21, NAI, LEC 62/2; Burges, 20, PRONI, D/1594/60; Smyth, 19, NAI, LEC 30/37; Blacker, 18, PRONI, D/959; Simpson, 12, PRONI, D/1522/4/2/11, D/552/1–32; Fane, 10, PRONI, D/1393/1; LEC Misc I, 7, NAI, LEC 16/6; Fivey, 6, NAI, LEC 12/22; Bond, 5, NAI, LEC 10/43; Clarke, 5, PRONI, D/1253/4/1; Harden, 5, PRONI, D/1253/3/1–17; Hardy, 5, PRONI, D/1253/4; Misc I, 5, PRONI, D/476; Dungannon, 4, PRONI, D/1954/3/4, 11; LEC, Misc, IV, 4, NAI, LEC 41/6; LEC Misc V, 4, NAI, LEC 52/42; LEC Misc VII, 4, NAI, LEC 66/73; Peel, 4, PRONI, D/889/1; Trevor, 4, PRONI, D/778; Workman, 4, PRONI, D/1252/14/4; McGeough II, 3, PRONI, D/3012/2/2/11; Rotton and Lane, 3, NAI, LEC 136/48; Small, 3, PRONI, D/1607/5–6; Misc II, 3, PRONI, D/2394/1/1–3; Misc III, 2, PRONI, D2394/2/1–4; Read, 2, NAI, LEC 14/48; Turner, 2, NAI, LEC 14/60; Misc IV, 1, PRONI, D/2394/3/3; LEC Misc II, 1, NAI, LEC 33/29; LEC Misc III, 1, NAI, LEC 33/36; Leitrim, 1, NLI, 36025/1, 3.

Wagons at work, or a transport revolution from below: the case of southern Sweden, 1750–1850*

by Fredrik Bergenfeldt, Mats Olsson and Patrick Svensson

Abstract

The introduction of turnpike trusts has been considered to be an integral part of the rapid decline in transport costs in England. Institutional change in the transport system or the lack thereof has been used to explain if, and when, a transport revolution occurred. However, improved roads are just one component of declining inland transport costs. In this paper, we specifically analyse how the forms of transport employed on roads developed in the absence of major institutional changes to the road system. We use Scania, a province located in southernmost Sweden, during the period 1750–1850 as a case study of the development of transport means during the transformation from a rural economy to an emerging industrial one. Our main finding is the independent role of individuals in lowering their own transport costs, as demonstrated by the large increase in the value of wagons relative to other commodities, and the increasing share of wagons equipped with iron instead of wooden wheels and with iron axles instead of wooden axles. This finding indicates that it was possible to lower transport costs in pre-industrial Europe without institutional change.

An influential perspective in the literature maintains that the introduction of turnpike trusts in England during the eighteenth and nineteenth centuries marked a significant change in the financing of road improvements. It is argued that the establishment of these trusts created the necessary conditions for a transport revolution by leading to lower freight rates.[1] In contrast to England, other countries in pre-industrial Europe saw few major institutional changes that

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[1] D. Bogart, 'Did turnpike trusts increase transportation investment in eighteenth-century England?', *JEcH* 65 (2005), pp. 439–68; id., 'Turnpike trusts and the transportation revolution in eighteenth-century England', *Explorations in Economic History* 42 (2005), pp. 479–508; id., 'Did the Glorious Revolution contribute to the transport revolution? Evidence from investment in roads and rivers', *EcHR* 64 (2011), pp. 1073–1112; D. Gerhold, 'Productivity change in road transport before and after turnpiking, 1690–1840', *EcHR* 49 (1996), pp. 491–515; see also M. Overton, *Agricultural revolution in England. The transformation of the agrarian economy, 1500–1850* (1996), p. 142; J. Mokyr, *The enlightened economy. An economic history of Britain, 1700–1850* (2009), p. 209.

affected either the organization of road maintenance or road investments. The general view of the road networks in pre-industrial Europe is that they were of low quality. Hypothetically, the means to spend on road maintenance and investments must have been limited throughout pre-industrial Europe. Indirect evidence indicates that this limitation was the case in such European countries as France, Spain, Portugal, Italy, Holland, Germany and the Scandinavian countries. The road networks in these countries suffered from a lack of government initiatives, political fragmentation and decentralized road maintenance.[2]

Improved roads are just one component of declining inland transport costs. One factor that has been frequently overlooked is the form that transport took. As Landers states, 'The efficiency of land transport depended on the draught animals, the vehicle and the surface'.[3] In fact, investments in improved wagons or better draught animals may be the most viable options for individuals desiring to lower their transport costs when faced with growing commercialization. Coordination failures and free riding are limited compared to investments in roads. If roads were of a *sufficient* standard, not at least in terms of adequate width and surface, then improved wagons or better horses would lower transport costs because better wagons and/or improved draught animals could carry heavier cargo and travel faster.[4] Of course, the definition of a *sufficient* road is somewhat ambiguous, but as long as the individual investment in better horses and wagons makes sense, the roads must be adequate to give a return on the investment.

In view of this discussion, we analyse how the means of transport, animal-drawn carts and wagons, developed in the absence of major institutional changes to the road system during periods of rapid economic development, such as the agricultural transformation and early industrialization. An examination of how transport evolved broadens existing knowledge of the nature of change in transport costs in pre-industrial Europe. Thus, our main hypothesis is that it was possible for individuals engaged in trade to lower transport costs in pre-industrial Europe without major institutional changes to road maintenance. We use Scania, which is located in southern Sweden, and the period 1750–1850, as a case for testing our hypothesis. This focus allows us to study the development of the means of transport in an economy undergoing an agricultural transformation with increasing long-distance trade. Scania is an area without navigable rivers or canals, so one in which wagons were the only form of transport for the inland conveyance of grain and in which the dominant producers, the peasant-farmers, transported their grain themselves: no commercial freight companies were established during this period.

The hypothesis is investigated at the micro-level in three different ways. First, we explore the stock and the quality of draught animals available for the peasant-farmers over time. Second, we analyse the development of wagons in the same way by looking at the relative prices of wagons to grain. Relative increases in the prices of horses and wagons in the absence of economies of scale in production is an indication that improvements in these transport means occurred. This quantitative measure makes it possible to trace the development of horses and wagons over time. Third, we provide a detailed account of the technical changes by using the descriptions of wagons in probate records.

[2] R. Szostak, *The role of transportation in the Industrial Revolution. A comparison of England and France* (1991), pp. 53–4.

[3] J. Landers, *The field and the forge. Population, production, and power in the pre-industrial West* (2003), p. 81.

[4] For a discussion, see Bogart, 'Turnpike trusts', p. 488; Gerhold, 'Productivity change', p. 498–500.

I

As in many other countries, the English road maintenance system was a decentralized system based on parish responsibility. During the eighteenth and nineteenth centuries, this system was reformed by the introduction of turnpike trusts. The trusts gave a group of private investors the responsibility for a specific road line: they made it possible to invest in improvements by collecting tolls, issuing bonds, and where necessary purchasing land. This institutional innovation reduced uncertainty in new road investments, limited coordination failures and reduced free riding on other parishes' road investments.[5] The turnpike trusts had a profound impact on the English road network, and it is suggested that they laid the foundation for a transport revolution in England in the eighteenth and nineteenth centuries. With the establishment of turnpike trusts, road investments increased, and road maintenance improved, thereby contributing to the improvement of the road's base, surface and width of the English roads, which led to lower freight rates and reduced travel times.[6]

In this way, the early transport revolution, with better roads being built alongside canals and improvement in coastal shipping, preceded the Industrial Revolution. On the eve of the Industrial Revolution, England had a more developed and integrated market than any other country in Europe due to improvements in the transport sector and easy access to both inland waterways and coastal ports.[7] Declining transport costs made further regional specialization possible, while labour and capital were allocated more efficiently. It has even been argued that one of the most important effects of lower transport costs was an increased exchange of ideas and values, which contributed to improved efficiency in the initial stages of industrialization.[8] Thus, the transport revolution was not an effect of the Industrial Revolution but rather an important prerequisite for it, as opposed to the expansion of the railways, which took place concomitantly with the Industrial Revolution.[9]

Road improvements and the turnpikes have been highlighted as vital parts of the transport revolution in England. These factors had a more significant impact on the economy than improved water transport,[10] although the building of new canals is often described as the dominant economic feature. Clearly, water transport offered much lower transport costs for bulky goods than did road transport. Nonetheless, it has been argued that turnpike roads were more important than canals because the movement of goods was faster on roads than on canals.[11] It took less time to pack and unpack goods on a wagon or a packhorse than on a boat. In many cases, the ubiquity of the road system, along with shorter routes and faster speed, made road transport the most feasible option for the conveyance of goods, such as agricultural products and textiles.[12]

[5] W. Albert, *The turnpike road system in England, 1663–1840* (1972); Bogart, 'Turnpike trusts'; id., 'Glorious Revolution'.

[6] Bogart, 'Turnpike trusts'; Gerhold, 'Productivity change'.

[7] J. Mokyr, *The lever of riches. Technological creativity and economic progress* (1990), p. 244; Szostak, *Role of transportation*, p. 53.

[8] Mokyr, *Enlightened economy*.

[9] Szostak, *Role of transportation*, p. 85; Mokyr, *Enlightened economy*, p. 203.

[10] T. Barker and D. Gerhold, *The rise and rise of road transport, 1700–1990* (1995), p. 33.

[11] Mokyr, *Enlightened economy*, p. 209.

[12] J. A. Chartres and G. L. Turnbull, 'Road transport', in D. H. Aldcroft and M. J. Freeman (eds), *Transport in the Industrial Revolution* (1983), pp. 64–99.

Naturally, improved land transport had a larger overall impact on the transport of many low-cost goods than did the extension of water transport.[13]

In contrast to England, France saw only marginal improvements in its road network during the eighteenth century, despite the fact that the road network was in a critical state in the early part of the century.[14] During this period, the French government was responsible for the construction of roads, and several attempts were made to improve the road system in the eighteenth century by investing in new roads. These efforts mostly involved expensive, high-status road projects, which crowded out the financial means for basic road investments and maintenance. The road maintenance in France was also poorly organized. Until 1787, it was based on *corvée* labour, in which men between the ages of 16 and 60 were required to work 30 days a year repairing roads. This system, with reluctant workers and limited time designated for road maintenance, meant that the maintenance of the French roads was often neglected, even when they were in a poor state.[15]

The view that turnpikes contributed directly to lower transport costs has not gone unchallenged. It has been argued that an improvement in roads could have taken place even without the turnpikes. Moreover, even if turnpikes were important in lowering transport costs in England, other improvements in land transport played an equally important part and took place independently of the turnpikes.[16] For example, a gradual transition from oxen to horses is discernible in England as early as the Middle Ages. The main advantage of horses, compared to oxen, was the greater speed at which they could travel.[17] Gerhold has suggested that the improved breeding and draught power of horses in the late eighteenth century was itself a gain in productivity.[18] Furthermore, packhorses were replaced by two-wheeled wagons as early as the fourteenth century, and in the late seventeenth century, English carrying services began using four-wheeled wagons instead of two-wheeled ones. The adoption of four-wheeled wagons also took place among farmers, particularly wealthy ones engaged in grain production, during the same period, before the introduction of the turnpikes.[19] Both of these changes were important for improving freight capacity.[20]

Most of these improvements were introduced by the people transporting goods themselves independently of state-led institutional change. For example, increasing market involvement was an incentive for farmers to reduce their transport costs. For those who already were involved in the market, less time spent on conveyance meant that more time could be devoted to agricultural production, which increased agricultural productivity. Lower costs for transport also meant that remotely situated farms became more integrated in the market. In addition, when transport costs were lowered, urban-produced goods became cheaper for farmers, leading to further gains through an increased specialization in agricultural tasks.[21]

[13] Szostak, *Role of transportation*, pp. 50–2; Barker and Gerhold, *Rise and rise*, p. 33; Chartres and Turnbull, 'Road transport', p. 94.

[14] Szostak, *Role of transportation*.

[15] Ibid., pp. 60–7.

[16] For a discussion, see Barker and Gerhold, *Rise and rise*, pp. 24–5; Gerhold, 'Productivity change', p. 506.

[17] J. Langdon, 'Horse hauling: A revolution in vehicle transport in twelfth- and thirteenth-century England?', *Past & Present,* 103 (1984), pp. 37–66.

[18] Gerhold, 'Productivity change', pp. 501–2.

[19] S. Porter, 'Farm transport in Huntingdonshire, 1610–1749', *J. Transport Hist.*, third ser., 3 (1982), pp. 35–45.

[20] Barker and Gerhold, *Rise and rise*, p. 25.

[21] Szostak, *Role of transportation*, p. 29; Barker and Gerhold, *Rise and rise*, p. 34.

There are two possible scenarios based on the previous discussion. One is that better roads contributed to improving the transport means with increased freight capacity because of smoother surfaces and wider roads. These improved road qualities increased speed, facilitated heavier loads, eased the labour of horses and enabled the use of wagons instead of packhorses.[22] Similarly, bridges were important for connecting road stretches in the transport system and allowing for the adoption of larger, heavier transport means.[23] However, if the roads and bridges were of a sufficient standard to allow for the introduction of better wagons, another scenario is that the individual farmers lowered their individual transport costs by breeding stronger horses and/or by improving their wagons. There are a number of indications in the literature that this was possible. This situation may have been as important for economic development as investments in new roads brought about by an institutional reform of the road maintenance system. Our intention is to deepen this discussion by focusing on the development of the means of transport in a context lacking institutional changes to the system of road maintenance.

II

The origin of the Swedish system of road maintenance and construction can be traced back to the Middle Ages. According to the national legislation introduced by King Magnus Ericsson in 1350, every landholding peasant had to participate in the maintenance and construction of Swedish roads: they had to provide building materials and labour for constructing and maintaining roads in proportion to their taxable land units (*mantal*[24]). This obligation lasted until 1944, when the road administration was centralized.[25] In the eighteenth century, the state issued several decrees to ensure that road maintenance was, in fact, carried out. A new road law introduced in 1734, amongst other things, provided for regulated road maintenance twice a year for the peasant-farmers, gave instructions on how roads and ditches were to be made and provided for regular inspections by the district office (*Häradsrätt)* to identify the roads and bridges in need of maintenance. A royal decree was issued in 1790 that further stressed the peasants' role in clearing the roads and making them passable.[26]

During the seventeenth century, an upgrading of the Swedish road network commenced with the construction of new roads and bridges, as well as a noticeable development of the main roads, which were financed by the state. The driving force behind this expansion was

[22] Barker and Gerhold, *Rise and rise*, pp. 24–6; Bogart, 'Turnpike trusts', p. 488; Gerhold, 'Productivity change', pp. 498–500.

[23] D. F. Harrison, 'Bridges and economic development, 1300–1800', *EcHR* 45 (1992), pp. 240–61; J. Langdon and J. Claridge, 'Transport in Medieval England', *History Compass* 11 (2011).

[24] In principle, all land in Sweden had an assessment in *mantal*. During the eighteenth and nineteenth centuries, this was a strict measure of the farm's ability to pay taxes, i.e. its productive capacity. The fact that it was a capacity measure meant that the acreage varied. On the fertile plains, a farm taxed at a third of a *mantal* consisted of around 20 hectares, whereas in the forests an equally taxed farm could have acreage of 100 hectares. When a farm was divided, its *mantal* was divided between the parties. The total sum of *mantal* in Scania was almost unchanged between 1688 and 1900.

[25] B. Gustafsson, 'Hur vägarna blev en kollektiv nyttighet', in I. Norrlid, L. Olsson, B. Sandin, and J. Thelander (eds), *Över Gränser. Festskrift till Birgitta Odén* (1987), pp. 90–1.

[26] K. Enghoff, *De allmänna vägarna i Malmöhus Län* (1938), pp. 114–17, 128.

the strengthening of the centralized state in Sweden, which required better communications and transport.[27] The construction of new roads came to a halt during the eighteenth and early nineteenth centuries when the government invested in new canals instead. The building of canals did not address the transport needs of the majority of the peasant-farmers.[28] Even so, there were changes in agriculture in Sweden that might have indirectly affected road quality. As a result of land rearrangement and the end of the open-field system (i.e., enclosure) in the nineteenth century, roads were straightened and rebuilt.

It is important to note that despite continuous interest from the government in road maintenance, the overall organization of road maintenance was not changed in any way. Road maintenance continued to adhere to the medieval arrangement in which landholding peasants were responsible for road standards, and the government acted through decrees and fines in an attempt to make the system work.

Due to a lack of evidence, the efficiency of the road maintenance system in Sweden has not been analysed in detail. Nonetheless, there are some qualitative indications that the road organization functioned inadequately and that peasant-farmers lacked incentives to fulfil their duties. The constant interference through new royal decrees has been regarded as one indication that the system was poorly organized.[29] Furthermore, there was discontent among the peasant-farmers about their road maintenance duty, but the system was nevertheless preserved.[30] Even so, the maintenance of roads probably functioned in cases where farmers used the roads and thus had an interest in maintaining them.[31] There is also some evidence from contemporary sources showing that there was an interest in maintaining high-quality and passable bridges.[32] One limiting factor may have been the problem of coordinating a public good. If peasant-farmers in one parish improved their part of the road, they were not guaranteed that the peasant-farmers in the next parish would also do so. Rather, these latter individuals would have benefited from acting as free-riders, and the outcome may have been long conflicts between peasant-farmers in adjacent parishes and negligence of road maintenance.[33]

The actual state of the roads in Sweden has been described in conflicting ways. One view is that Sweden had an underdeveloped road system in the eighteenth and nineteenth centuries.[34] The other view is that by the end of the eighteenth century, Sweden already had one of the best road networks in Europe with a reasonably well-functioning road maintenance system.[35] Naturally, with the paucity of data on roads, it is difficult to chose between these opposed positions, but a major increase in peasant-farmers' long-distance grain sales during the late eighteenth century onward is an indication of an at least adequate road system. One local study of western Sweden has dealt with changes in the form that transport took and its implications

[27] H. Westlund, 'State and market forces in Swedish infrastructure history', *Scandinavian J. Hist.* 23 (1998), pp. 65–88.

[28] G. Ahlström, *Infrastruktur och kommunikationer. Sverige under 1700- och 1800-talen* (1985); Westlund, 'State and market forces'.

[29] Gustafsson, 'Hur vägarna', pp. 90–1.

[30] J. O. Montelius, 'Svensk vägadministration: en historisk översikt', *Bebyggelsehistorisk tidskrift* 39 (2000), pp. 15–22.

[31] Westlund, 'State and market forces'.

[32] Enghoff, *De allmänna*, p. 117.

[33] Ibid., pp. 118–19.

[34] Ibid.; G. Fridlizius, 'Handel och Sjöfart', in O. Bjurling (ed.), *Malmö Stads Historia, del 3* (1981).

[35] See discussion in Ahlström, *Infrastruktur* and Westlund, 'State and Market'.

on the overall state of the roads. Gadd found that the use of pack saddles disappeared during the 1770s and was replaced by the use of wagons. Moreover, wagons with iron axles were introduced among the peasant-farmers around 1780 and became widespread throughout the grain-growing plains during the 1820s.[36] These changes and investments would have been impossible without improvement, or at least the achievement of a sufficient standard of the roads. Thus, the Swedish debate is similar to the English debate: were the roads of sufficient quality before the Industrial Revolution? Was it possible to lower transport costs without an institutional change to the road system?

III

Our case study is the region of Scania, which is located in southern Sweden. This region was dominated by agriculture until the industrial breakthrough of the late nineteenth century. Agriculture in Scania during the eighteenth and nineteenth centuries saw a rapid increase in output that more than quadrupled from 1700 to 1860.[37] The transformation of agriculture began with the earliest enclosures and the reclamation of new land in the 1750s, but it accelerated in the early nineteenth century with more radical enclosures and the introduction of new tools and new crop rotations. Agricultural change was also caused by the increase in grain prices and the removal of trade regulation in the late eighteenth and early nineteenth century, which encouraged producers to increase output.[38] Because the vast majority of the land (approximately 90 per cent *c.*1800[39]) was managed by peasant-farmers, a central part of the agricultural transformation was the growing market involvement by these farmers. Scania was already a surplus producer of grain in the early seventeenth century. After the change of nationality from Danish to Swedish in 1658, trade was redirected to sales of grain to deficit areas in Sweden.[40] From the 1820s onward, exports of agricultural products, particularly grain, increased. When foreign demand for oats increased rapidly during the 1840s, the export volumes increased massively.[41]

Although the demand that came from the relatively small towns in Scania was rather limited, the towns were still important nodes in the grain trade. The agricultural surplus had to be conveyed by road transport to the major towns by the coast before being exported by sea to either foreign or domestic areas.[42] It is quite clear that inland transport conditions for conveyance of grain differed regionally in pre-industrial Sweden. In central Sweden, the easy access to inland waterways, which consisted of lakes connected by canals, created favourable

[36] C. J. Gadd, *Järn och Potatis. Jordbruk, teknik och social omvandling i Skaraborgs län 1750–1860* (1983), pp. 183–95; C. J. Gadd, *Den agrara revolutionen, 1700–1870* (2000), pp. 262–65.

[37] M. Olsson and P. Svensson, 'Agricultural growth and institutions: Sweden, 1700–1860', *European Rev. Economic History* 14 (2010), pp. 275–304.

[38] See, e.g., M. Olsson and P. Svensson, 'Agricultural production in southern Sweden, 1702–1864', in Olsson and Svensson (eds), *Growth and stagnation in European historical agriculture* (2011), pp. 117–39.

[39] M. Olsson, *Storgodsdrift. Godsekonomi och arbetsorganisation i Skåne från dansk tid till mitten av 1800-talet* (2002).

[40] Olsson, *Storgodsdrift*, pp. 42–8; K. Åmark, *Spannmålshandel och spannmålspolitik i Sverige, 1719–1830* (1915), p. 20.

[41] G. Fridlizius, *Swedish corn export in the Free Trade era* (1957).

[42] Gadd, *Den agrara revolutionen*, pp. 180–1.

conditions for domestic transport of grain.[43] Most of the movement of grain took place in the winter in the northernmost parts of Sweden because of more favourable transport conditions when lakes were frozen and it was possible to use sleighs.[44] The southernmost parts of Sweden lacked both inland waterways and cold winters. Here, the roads were used for carriage of agricultural products, even during rainy winters and autumns when at times they could be quite muddy and difficult to use.[45]

We employ probate records to measure the degree of investment in form of transport by these grain producers. In general, the records provide information on the household debts and assets of a deceased person. The marital status and occupation of the deceased, the place of residence, and the surviving children and their spouses are noted in the probate record. More importantly, there is also an assessment of the value of each item in the estate, including a short description of the item.

The problems of using probate records are now well known. The first problem is the representativeness of the inventory population; not all deaths resulted in an inventory. According to Lindgren, the deceased for whom inventories were not made generally lacked assets and/or debts. Lindgren found that it was mostly unmarried individuals and individuals belonging to the lowest social strata who were under-represented in the inventories.[46] For our purpose, this bias is of minor importance because we focus on the relatively wealthy group of farmers and their possession of draught animals and wagons. However, we must consider another problem: some of the deceased, although referred to as farmers, had retired and given up farming. This situation could lead to an underestimation of the stock and value of animals and wagons among farmers.[47] We attempt to overcome this problem by only using inventories in which there was a farm listed as an asset. However, for those who did not own their farms (i.e., for tenants), the landed property was not registered in the inventory. Using the name of the deceased and his place of residence and checking this information against the poll tax registers, we have corrected for this situation. A second problem concerns changes in the descriptions of the items. Often, the items in the probate inventory were defined in more detail when they were novel than after they had become common items. When items are more thoroughly described, we take this as an indication of a technical innovation. Conversely, we interpret the disappearance of references to an innovation as a sign of its general adoption.[48] Finally, there is a danger that the valuation of the items in the inventories did not reflect the real prices of the objects. This is not a problem for us as long as the bias is constant over time because we use only the relative value in relation to market scale prices on grain. Regarding this potential trend bias, earlier studies of Swedish probate inventories have shown that the inventory items were undervalued, but the size of the undervaluation was constant during

[43] T. Thorburn, *Economics of transport: The Swedish case, 1780–1980* (2000), pp. 26–7.

[44] Westlund, 'State and market forces', pp. 67–8.

[45] Gadd, *Den agrara revolutionen*, p. 263.

[46] H. Lindgren, 'The modernization of Swedish credit markets, 1840–1905: Evidence from probate records', *JEcH* 62 (2002), pp. 810–32.

[47] A further discussion on this can be found in Porter, 'Farm transport', p. 36, who used probate inventories to investigate the adoption of four-wheeled wagons among English farmers.

[48] For a discussion, see J. Kuuse, 'The probate inventory as a source for social and economic history', *Scandinavian EcHR* 22 (1974), pp. 22–31; Gadd, *Järn och Potatis*; P. Hallén, *Järnets tid: den svenska landsbygdsbefolkningens järninnehav och järnkonsumtion* (2003).

TABLE 1. Probate records in the sample and percentages of observations

Property rights status	*%*
Freeholders	44.0
Crown tenants	26.0
Tenants under the nobility	30.0
	100.0
Natural conditions	*%*
Plains	36.0
Intermediate land	37.0
Woodland	27.0
	100.0
Mean Farm size (*mantal*)	0.34
Year	*Number of observations*
1750	35
1770	28
1790	33
1810	33
1830	50
1850	51
Total	230

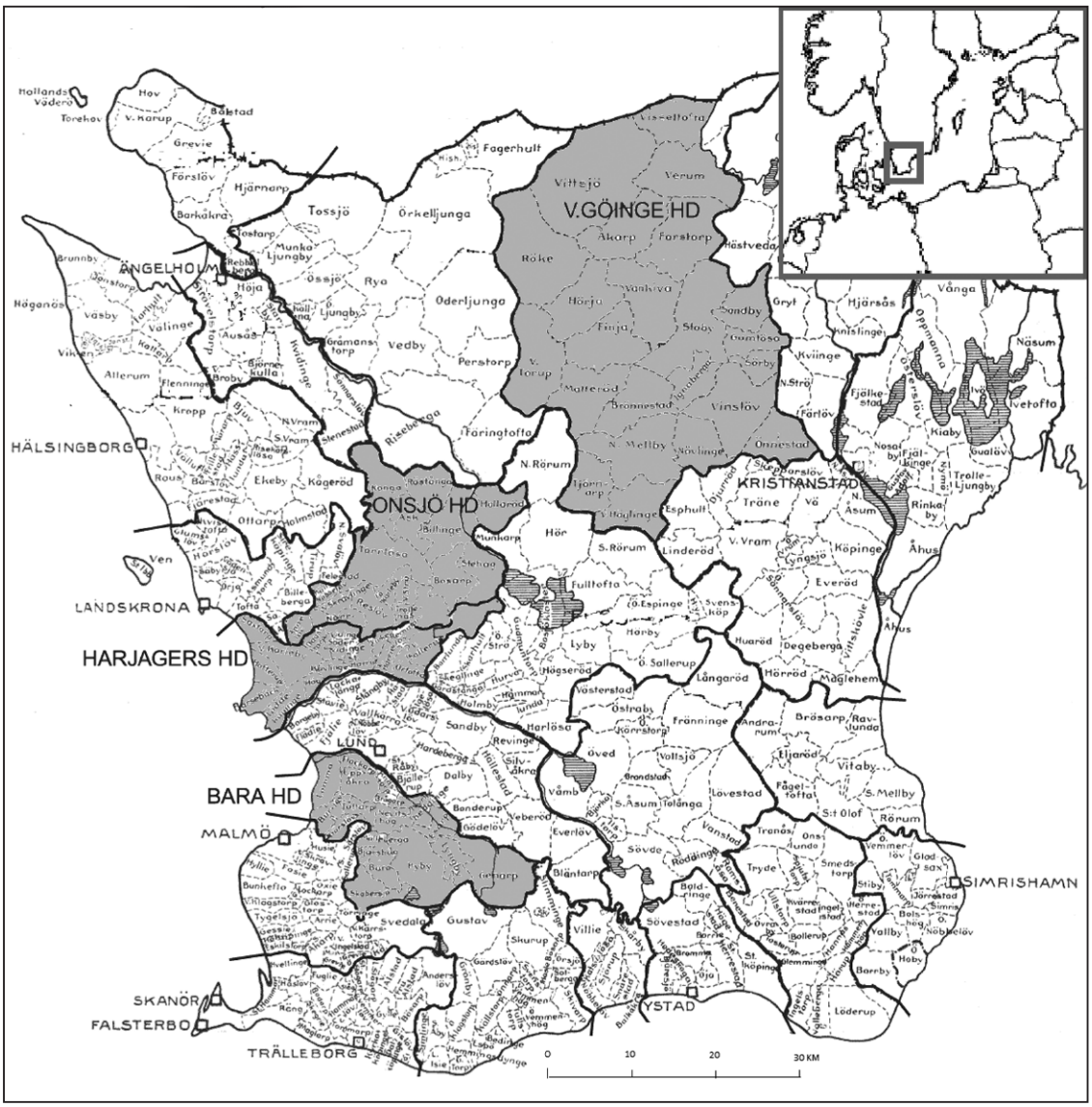
Sources: see Figure 1.

the period investigated in this paper.[49] Most importantly, these studies have shown that the valuation of wagons did not perfunctorily follow market price changes in grain, but reflected the condition and quality of the wagons.[50]

We have collected information from the probate records for the period 1750 to 1850 with a range of 20 years between each data point, in all 230 records. No data point has less than 28 observations and the probate records collected comes from within three years from each data point (e.g. 1770 holds 1767–73), with the exception of 1750 which reaches back for two whole decades due to lack of observations. The data set was randomly collected from four districts (*härader*). It contains data on various geographical settings and different types of peasant-farmers with respect to property rights status, as seen in Table 1. In Scania, natural conditions tend to correlate with the distance to the nearest harbour. The best soils are

[49] M. Isacson, *Ekonomisk tillväxt och social differentiering 1680–1860. Bondeklassen i By socken* (1979), p. 223.

[50] Gadd, *Järn och Potatis*, p. 73.



MAP 1. Scania, showing the districts investigated

located on the plains near the coast, and most peasant-farmers in this category lived within 30 kilometres of a port. Although some of the peasant-farmers in the intermediate and wooded districts also lived within this range, some of them were as far as 80 kilometres from the nearest port (see Map 1).

The average size of the farms in our sample, 0.34 *mantal*, is close to the average size for all Scanian peasant-farmers during our period of investigation. Also over time, the average size of farms in the sample reflects the general development of farm sizes in the region. During periods of rapidly increasing agricultural production, farms became smaller, in terms of *mantal*, due to a process of farm division during the period under study. This pattern is

also reflected in the sample; in 1750, the average size was 0.47 *mantal*, a hundred years later it was 0.25, but during that period grain production per *mantal* increased massively.[51] Thus, we have a sample of relatively wealthy landed farmers throughout the period. With respect to the farmers' property rights, the most striking contrast was between those tenants under the nobility and the two other categories of freeholders and crown tenants. Whilst the latter had secure property rights, manorial tenants held by insecure tenures. While the former paid predetermined taxes to the state or a state official, mostly in cash or in grain, the latter paid unregulated *corvée* dues to the manor. As for the composition of production, crops comprised the dominant share of total production for all farms in Scania during the eighteenth and nineteenth centuries. Rye, barley and oats were the major staple crops, while potatoes, buckwheat, peas and peas were also occasionally grown. Animal production consisted of foals, calves, lambs and geese.

IV

Improved transportation can be achieved by increasing speed, by increasing freight capacity while maintaining the same speed, or by a combination of both. A first way of accomplishing this could be to change from slower animals to faster and stronger ones. In line with this notion, we assume that if farmers had horses, these would be preferred over oxen for transport. Two characteristics speak in favour of the horses. First, oxen were slower and weaker, and, second, horses could be used for many different tasks and therefore bore no additional cost when used for transport.[52] It is unlikely that horses were needed for other tasks at the same time as they were required for transport because peasant-farmers, relying on household labour, probably did not go to towns during the peak season of agricultural work. Moreover, the argument, proposed by some researchers, that horses pulling wagons were more expensive than horses used in agricultural tasks because they required more food[53] is, to a large extent, invalid here. Because the share of horse work used for transport on the peasant farms was rather small, potential extra costs were negligible.[54]

From the probate records, we can determine that even before 1750, a Scanian farmer had, on average, seven horses and foals, and no farmer in the sample had fewer than two horses. This herd size remained the same until 1830, when an average farmer had approximately five horses and foals.[55] The presence of a relatively large number of horses indicates that a transition to horses had already taken place before the mid-eighteenth century, at least in southern Sweden. One method to estimate the quality of the horses over time is to relate their value to the general price movement. We use the price of the dominant grains, rye and barley, as indicators of the general development of prices calculated as an average of the grain prices for the five years preceding each point analysed, and we used the most expensive horse at each farm as the nominator for the value of the horse.

[51] Olsson and Svensson, 'Agricultural growth', pp. 283, 285.

[52] J. Langdon, 'The economics of horses and oxen in medieval England', *AgHR* 30 (1982), pp. 39–40.

[53] Ibid., p. 33.

[54] Thorburn, *Economics of transport*, p. 101.

[55] This decrease in the number of horses has also been observed for other parts of Sweden and has been explained by improved ploughs requiring less draught power, Gadd, *Järn och Potatis*.



FIGURE 1. Relative value of the farm's best horse, 1750–1850 (1750=100)

Note: The value of the best horse per farm is divided by the average price of rye and barley for each period.

Sources: Probate records, Regional Archives of Lund: Bara häradsrätts arkiv; Harjagers häradsrätts arkiv; Onsjö häradsrätts arkiv; Västra Göinge häradsrätts arkiv; *Poll tax registers*, Regional Archives of Lund: Bara häradsrätts arkiv; Harjagers häradsrätts arkiv; Onsjö häradsrätts arkiv; Västra Göinge häradsrätts arkiv; *Historical Database of Scanian Agriculture*, Department of Economic History, Lund University.

From Figure 1, we can see that horses increased in value relative to grain between 1770 and 1810. This is an indication of improving horse quality, which coincides with the beginning of the so-called Crown Stallion Establishment (*Kronohingstinrättningen*) in Scania in 1778, intended for more and better breeding in the villages. After its establishment, it was ordered that a stud horse should measure at least 9 *kvarters* and 4 *tum* (143.81 centimetres). At the expense of the Swedish Crown, 136 stallions were bought from German and Swedish stud farms, each of which was assigned to a group of parishes and villages. The peasant-farmers were pressured by the government to use these stallions, and no others, for breeding. Peasants had to pay a fine of 60 *riksdaler* if they did not comply.[56]

Although the Crown's stud lasted for only about ten years, the project resulted in the birth of more than 5000 foals of good breeding. More importantly, the stallions and their offspring remained in the villages and proliferated. Subsequently, no further major state projects were undertaken to improve the breeding of the peasants' horses, at least not until the 1860s. This development in horse breeding is consistent with the relative values of the best horses, as shown in Figure 1. The horses improved from 1770–90 onwards, most likely due to the improved breeding that began in the 1780s.

There are two ways to use horses for transport: as packhorses or to pull a wagon. Pack animals were less dependent on the width of the roads. This meant that roads had to be sufficiently wide before wagons could replace packhorses.[57] Pack animals were faster than horses pulling a wagon and could work for more hours per day. While horses pulling a wagon

[56] C. G. Weibull, *Skånska jordbrukets historia intill 1800-talet början* (1923), pp. 176–7.

[57] Bogart, 'Turnpike trusts', p. 488.

could only travel approximately 40–50 kilometres per day, packhorses could reach around 80 kilometres. However, packhorses could transport less weight.[58]

To examine whether the horses in Scania between 1750 and 1850 were used as pack animals or as power to pull the wagons, we can again use our probate records. If horses were used as pack animals, we would expect to find special equipment related to this task among the items in the inventories. Indeed, in many of the inventories, saddles can be found among the items listed. However, most of these are designated as 'riding saddles' and not 'pack saddles'.[59] Together with the wagons found in the inventories, this finding provides evidence that horses on Scanian farms were used predominantly for pulling wagons rather than as pack animals. It implies that by the middle of the eighteenth century the roads in Scania were of a sufficient quality to permit the use of wagons instead of pack animals.

V

We use two supplementary methods to examine the changes in the wagons. First, we study the development of prices of wagons in the probate records. Second, we perform a disaggregated analysis of the technical changes of wagons over time. It is important to note that we study wagons that were used exclusively for the conveyance of goods; we have excluded wagons that may be considered conspicuous consumption.

The long-term development of the relative value of the best wagon in each household is shown in Figure 2. We assume that the farm's best wagon was the one that was used for long conveyance of agricultural goods. There was a rapid improvement in wagons that began sometime after 1770. From then on, the relative price of the farms' transport wagons increased until 1810. The technical contents of this rapid increase in the value of wagons will be explored later, but we can already dismiss explanations linked to changes in raw material prices. The vital parts of improved wagons were made of iron, and the iron prices increased more slowly than the general price level (see Figure 6). The slower development of iron prices relative to the general price level was connected to a rapid increase in grain prices and a rising production of iron, which was produced by the ironworks in central Sweden.[60]

It seems logical to connect this increase in the value of transport means with the concurrent expansion of internal trade and the commercialization of agriculture in Scania. Moreover, the period of the fastest growth in the relative price of wagons, 1790 to 1810, was not only characterized by a growing demand but also by soaring grain prices. Therefore, because we relate the value of the wagons to the price of grain, the figure shows a massive increase in the real wagon value, which points to this period as one of utmost importance for the improvement of

[58] Landers, *Field and the forge*, pp. 81–4. Packhorses could not only carry less weight, but to travel quickly they also had to be accompanied by a person riding on a horse; thus, the average weight per horse used was even lower than that calculated in previous studies.

[59] In a study of western Sweden, Gadd, *Järn och Potatis*, found evidence of pack saddles in probate inventories. They disappeared after 1775, indicating a transition from packhorses to wagons.

[60] In a study of Sweden, Hallén, *Järnets tid*, p. 196, estimated that iron possession in Sweden increased rapidly during the eighteenth and nineteenth centuries. While an average sized farm in 1750 possessed 140 kilograms of iron, it possessed almost three times as much, 500 kilograms, in 1870.



FIGURE 2. Relative value of the farm's best wagon, 1750–1850 (1750=100)

Sources: see Figure 1.



FIGURE 3. Relative value of the total wagons per farm, 1750–1850 (1750=100)

Sources: see Figure 1.

transport means. In the next period, from 1810 to 1850, the development of the relative value of the transport wagons seems to have been only modest, although marked by a somewhat more noticeable increase in the last period, a phase of strong commercialization after the repeal of the Corn Laws in Britain.

Another way of exploring the investments in wagons among peasant-farmers is to follow the total value of the wagon fleet over time. The long-term development of the total value of wagons per household in Scania is displayed in Figure 3. We use the previous procedure to compare changes over time. The total value of all wagons is deflated by the preceding five-year average of grain prices. As Figure 3 makes clear, the increase in the total value of wagons was rather slow in the period 1750–70, but it began to increase between 1770 and 1790 and was particularly robust in 1790–1810. From the 1810s onward, the development of grain prices and the summed value of the wagons among peasant-farmers remained constant, although a small



FIGURE 4. Average number of wagons per farm, 1750–1850

Sources: see Figure 1.

increase might have been evident during the initial phase of the mid-nineteenth century grain trade expansion.

A portion of the increase in the value of the total wagons per household was due to a larger number of wagons, as can be seen from Figure 4, and some of this increase was due to improvements in wagon quality. The growing number of wagons could be due to peasant-farmers investing in more wagons for transport or acquiring wagons that were more task-specific. Examining the inventories in detail, we find that at the same time that the best wagons were improved by seats, for example, they were also referred to as 'transport wagons' as opposed to 'working wagons', the phrase which seems to have been used previously for wagons used for both transport and production. Thus, at the same time that the best wagons were improved, they became exclusively transport wagons and were replaced in work by wagons designated for agricultural production.

Because these results build on different inventories for the respective time periods, we conduct a multivariate regression analysis (OLS regression) with the relative prices of the transport wagons as the dependent variable to control for the sample composition at each point in time (Table 2). Along with the time variable, measured as dummies for each specific time period, we also include natural conditions (plain land, intermediate land and wood land), type of land ownership and farm size as independent variables.[61] The results demonstrate that the pattern found in the bivariate analysis holds when we control for farm size, land ownership and natural conditions. In line with the expectations, the major increase in the relative value of the best wagons took place during the sub-periods of 1770 to 1790 and 1790 to 1810 (as indicated by the change between the coefficients for the time variables in the regression).

To delve deeper into developments in the wagons during the period studied, we examine the detailed descriptions of the wagons in the probate inventories. An analysis of these indications

[61] The farms without complete information on all these variables have been excluded from the regression, which leaves us with 185 observations.

TABLE 2. OLS regression with the relative value of transport wagon as the dependent variable, 1750–1850

Category	*Variable*	*Coefficient*	t-*value*	*P* > t
Farm size	Mantal	3.19	5.13	0.000
Land ownership	Freehold	r.c		
	Crown tenant	−0.66	−2.15	0.033
	Noble tenant	−0.32	−1.18	0.238
Natural conditions	Plains	r.c.		
	Intermediate	−0.82	−3.00	0.003
	Woods	−1.30	−4.44	0.000
Time periods	1750	r.c		
	1770	0.31	0.76	0.450
	1790	1.05	2.63	0.009
	1810	2.56	6.41	0.000
	1830	3.03	7.46	0.000
	1850	3.67	9.19	0.000
Number of observations	185			
F-value	22.95			
Prob > F	0.000			
R-square	0.56			
Adjusted R-square	0.54			

Note: r.c. is an abbreviation for reference category.

reveals changes in the transport technology. First, we outline changes in the types of axles and, subsequently, changes in the types of wheels.

The types of axles on the transport wagons are shown in Table 3. The pattern that emerges is that of a steady improvement of the transport wagons. The initial increase in the share of transport wagons with iron-sleeved axles in 1770 is noteworthy, although the percentage of transport wagons whose axles were iron-sleeved decreased from 1770 to 1790 and again from 1790 to 1810 and subsequently disappeared completely. This initial technological development, which wedged together the wheel with the axle, was a transitional construction to improve the strength of the wagons but was soon abandoned for real iron axles. Concurrently, as seen in Table 3, the proportion of transport wagons with iron axles increased rapidly until 1790, but decreased in the two subsequent periods. However, the declining share of wagons with iron axles was not a matter of technical regress. Rather, it was due to a more thorough description in the inventories when the iron axles began to emerge during 1770–1790 and less so in other periods, when iron axles were the standard. This interpretation is consistent with the larger share of unspecified wagons in 1750 and 1850, respectively, and the increasing value of wagons over time, as shown in Figure 2. By comparison, only 8 per cent of the wagons in

TABLE 3. Types of axles on the transport wagons (percentages), 1750–1850

	Iron axles	*Wood axles*	*Iron-sleeved*	*Unspecified*
1750	0	0	0	100.0
1770	23.0	0	8.0	69.2
1790	53.3	0	6.6	40.1
1810	34.4	0	3.1	62.5
1830	16.5	2.4	0	80.1
1850	4.2	0	0	95.8

Sources: see Figure 1.

TABLE 4. Types of wheels on the transport wagons (percentages), 1750–1850

	Iron-rimmed wheels	*Wooden wheels*	*Unspecified*
1750	0	0	100.0
1770	11.5	0	88.5
1790	16.7	0	83.3
1810	65.6	6.3	28.1
1830	61.9	0	38.1
1850	46.8	0	53.2

Sources: see Figure 1.

Västergötland, which is located approximately 250 kilometres north of Scania, had iron axles in 1783–90, but 80–95 per cent of them had iron axles in the 1850s.[62]

Wheels constituted another crucial component of the wagons. They were important for both the durability of the wagon and its freight capacity. Low-quality wheels were easily worn out and in the worst case could be damaged beyond repair. This phenomenon was especially the case when the wagon carried heavy cargo.[63] Table 4 shows the description of the wheels on the transport wagons. In the periods leading up to 1810, the proportion of transport wagons with iron-rimmed wheels increased. The first two sub-periods, 1750–70 and 1770–90, saw a steady increase, but it was predominantly from the 1790s that most farmers invested in iron-rimmed wheels, leading to two-thirds of all transport wagons being equipped with iron-rimmed wheels by 1810. From then, we see the same pattern as for the axles, with a decreasing share of wheels being described as iron-rimmed. It seems unlikely, as before, that there would be a technological retrogression with respect to wheels on the wagons. It is likely that the iron-rimmed

[62] Gadd, *Järn och Potatis*, p. 189.
[63] E. Esbjörnsson, 'Skånska Allmogevagnar', in *Skånes hembygdsförbunds årsbok*, pp. 55–6.

TABLE 5. Estimates of the materials in the moving parts of the transport wagons (percentages), 1750–1850

	Iron	*Wood*
1750	0	100
1770	27.3	73.7
1790	66.7	33.3
1810	93.7	6.3
1830	97.6	2.4
1850	100.0	0

Sources: see Figure 1.

wheels were carefully distinguished from wooden wheels when they first began to appear, but not later.

Merging these results and taking into consideration these failures to specify the types of axles and wheels, we can estimate the total quality improvements (Table 5). Our interpretation is that in 1850, all transport wagons were equipped with either iron axles or iron-rimmed wheels or, in most cases, both (Figure 6). This contrasts with the beginning of our period, when the probate records show that all wagons had wooden wheels and wooden axles. Again, when comparing the development in west central Sweden, peasant-farmers in Scania were somewhat slow in introducing iron wheels but early in introducing iron axles.[64] A possible explanation for this is the relative deficit of iron in south Sweden. Consequently, when iron was first introduced in this central grain district, it was used to directly increase loading capacity by replacing the wooden axles with iron axles.

Moving from wood to iron led to a set of improvements in transporting heavy goods. First, iron parts increased the loading capacity of the wagons. Iron was stronger and more durable than wood, which was particularly important when transporting heavy goods.[65] Second, the friction was lower with iron parts than with wooden parts. Wooden axles and wheels were greased with a homemade mixture of tar and swine lard. On longer journeys, the farmers had to grease these parts continuously, often using black slugs to smear the naves to lower friction and to prevent the parts from wearing out.[66] With the lower friction resulting from iron parts, the draught animals could pull more weight with the same effort. Thus, improved loading capacity and less friction meant that holding constant the quality and number of draught animals and the number of wagons and days used for transport, more goods could be transported, and transport productivity increased.

[64] Gadd, *Järn och Potatis*.

[65] Ibid, p. 193.

[66] I. Svanberg, 'Black Slugs (*Arion ater*) as grease: A case study of technical use of gastropods in pre-industrial Sweden', *J. Ethnobiology* 26 (2006), pp. 299–309.



FIGURE 5. *Father is going to town* (*Far ska köra te´ stan*) by Frans Lindberg (1858–1944). The artist tries to display the typical buildings, clothing and other objects from the 1840s in Scania. The painting is kept by Österlen's Museum in Simrishamn and is reproduced with their permission.

VI

Previous research has concluded, or at least implied, that the introduction of turnpike trusts in England during the eighteenth and nineteenth centuries, contributed to lower transport costs. However, there were other ways to reduce costs for individuals in need of better inland transport, most notably by breeding stronger horses and/or improving wagons, if the roads were of a sufficient standard. Against this background, we asked whether transport costs could be lowered without institutional changes to the road system and major road investments. To answer this we looked at the development of draught animals and wagons in southern Sweden during the eighteenth and nineteenth centuries.

Our results demonstrate that transport costs declined without an institutional change to the road system. In the Scanian case, this outcome was due to two simultaneous changes. First, there were significant improvements as iron axles replaced wooden axles on the wagons and wooden wheels were substituted with iron-rimmed wheels on the wagons used for transport. These changes were important for improving the freight capacity and the reliability of the wagons. Moreover, the designation of wagons exclusively for agricultural production and conveyance indicates that farmers became increasingly aware of the importance of improved transport. Second, state-led actions to improve the quality of the horse stock through breeding were undertaken, which meant that the horses could travel faster and carry heavier cargo.

Indeed, the revelation of these improvements in land transport indicates that the roads and bridges were of at least a minimum and sufficient standard, enabling peasant-farmers to lower their own individual transport costs through investments in their means of transport. While we do not rule out the possibility that these farmers might have started to improve the roads as well, it is notable that all of these changes were undertaken despite the fact that the state did not initiate any institutional change to the road system or make any significant investments in roads. Furthermore, the evidence presented in this article shows that these improvements, which involved better wagons and breeding of horses, came during periods of rapid economic development. Although our results cannot be interpreted directly in a causal manner, they clearly indicate that the peasant-farmers took active measures to lower their transport costs in the face of growing commercialization and increasing agricultural surplus. In turn, these reduced transport costs might have contributed to the further commercialization of the peasant economy by providing incentives for increased specialization among farmers involved in trade and by involving more remotely situated peasant-farmers in the markets.

Our study contributes important insights into the decline of transport costs in pre-industrial Europe. When incentives for producers increased (due, for example, to increasing demand for agricultural products and a growing agricultural surplus), reaching the markets became sufficiently important that initiatives to lower transport costs were taken by the road users themselves. These initiatives consisted of investments in improved transport means or even in improvements of the roads within the old road maintenance system. This study highlights that it was possible to reduce transport costs in pre-industrial Europe despite the absence of an institutional change to the road maintenance system.

The Land Question in nineteenth-century Wales, Ireland and Scotland: a comparative study*

by David W. Howell

Abstract

This article follows the recent trend of adopting a comparative approach in the historiography of the Land Question. Some studies have sought to compare the land agitations of Ireland and the Western Highlands of Scotland while others have been concerned to explain the absence of a land war in Wales compared to that of Ireland. By comparing the Welsh Land Question with those of the other two Celtic nations, this study argues that while there were common grievances fuelling all three land agitations and – partly through knowledge of happenings elsewhere in the Celtic fringe – similar reform programmes and courses of action, it is the differences between the three land movements that need recognition and emphasis.

Much attention has been paid to the origins and nature of the 'Land Question' which was to play such a crucial role in the politics of nineteenth-century Britain and Ireland. Although middle-class urban radicals drew attention to an English land question in their criticism of the management of landed estates and the aristocratic monopoly of land through primogeniture and the strict settlement, no mass tenant movement came into existence in the late-nineteenth century.[1] In spite of grievances felt over issues like game and tenant right, relations between farmers and their landlords remained reasonably harmonious and bore little resemblance to the bitterness and frequent violence experienced in Ireland, the Western Highlands of Scotland and, if to a lesser extent, Wales.[2] However, notwithstanding certain basic complaints shared by all three peasantries, for all the (unsuccessful) efforts of certain Highland Land Leaguers to forge a pan-Celtic League in 1886[3] and despite the influence exerted by Ireland on the Highland crofting

* I am especially grateful to the *Review*'s referees for their helpful comments on an earlier version of this paper.

[1] The Farmers' Alliance established in 1879 drew its main support from the arable farmers of East Anglia, who were severely hit by the depression. Essentially a Liberal radical movement, farmers joined it in the hope that it would ease their situation. While the newly returned Liberals passed pro-farmer legislation like the Ground Game Act and the new Agricultural Holdings Act, farmers did not sympathize with the more radical aims of Liberal reformers so that by 1883 the alliance was in decline, farmers returning to their traditional relationship with their landlords. See especially J. R. Fisher, 'The Farmers' Alliance: An agricultural protest movement in the 1880s', *AgHR* 26 (1978), pp. 15–28.

[2] F. M. L. Thompson, *English landed society in the nineteenth century* (1963), pp. 203–4; J. V. Beckett, 'Agricultural land ownership and estate management', in E. J. T. Collins (ed.), *The agrarian history of England and Wales,* VII, *1850–1914* (2 parts, 2000), i, pp. 741–45; G. E. Mingay, *Rural life in Victorian England* (1976), pp. 53–4.

[3] Peris Jones-Evans, 'Evan Pan Jones – Land Reformer', *Welsh History Rev.* 4 (1968–9), p. 153.

community and by both Ireland and the Scottish Highlands on Welsh tenant farmers, the land question in each of the three regions had its own distinctive nature and remedial programme.[4]

This article will, firstly, offer a more nuanced analysis of the Welsh Land Question than that advanced in my *Land and people in nineteenth-century Wales* (1978) and then draw some comparisons between the Welsh, Irish and Highland crofter land campaigns, comparisons which will serve to illuminate the particularity of the land systems and the struggles to reform them within each of the three Celtic nations in turn. It is rendered the more opportune given that non-Welsh historians have largely confined their Celtic comparisons to the Irish and Scottish Gaels.[5] And because the Irish land war led the way in organized violent protest within the Celtic fringe, comparisons between the Irish and crofter land campaigns have been undertaken mainly by Scottish historians concerned to assess the degree of influence of events in Ireland on the land war in the Highlands. In this exercise, understandably no attention has been paid to the land question in Wales. This was the tendency, too, among contemporary commentators. For example, in 1880, John MacMillan, Free Church minister at Lochbroom, Ross-shire, was to refer to the 'tyranny and bondage' under landlordism in Scotland and Ireland, while John Murdoch, the prominent crofter land campaigner, sought in his newspaper *The Highlander* to draw parallels between the sufferings of the Irish peasantry and those of his native crofters.[6] For their part Welsh historians like Matthew Cragoe, John Davies and Graham Jones[7] have likewise sought to compare conditions in Wales and Ireland and to measure the impact of events in the latter upon the Welsh land reform movement; scant interest, however, has been shown in the crofter land war. Written from a Welsh perspective, this essay seeks to redress this imbalance by exploring similarities and differences between all three Celtic nations. By comparing the Welsh, Irish and Highland crofter land questions it will be shown that there were greater similarities between the Irish and crofting communities than their Welsh counterpart, experiences shared in common which determined that both peasantries organized effective land leagues and embarked on land wars. Even so, many Welsh tenant farmers experienced similar tenurial problems to their Celtic cousins, which led to a determined, if peaceful, campaign for land reform. This movement, however, bore greater similarities to the crofter one; in particular, neither Welsh tenant farmers nor Scottish crofters sought free sale of holdings and land purchase, both desired by Irish peasants.

[4] David Cannadine, *The decline and fall of the British aristocracy* (1990), pp. 54–69.

[5] Examples are: J. Hunter, 'The Gaelic connection: the Highlands, Ireland and Nationalism, 1873–1922', *Scottish Historical Rev.* 54 (1975); Charles W. J. Withers, 'Rural protest in the Highlands of Scotland and in Ireland, 1850–1930', in S. J. Connolly, R. A. Houston and R. J. Morris (eds), *Conflict, identity and economic development: Ireland and Scotland, 1600–1939* (1995); Andrew Newby, '"Scotia Major and Scotia Minor": Ireland and the birth of the Scottish Land Agitation, 1878–1882', *Irish Economic and Social Hist.* 31 (2004); Ewen A. Cameron, 'Communication or separation? Reactions to Irish land agitation and legislation in the Highlands of Scotland, *c.*1870–1910', *English Historical Rev.* 210 (2005), pp. 633–66.

[6] A. W. Macoll, *Land, faith and the crofting community: Christianity and social criticism in the Highlands of Scotland, 1843–1893* (2006), p. 98; T. M. Devine, *Clanship to Crofters' War: The social transformation of the Scottish Highlands* (1994), pp. 223, 225; Hunter, 'Gaelic Connection', p. 182.

[7] John Davies, 'Wales and Ireland Compared', *Planet*, 95 (Oct.–Nov. 1992); Matthew Cragoe, '"A contemptible mimic of the Irish": The Land Question in Victorian Wales', in Matthew Cragoe and Paul Readman (eds), *The Land Question in Britain, 1750–1950* (2010); J. Graham Jones, 'Michael Davitt, David Lloyd George and T. E. Ellis: The Welsh experience, 1886', *Welsh History Rev.* 18 (1996–7).

I

If the Welsh Land Question was to become a burning issue with strong national overtones only from the 1880s, earlier generations had voiced criticism of Welsh landlords for oppressing their tenants and the wider community. Resentment on the part of tenant farmers towards them for charging high rents had been felt in the 1770s, 1780s and the war years of the 1790s, such dissatisfaction hardening thereafter through their unwillingness to reduce the high wartime rents when prices for farm produce collapsed after 1814. The Welsh gentry's increasing haughtiness and 'their habits of sterness and reserve' in the post-Napoleonic war years further increased the antagonism felt towards them.[8] Anger over the landowners' unsympathetic response to their tenants' plight during the unprecedented farming crisis of the late 1830s and early 1840s erupted in the Rebecca riots. A powerful attack in print on Welsh landlords for their greed was made by Samuel Roberts ('SR') of Llanbrynmair (Montgomeryshire) in the 1850s, in which he claimed that many tenants had been 'long relentlessly robbed of the just fruit of their toil'.[9] All-important in fuelling the growing anti-landlord sentiment on the part of the peasantry was their joining the ranks of nonconformity from the opening decades of the century; it meant that landlords were not only depicted by the emerging radical nonconformist leaders as rack-renters but also as Anglican, Anglicized and Tory gentlemen who were unfit to be the parliamentary representatives of the predominantly nonconformist people of Wales. Landlords' vengeful eviction of tenants in the wake of the 1868 parliamentary election as punishment for their 'disloyalty' at the polls certainly heightened resentment against them.

It was only in the 1880s and 1890s, however, that the leadership of nonconformity came to enunciate a specifically Welsh Land Question. In response to generations of neglect at Westminster – 'contemptuous neglect' stated Welsh national leader Tom Ellis[10] – the last two decades of the nineteenth century witnessed agitation by Welsh patriots for legislation to redress the distinctive grievances and needs of the people of Wales. Prominent among their demands were disestablishment of the Welsh church and land reform. The desire among Welsh country dwellers for separate legislation to deal with the 'land problem' became a vital ingredient of Welsh ethnic mobilization, Welsh radicals pointing to what they saw as the social and economic hardships endured by Welsh-speaking, nonconformist and Liberal tenant farmers under an oppressive regime of anglicized, Anglican and Tory squires. Given that political power rested upon the ownership of land, the campaign for land reform in Wales, as elsewhere in Britain, had obvious leverage for the politicization of rural communities, and radical Liberal leaders accordingly 'worked' the land to clear advantage.[11]

[8] Anon., 'The present state of society in Wales', *Cambrian Quarterly Mag.* 3 (1831), pp. 126, 128–9.

[9] See his *Farmer careful of Cilhaul Uchaf* (sec. edn, 1881), p. 7.

[10] *Carnarvon and Denbigh Herald*, 28 Oct. 1892.

[11] J. P. D. Dunbabin, *Rural discontent in nineteenth-century Britain* (1974), p. 231, refers to this 'working' of the countryside; see, likewise, Clare Boucher, 'Working the Land' (unpub. M.Phil. thesis, Swansea University, 1998). Matthew Cragoe asserts that 'the Welsh land question was not fundamentally an economic issue: it was political', '"A contemptible mimic of the Irish"', p. 102. Ewen Cameron similarly indicates that the Liberals' domination of Scottish politics saw them use 'the land question as a key component of their appeal north of the border': 'Setting the heather on fire: The Land Question in Scotland, 1850–1914', in Cragoe and Readman (eds), *Land Question*, p. 109.

Writing in 1886, the radical patriot T. J. Hughes ('Adfyfr'), one of the redoubtable champions of the Welsh land reform movement, warned darkly: 'The Welsh aspect of the Land problem cannot be dallied and trifled with without danger: it is about the most urgent question of the day, and unless it is equitably settled, it will also speedily become the question of the night'.[12] The influence of Irish and Highland crofter events and the hardship inflicted by the deepening agricultural depression in the mid-1880s together pushed the land question – alongside the overriding issue of disestablishment of the Welsh Church – to the forefront of Welsh parliamentary elections from 1885 onwards, both campaigns being championed by many Welsh- and English-language newspapers in Wales like *Baner ac Amserau Cymru* under its editor the Calvinistic Methodist preacher Thomas Gee of Denbigh. If more closely intertwined with disestablishment, the tithe war in Wales also had some connection with the land question and, once again, Welsh Liberal leaders were quick to 'work' the issue. Thus David Lloyd George was to ask Tom Ellis: 'Do you not think this tithe business is an excellent lever wherewith to raise the spirit of the people?'[13]

If the Land Question was being 'worked' by Welsh radical leaders, it is necessary to question to what extent they were justified in their criticisms of Welsh landlords. At the heart of the Land Question were land hunger and a consequent keen competition for holdings among small peasant-tenants, farms which were owned by a body of landlords culturally alien from their tenantry. Welsh radicals pointed to unfortunate consequences for tenants arising from these circumstances. Landlords were blamed for charging exorbitant rents and for failing to come to their tenants' rescue in the depression of the 1880s and early 1890s by making adequate abatements or reductions in their rents. Furthermore, tenants were supposedly afraid to make improvements to their holdings lest their landlords raised their rents. Allegations were also made that landlords favoured Anglicans and Conservatives over nonconformists and Liberals as tenants when farms fell vacant and that they made capricious evictions of politically 'disloyal' tenants. Finally, landlords were attacked for their cruel operation of the game laws.[14] In accounting for the perceived evils of the situation, Tom Ellis placed emphasis on the divisions between landlords and tenants in language, creed and politics. That the all-important 'community of feeling' present between landlords and tenants in English counties was absent in Wales was a claim he made in his speech commending his Land Bill before the House of Commons on 16 March 1892, while, in the following November, he was to pronounce that: 'The system of rent was tolerable when the rent-receiver and the rent-producer were sympathetic partners. When estranged in language and religion, politics and social dealing, the system became unjust'.[15]

This indictment of Welsh Landlordism was in part an exaggeration, for there is plentiful evidence that tenants on large estates enjoyed considerate treatment at all times from their landlords.[16] Where the criticism was more justified was in relation to smaller estates. Many

[12] T. J. Hughes, *Landlordism in Wales* (1887), pp. 3–4.

[13] Kenneth O. Morgan, *Wales in British politics, 1868–1922* (rev. edn, 1970), p. 86.

[14] The whole agrarian indictment was leveled in Hughes, *Landlordism in Wales*.

[15] *Parliamentary Debates* (hereafter *PD*), *Commons*, 4th ser., 2 'Tenure of Land (Wales) Bill', 16 Mar. 1892; *Carnarvon and Denbigh Herald*, 11 Nov. 1892.

[16] None of the large estate owners in Wales could match the wealth of the owner of the Scottish Sutherland estate. That the second and third dukes were generous to the crofters on their vast estate is to be

were encumbered by debt. Their owners were simply too impoverished to be able to treat their tenants liberally. With both parties lacking capital an inevitable clash of interests arose. Tenants felt insecure and were unwilling to improve from fear their efforts would be nullified by higher rents.[17] J. E. Vincent, a barrister and stout supporter of the owners of large Welsh estates, wrote to *The Times* in 1888 concerning Cardiganshire: 'Of small landlords, on the other hand, I heard nothing but evil'.[18] If the small hereditary Welsh landowner was more grasping, it was, however, the small newcomer from business entering the land market from the 1870s – which in Wales remained buoyant throughout the depression years owing to land hunger keeping up capital values – who was the worst offender, concerned as he was to obtain as good as possible return on his outlay.[19]

Even on the liberally run large estates, however, tenants suffered as a consequence of the growing number of land sales from the 1870s. When property changed hands by purchase, the land was often valued as it existed without any reference as to how, or by whom, that value was produced. As mentioned, the small purchaser proceeded to fix the rents in order to obtain a satisfactory return on the purchase price, and in this way the tenant's rent was raised regardless of his improvements. Bryn Roberts, Liberal MP for Eifion (North Caernarvonshire) and sometime Methodist barrister, conceded that difficulties occurred on large estates only when sales of tenancies took place.[20] Some landlords like P. P. Pennant, owner of the Nantllys estate in Flintshire, recognizing the unfairness of this, called for legislative action – such as an addition to the 1883 Act – to secure compensation to the tenant.[21]

To what extent were good relationships between landlords and their tenants bedevilled – as Ellis and others maintained – by the cultural divide between landlords and their tenants? It is feasible that even on the small estates the less generous treatment of tenants stemmed from poverty rather than from any lack of sympathy spawned by religious and political differences.[22] Nor did that cultural divide give rise in the last quarter of the century to the

Note 16 *continued*
explained not only by the fact that their independent wealth allowed this, but by their desire to improve their public image after the deep resentment harboured over their earlier policy of clearances. See here Annie Tindley, '"Actual pinching and suffering": Estate responses to poverty in Sutherland, 1845–86', *Scottish Historical Rev.* 90 (2011), pp. 236–56. For treatment of tenants on large Welsh estates see David W. Howell, *Land and people in nineteenth-century Wales* (1978); Matthew Cragoe, *An Anglican aristocracy: The moral economy of the landed estate in Carmarthenshire, 1832–1895* (1996), p. 72; John Davies, 'The Cawdor Estates in south-west Wales, 1778–1914' (unpub. Ph.D. thesis, Swansea University, 2009), pp. 80–1; Richard J. Colyer, 'The gentry and the county in mid-nineteenth century Cardiganshire', *Welsh History Rev.* 10 (1980–1), pp. 497–535; D. Leslie Baker-Jones, *Princelings, privilege and power: The Tivyside gentry in their community* (1999); *Carnarvon and Denbigh Herald,* 2 Nov. 1894.

[17] *Cambrian News,* 11 Nov. 1892; BPP, 1895, XL, q. 46906, evidence of J. Humphreys Davies, a landlord in Llangeitho parish, Cardiganshire.

[18] Anon., *Letters from Wales* (1888), p. 169. On 11 January 1893 the same correspondent wrote of Anglesey: 'By some of the small owners, but not by all, extortionate rents are often exacted', cited in *Carnarvon and Denbigh Herald,* 13 Jan. 1893.

[19] Howell, *Land and people,* pp. 82–3.

[20] BPP, 1894, XXXVI, q. 13171, evidence of Bryn Roberts.

[21] BPP, 1895, XLI, q. 58074.

[22] For a rebuttal of the claim of the Welsh Disestablishment Campaign Committee that farmers need not apply for holdings unless they abandon their political and religious convictions, see George H. M. Owen's declaration that this was 'an allegation absurd and untrue', cited in *The Pembrokeshire Herald*, 9 Oct. 1891. Owen was secretary of the North Wales Property Defence Association.

earlier type of retaliatory political evictions to punish 'ungrateful' tenants. Tenants were protected by the secret ballot and the landlords' awareness that they dare not repeat the punitive evictions that followed the elections of 1859 and 1868 because their actions were now being scrutinised by an often hostile vernacular press.[23] Hugh Hughes, a freeholder farming in the parish of Llangadwaladr in Denbighshire and a member of the Llansilin school board, notwithstanding his readiness to criticize landlords where he saw fit, testified before the 1890s Land Commission: 'In former years many cases of hardship arose owing to religious and political differences between landlord and tenant, but during the last few years I do not think there has been any cause of complaint on this account'.[24] To maintain, as did Ellis, 'Adfyfr', and Lord Rendel, that where most tenants espoused different political and religious affiliations to those of their landlords a land question must exist as a matter of course was a doubtful claim in relation to the late century.[25] Even so, landlord pressure – itself sometimes in response to their being leant on by Church of England clergymen – certainly remained possible and was not surprisingly exerted in the Tithe War, although at most there only four cases where prominent farmers in the campaign were evicted.[26] The whole issue of landlord pressure on tenants to achieve political and religious goals is by its very nature a cloudy one. The aforementioned Bryn Roberts sought to guide the Land Commissioners in volunteering:

> If I were asked whether capricious or vindictive eviction is often resorted to, I should say no, it is not, but the power to resort to it is enough, and a great deal too much. It destroys all independence in tenants, and makes them … totally unable to resist the will of the landlord on any subject whatsoever.[27]

To be sure, this argument has a certain plausibility, yet, if this was indeed the case, would tenants have so overwhelmingly voted against the landowners in the elections from the mid-eighties? Perhaps it was the case that they feared taking too high a profile in political campaigns? Again, if landlords by late century had come to accept that a predominantly nonconformist tenantry was unavoidable, a few like the owners of the Voelas and Cefnamwlch estate in north Wales showed a preference for Anglican tenants when letting vacant holdings.[28] Finally insofar as the cultural divide was concerned, there can be no refuting the criticism levelled by tenants at landlords' and their agents' frequent ignorance of the native language as a handicap to good working relationships, one all the more serious in those monoglot

[23] For the 1868 evictions, see Morgan, *Wales in British politics*, p. 25; for evictions in the 1859 Merioneth election, see I. G. Jones, 'Merioneth politics in the mid-nineteenth century', *J. Merioneth Historical and Record Society* 5 (1965–8), pp. 273–334; for a revisionist assessment, see Matthew Cragoe, 'The anatomy of an eviction campaign: The General Election of 1868 in Wales and its aftermath', *Rural Hist.* 9 (1998), pp. 177–93.

[24] BPP, 1895, XLI, q. 55539.

[25] Anon., *Letters from Wales*, p. 239.

[26] Dunbabin, *Rural discontent*, pp. 225–6; evidence of clergymen-pressure is contained in National Library of Wales (hereafter NLW) MS 19462C (Rendel MS, 14) concerning the eviction of a farmer, W. Watkin of the Moat in Manafon parish, Montgomeryshire; also in NLW, Voelas MS C95: letter of 31 May 1887 from the rector of Cerrig-y-drudion, Denbighshire, to Col. Wynne Finch, which advised: 'The landlords should act firmly now, and tell their tenants plainly, what they mean to do in this movement, or it will certainly end in a rent war'.

[27] BPP, 1894, XXXVI, q. 13170.

[28] NLW, Voelas and Cefnamwlch MSS, B12, fo. 415 and B13, fos. 9 and 39.

Welsh-speaking areas of the north and west.[29] In a telling statement, the conservative Welsh correspondent of *The Times* observed soberly on 17 January 1893 that the landowners' lack of Welsh 'is, undoubtedly, a serious matter, more serious, perhaps, than some landlords imagine, and has much to do with such success as the agitators have attained'.

Whereas fear of political eviction fell away in the last decades, complaints against game were increasing. The practice, from the third quarter of the century, of landowners letting some of their property to sporting tenants who insensitively disregarded tenants' fences and crops, added further sting to the game grievance. For one Merioneth tenant testifying before the Welsh Land Commission in 1893, the sporting tenant was 'the greatest hardship and the greatest oppression in the country'.[30] Arguably even more detested was the gamekeeper – a loathed official not confined to Welsh estates of course – whose infamy was denounced before the same Land Commission. If David Williams, a tenant of the Hafodunos estate in Denbighshire, was fulsome in his praise of his master, Henry Robert Sandbach, he was scornful of one of his gamekeepers: 'I cannot call him a man at all: he has a spice of the devil, whatever', and claimed that 'the keeper was the master, and not the master'.[31]

For all the criticism levelled against Welsh landlords, overall the impression conveyed by certain knowledgeable contemporaries was that they were not universally unpopular in the 1870s, 1880s and 1890s. Indeed, writing at the close of the 1870s, John Gibson, editor of the radical mid-Wales newspaper *The Cambrian News*, maintained that Welsh landowners grew closer to their communities in the late century:

> The gulf between the large owners of land and the people was wide and unabridged in the old times already referred to. The landlord took no part in public business, which was altogether conducted in a language he did not understand, and therefore did not like. The spread of education among the people, the decrease of prejudice against the Welsh language, and other causes, have brought the different sections of the people nearer together. Landlords are beginning to take an interest in Sanitary and Local Boards, and their influence for good is felt in many districts on Boards of Guardians and all kinds of associations established for the advancement of the people intellectually and socially – relations are closer than they used to be.[32]

Gibson remarked later, in January 1886, upon the continued existence of 'that respect, sometimes amounting to reverence, felt by the average Welsh farmer to his landlord'.[33]

In response to the vigorous campaign in the press and on the political platform from the mid-eighties for land reform, there was nevertheless strong support for the Welsh Land Bill in the run-up to the 1892 election. Indeed, in the rural constituencies during that election, the Bill

[29] BPP, 1894, XXXVI, q.16623A: evidence of John Jones of Bala.

[30] BPP, 1895, XXXVI, q. 9390.

[31] BPP, 1894, XXXVI, qq. 14366–70; for similar evidence concerning Carmarthenshire, see BPP, 1895, XL, q. 38769.

[32] John Gibson, *The agriculture of Wales* (1879), p. 22.

[33] *Cambrian News*, 15 Jan. 1886, cited in Jones, 'Michael Davitt, David Lloyd George and T. E. Ellis', p. 455; likewise, Humphreys-Owen of Glansevern informed Stuart Rendel in 1882 that 'the squires in Montgomeryshire are personally liked by the voters, so far as is compatible with the wide difference in politics and religion', cited in Morgan, *Wales in British politics,* p. 56.

allegedly influenced the voting more than did the issue of Welsh Disestablishment, Tom Ellis contending in October 1892 that 'in some respects, and to some classes of people, it [the Land Question] was more grimly urgent [than Disestablishment].[34] At the same time, this support for legislation to guard against what was portrayed to be an exploitive class of landlords did not prevent certain tenants on large and, indeed, small estates (whose landlords, if not so generous as those owning larger properties, were, importantly, better known on a *personal* level to their tenants)[35] from remaining content with their *own* landlord. While supporting legislation which would protect a tenant from a harsh landlord, W. N. Jones, a tenant on the Dynevor estate in Carmarthenshire and a county councillor, nevertheless enjoyed an amicable relationship with Lord Dynevor and commended him as a kind landlord.[36] If radicals like Jones and Gwilym Evans, chairman of the Carmarthenshire County Council, acknowledged that some landlords treated their tenants kindly, at the same time, however, they objected to the power a landlord had over his tenant in an age of democracy and felt that tenants were entitled, *as of right,* to what they currently received out of *grace and favour.* Evans told the Land Commissioners that what he wanted to eradicate on the liberally run large estates were the tenants' feelings of utter dependence, which he attributed to a pervasive 'feeling of fear – uncertainty' and continued: 'I believe that the fact that the farmers have had to go cap in hand to their landlords and their agents, and in many instances sub-agents, for any little improvements, repairs, or small concessions, has had much to do with the cringing, salaaming spirit of the small tenant farmer'.[37] Even the conservative J. E. Vincent wrote to *The Times* in 1888 concerning farmers in the Lleyn peninsula, Caernarfonshire: 'But they have a not altogether unreasonable feeling that they are entitled as of right, to what they receive out of grace; they want fixity of tenure and the adjustment of rent upon a sliding scale'.[38]

If many landlords were, therefore, generous they were feudal in their outlook, expecting their 'inferiors' to submit to their authority. Such an attitude ran counter to the democratic impulses of the time, and was one shared by the English country gentleman, of whom P. A. Graham in 1892 observed that for all his goodness and generosity to the poor he was slow 'to accommodate himself to the spirit of the age'.[39] Such continuing attachment to the importance of rank sat ill with the younger generation of countryman in the 1880s and 1890s. Whereas Tom Ellis's father – though wrongly evicted from his farm for allegedly infringing his landlord's sporting rights – had accepted the situation, for after all the 'master' was the 'master', not so his son. The incident festered in his mind and influenced his perception of the Welsh Land Question.[40] (Similarly it was to be the younger generation of crofters in the Scottish Highlands who in the 1870s underwent a political awakening by reading newspapers, particularly *The Highlander.*)[41] That old spirit of feudal respect in Wales was slipping away, notably among the middle-class tenant farmers who, politicized by the press

[34] *Carnarvon and Denbigh Herald,* 28 Oct. 1892; see also *The Times,* 2 Sept. 1892: editorial entitled 'The election in Wales'.

[35] Anon., *Letters from Wales,* p. 4.

[36] Alan Bainbridge, 'The agricultural community in Carmarthenshire, *c.*1876–1896', (unpub. MA dissertation, Swansea University, 1975), p. 83.

[37] BPP, 1895, XL, q. 38764.

[38] *Letters from Wales,* p. 15.

[39] P. A. Graham, *The rural exodus* (1892), pp. 48–9.

[40] W. Llywelyn Williams, 'Tom Ellis', *Wales,* iv (May–Oct. 1913), p. 13.

[41] James Hunter, *The making of the crofting community* (1976), pp. 129–30.

and nonconformist chapel,[42] were becoming political leaders of their neighbourhoods. They would have concurred with the sentiment expressed on 14 September 1894 by *The Carnarvon and Denbigh Herald* in an editorial entitled 'The Wynnstay and Other Welsh Estates from the Land Commission':

> The best possible defence of the present system of landlordism is made by Sir Watkin's agent. Those who will take the trouble to compare it with the evidence of Mr. Gee and Mr. T. E. Ellis will readily perceive, however, how inadequate it is as an answer to the demand that agriculture should be emancipated from feudal conditions, and that the farmer should in the future be a free man in a free country.

Just how widely this spirit of independence was embraced by the ordinary farmer struggling to survive is impossible to measure however; certainly it should not be overstated.

If the tenurial circumstances of Welsh tenant farmers therefore gave rise to a certain amount of irritation, what nevertheless became clear from an airing of their alleged grievances before the Welsh Land Commissioners was that there was some misrepresentation and exaggeration on the part of Liberal leaders in their 'working' the land. Kenneth Morgan observes that: 'The main theme that emerged was that the land question was basically social, not economic, the product of a growing cultural alienation between owners and occupiers'.[43] Ultimately the appeal of the political leaders to rural dwellers stretched far beyond mere economic and tenurial aspects. Welsh Landlordism was presented as a major impediment to the nation's development. As 'Adfyfr' wrote in 1887:

> We meet Welsh Landlordism and its heavy paralysing hand at every turn in the highways and byways of Welsh life; on the Sunday as well as on the week-day; its grasp extends over cottage and farm, school-house and polling booth. It dwarfs and blights everywhere our national growth.[44]

If harking back to the bad old days of oppressive Landlordism and aristocratic/gentry remoteness from their communities at mid-century, he was properly reminding his readers that Welsh landlords, culturally alien, were not fit leaders of the changed Welsh society: their pleasure-seeking lives and militaristic proclivities were at variance with those of nonconformist, Welsh-speaking, temperance-based, pacifist rural dwellers.

One instance only will be cited as indicative of Welsh landowners' failure to come to terms with the times – a failure in this respect shared by their English counterparts – namely, their frequent, though not universal, opposition to School Boards. Robert Smith thus cites the attitude of Sir Watkin Williams Wynn of Wynnstay who pronounced in 1871 that, as patron of 60 schools, he would in future support only those which would continue to be run according to the principles of the Established Church.[45] The Liberal campaign of deliverance from the

[42] That politicization is brilliantly examined in I. G. Jones, *Explorations and explanations: essays in the social history of Victorian Wales* (1981).

[43] K. O. Morgan, *Rebirth of a Nation* (1981), pp. 83–4.

[44] Hughes, *Landlordism in Wales*, pp. 3–4. Cragoe, in his '"A contemptible mimic of the Irish"', pp. 102–3, emphasizes the growth of nationalist feeling among Welsh MPs. from the 1880s as having been 'so important a factor in their pursuit of the land question'.

[45] Robert Smith, *Schools, politics and society: Elementary education in Wales, 1870–1902* (1999), pp. 60–1, 64.

thraldom of a privileged landed elite was popular among the 'gwerinwr' – the common people – who registered their new allegiance at the polling booths. It is this consensus within rural communities of the new Wales that explains the rejection as political leaders of squires and aristocrats who, as *landlords*, often remained personally popular with their tenants and the wider community. The following comment in a radical north Walian newspaper precisely conveys this dichotomy. In the aftermath of the defeat of Ellis Nanney, Lord Penrhyn's agent, at a parliamentary by-election in 1891, *The Carnarvon and Denbigh Herald* could still acknowledge that:

> [T]here is no more popular landed-proprietor in Caernarfonshire than the squire of Gwynfryn … a man may be and often is something else and much more than the political creed he possesses. Regarded from a Liberal point of view, Mr. Ellis Nanney has always been a really right sort of man, but, unhappily on the wrong side of politics.[46]

II

In this section a comparison will be made between the land questions of Wales and Ireland. It was the often favourable feelings harboured by Welsh tenants towards their landlords which persuaded John Gibson in January 1886 that: 'A Welsh Land League cannot have behind it that bitter experience of injustice which gave the Irish Land League its vital force'.[47] That view, however, of conditions in Ireland was somewhat simplistic: it was shaped by the anti-landlord rhetoric prevalent at the time, orchestrated among others by Father Patrick Lavelle, parish priest of Partry.[48] Paralleling trends in Welsh historiography, their conduct came to be seen in a better light in the late twentieth century by historians like Barbara Solow, James Donnelly, Paul Bew, Samuel Clark and W. E. Vaughan.[49] According to the revisionist version, tenants, far from being rack-rented, were charged merely moderate rent increases between the Famine and the Land War, such increases falling behind the rise in prices they were receiving for their farm produce; landlords were not typically absentees and, if they were in one major respect alien, namely, in their Protestantism, for the most part they shared the same language with their tenants – in contrast to their Welsh counterparts – and mixed easily with those below them in the social hierarchy; and evictions in the 1860s and 1870s had dropped dramatically since the high level of the early 1850s and were to climb rapidly once again only from 1878 with the outbreak of the Land War, many landlords, indeed, using their power of evicting tenants in arrears sparingly.[50]

If Irish landlords thus bore some resemblance to their Welsh counterparts in the way they treated their tenants, they were nevertheless harsher in their conduct, as over evictions and

[46] *Carnarvon and Denbigh Herald,* 3 Apr. 1891: editorial.

[47] *Cambrian News,* 15 Jan. 1886, cited in Jones, 'Michael Davitt, David Lloyd George and T. E. Ellis', pp. 454–5.

[48] W. E. Vaughan, *Landlords and tenants in mid-Victorian Ireland* (1994), p. 5.

[49] Barbara Solow, *The land question and the Irish economy, 1870–1903* (1971); J. S. Donnelly, *The land and the people of nineteenth-century Cork: the rural economy and the land question* (1975); Paul Bew, *Land and the national question in Ireland, 1858–82* (1979); Samuel Clark, *Social origins of the Irish land war* (1979); Vaughan, *Landlords and tenants*.

[50] The revisionist claims are contained in Vaughan, *Landlords and tenants,* chs. one to three.

consolidation of holdings.[51] Such behaviour helps account for the tradition of conflict between Irish tenants and their landlords that was largely absent in Wales. Organized resistance, both legal and illegal, to landlordism before 1879 had occurred in the difficult years of 1849–52 – when the Tenant League influenced tenant voters to support advocates of land reform and when, in addition, local resistance grew up to the collection of rents and to evictions – and, later, in 1869–70, when, accompanying a revival of Tenant League public meetings, there occurred an upsurge of criminal activity, mainly in the form of threatening letters and of visits to neighbouring tenants by gangs warning them not to pay rents in excess of the tenement valuation. The years 1869–71 also witnessed the murder of a number of Irish landlords. Between the immediate aftermath of the Famine and the onset of the Land War in 1879, 'agrarian outrages' were especially perpetrated during 1849–52, 1862–64 and 1869–70, periods of economic difficulty. Significantly, during the turmoil of the land war between 1879 and 1882 when agrarian outrages rose sharply, landlords were to form as much as 36 per cent of agrarian homicides.[52]

The Land War had its roots in the suffering endured by the peasantry of County Mayo and other areas of western Ireland who, in 1879, with potato production falling drastically and earnings from migrant labourers to mainland Britain reduced to a trickle, faced starvation.[53] At the beginning of that year a popular tenant movement grew up in Mayo demanding rent reductions from landlords and that they hold back from evictions; significantly, the tenants had been politicized by local Fenian influence and had been organized through an active press campaign led by newspaper proprietor James Daly.[54] This spontaneous agrarian campaign was almost immediately taken over in the spring of 1879 by the politicians of the 'New Departure', headed by Michael Davitt, a Fenian, and emerging Home Rule leader, Charles Parnell, who recognized the potential in harnessing the agrarian movement towards promoting the overriding cause of Home Rule. Under their stimulus the National Land League of Mayo was brought into being in August, and thereafter the movement was joined by larger tenant farmers and – valuable as organizers – shopkeepers; what united them – if precariously – was their determination to hold on to the agrarian gains made in the previous 30 years and, of necessity therefore, to force landlords to grant rent abatements. Late October 1879 saw the founding of the Irish National Land League under Parnell's presidency.[55] Notwithstanding their earlier lenience, the harsh response of landlords to mounting tenant violence against them from 1879 ironically led many to 'chose to live up to their stereotype'.[56] Although Parnell himself urged the League to follow a path of moderation and non-violence – famously at Ennis in September 1880 he called for the League to boycott rather than shoot anyone who flouted its moral law – the dividing line between non-violence and violence was easily crossed and, as stated, agrarian outrages mounted steeply, including assassinations, firing 'warning' shots into dwelling houses,

[51] Cragoe, '"A contemptible mimic of the Irish"', pp. 94–5.

[52] Vaughan, *Landlords and tenants,* pp. 139–58, 177–8.

[53] R. F. Foster, *Modern Ireland, 1600–1972* (1989), p. 402.

[54] R. V. Comerford, 'The Land War and the politics of distress, 1877–82', in W. E. Vaughan (ed.), *A new history of Ireland*, VI, *Ireland under the Union,* II, *1870–1921* (1996), p. 33.

[55] Ibid., pp. 34–6; Clark, *Social origins,* ch. 8; D. George Boyce, *Nineteenth-century Ireland: The search for stability* (1990), ch. 6; Alvin Jackson, *Ireland, 1798–1998* (1999), pp. 118–20; Foster, *Modern Ireland,* pp. 402–5; Donnelly, *The land and the people of nineteenth-century Cork,* pp. 249–50.

[56] Foster, *Modern Ireland,* p. 409.

and ear-clipping.[57] Even boycotting itself was not untouched by violence; as Townshend observes, 'ostracism was not an entirely new method – nor indeed was it entirely non-violent'.[58]

In contrast, the Welsh rural neighbourhood was far more law-abiding. Even in the mid-1830s when recorded assaults in rural Wales reached a peak, 'the contrast between rural Wales and rural Ireland, Sicily and France … is very marked; vendetta, feuding, warring and violence were much less common'.[59] Although rural Ireland was to undergo a dramatic fall in serious crime between 1847 and 1876 on account of growing prosperity, continuous emigration, increasing literacy and more punctual payment of rents, Irish rural communities continued to be characterized by violence, certainly to a much greater extent than Welsh ones which increasingly from mid-century were, as for some urban districts, too, 'regaining a reputation for being law-abiding and peaceful'. Besides the ameliorating influences of favourable farming conditions, out-migration and growing literacy, Welsh rural communities were being civilized by the dissenting chapels, a claim frequently made by the leaders of Nonconformity.[60] Rev. Henry Richard thus contended that it was partly the moral and religious influence of the chapels that steered Liberal-voting Welsh tenant farmers away from violent response following the vengeful evictions in the wake of the 1868 general election. In his speech before the House of Commons in 1871 calling for the secret ballot to ensure that no such thing should happen again, Richard reflected: 'We know what would have taken place in Ireland under such circumstances. The Irish people would have taken the matter into their own hands'.[61]

Even so, Irish methods of intimidation were certainly practised in the farming community of south-west Wales during the Rebecca years, particularly in the summer of 1843. In her self-proclaimed 'journey of doing good to the Poor and distressed farmers', Rebecca and her daughters sought to right wrongs perpetrated upon the peasantry by a range of oppressors, including turnpike trusts, landlords, bailiffs, tithe collectors and masters of union workhouses, in the process resorting to smashing gates, sending threatening letters, and, following failure to comply, putting property to the torch or administering a beating. Not only were these oppressors targeted: tenant farmers who paid rent above the level deemed fair by Rebecca or who took a vacant farm whose former occupant had been evicted were likewise sent threatening letters. Those who remained obdurate were visited by the midnight incendiary. This was boycotting, which though coming into usage as a term only from the Irish Land War, had been employed for centuries in all parts of the world, and in Ireland itself in the late eighteenth-century 'Rightboy' movement.[62] And foreshadowing the late-century land campaign in Wales for a land court, farmers were already seeking to obtain fair rents by advocating their regulation by some form of independent assessment, thereby undermining the landowner's monopoly in this matter. That the protest in Ireland was perhaps influencing Rebecca's agenda is suggested in a

[57] Jackson, *Ireland, 1798–1998,* p. 120; Boyce, *Nineteenth-century Ireland,* p. 169; Foster, *Modern Ireland*, pp. 406–8; Vaughan, *Landlords and tenants*, ch. 6; for Parnell's speech on 19 Sept. 1880 at Ennis, see Alan O'Day and J. Stevenson (eds), *Irish Historical Documents since 1800* (1992), pp. 100–1.

[58] Charles Townshend, *Political violence in Ireland* (1983), p. 116.

[59] D. J. V. Jones, *Crime in nineteenth-century Wales* (1992), pp. 69, 240.

[60] Vaughan, *Landlords and tenants,* p. 163; K. Theodore Hoppen, *Elections, politics, and society in Ireland, 1832–1885* (1984), pp. 362–78; Jones, *Crime in nineteenth-century Wales*, pp. 239–41.

[61] *PD Commons*, third ser., 208, cols. 1131–7.

[62] Clark, *Social origins*, p. 311.



FIGURE 1. A convoy of policemen from Pembrokeshire, Camarthenshire and Glamorgan on their way to Cardiganshire to assist the local constabulary during the anti-tithe agitation which broke out in the county between 1888 and 1894.

Photo: Tomas Mathias (1866–1940), copyright Dyfed Cultural Services Department.

letter of Col. George Rice Trevor to the Home Office of 11 July 1843 bearing news that there was 'a wish to establish a fixity of tenure, as advocated in Ireland'.[63] Later, on 21 July, a Rebeccaite meeting at Cwm Ifor, Carmarthenshire, 'asked much about news from Ireland'.[64] Now, and for the first time, Welsh rural dwellers experienced the enforcement of communal codes outside the state law, codes which enforced what was perceived as fair play for the peasantry.[65]

Although in the relatively peaceful years from the 1850s onwards gangs were to attack mountain enclosures, and poachers would assault officials attempting to deprive them of their traditional fishing rights, Welsh tenant farmers and labourers would turn once again to organized violent protest only in the Tithe Wars from the mid-1880s down to the early 1890s.[66] While a degree of disorder was witnessed at most tithe sales, serious disturbances were to occur at Llangwm and even more so at Mochdre (both in Denbighshire) in early summer 1887; in the latter riot 50 civilians and 34 policemen were injured. From June 1887, too, the military were frequently called on to accompany the police at tithe sales, though the county authorities forbade them from direct confrontation with the crowds (Figures 1 and 2).[67] Notwithstanding

[63] TNA, HO 45/454.

[64] Ibid., letter of an anonymous correspondent.

[65] The best studies of the riots are David Williams, *The Rebecca Riots: a study of agrarian discontent* (1955) and David J. V. Jones, *Rebecca's Children* (1989). The riots resembled the 'War of the Demoiselles' waged between 1829 and 1834 by the peasantry of the French Pyrenees: Peter Sahlins, *Forest rites: The war of the Demoiselles in nineteenth-century France* (1994).

[66] David Jones, 'Crime, protest and community in nineteenth-century Wales', *Llafur* 1 (1974), p. 112; id., 'The second Rebecca Riots: A study of poaching on the upper Wye', *Llafur* 2 (1976), pp. 32–56.

[67] Donald Richter, 'The Welsh Police, the Home Office, and the Welsh Tithe War of 1886–91', *Welsh History Rev.* 12 (1984–5), pp. 59–62, 75; Dunbabin, *Rural discontent,* ch. 10; Neville Masterman, *The forerunner. The dilemmas of Tom Ellis, 1859–1899* (1972), pp. 93–5.



FIGURE 2. Constabulary and lancers at Llanfair Talhaearn during the Tithe War, 1888.

Photo: From an album compiled by C. V. Stephens, agent to the Ecclesiastical Commissioners, relating to the Tithe Disturbances in Denbighshire and Flintshire, 1886–90; Denbighshire Record Office, DD/DM/845/1, Gathering the Jewels, GTJ 15061.

that there were very few instances of brutal assault perpetrated by the rioters, that the 'real rioters' were not the farmers but rather the farm labourers and others who just wanted a fight, that damage to property was minimal, that no fatalities occurred, and that violence was always discriminating and especially directed at non-Welsh auctioneers – all this in contrast to more extreme Irish behaviour – the fact remains that when Welsh rural dwellers perceived injustice, as did Rebecca's children and, later, the anti-tithe campaigners, they were – for all the civilizing influence of the chapels – prepared to embark on a course of violent confrontation.[68]

Contrariwise, the campaign for Welsh land reform was conducted along strictly peaceful constitutional lines through agencies like the press, the Welsh Land, Commercial and Labour League, the North and South Wales Liberal Federations from October 1887, parliamentary election platforms and the House of Commons itself. With the deepening of the farming depression from late 1883 the land question became a big issue in Welsh elections from 1885 and, following the failure of Welsh land bills in each session between 1887 and 1892, culminated in the setting up of a Royal Commission in early 1893 to inquire into the Welsh land system,

[68] These conclusions about the tithe riots are based on Richter, 'Welsh Police', p. 75. Dunbabin, *Rural discontent*, p. 309, points to the 'real rioters' not being the farmers.

Gladstone having recognized in his celebrated speech in Snowdonia on 13 September 1892 that Wales had 'a land question distinct from the land question in England'.[69] That a Conservative administration would have stifled such an initiative is conveyed in the partisan pronouncement of Lord Salisbury in late November 1893 that 'As far as I know the land system of Wales is just the land system of England'.[70]

The nearest that Welsh farmers came to organized joint action against landlords was in January 1886 with the founding of local land leagues or clubs in various counties of north Wales whose aim of persuading landlords to grant rent abatements met with some success.[71] This constructive turn of events in early 1886 was rubbed in by the combative John Gibson in his *Cambrian News* for 5 March 1886: 'Mr. Michael Davitt is ostentatiously, and almost unnecessarily, repudiated, whilst the formation of a Land League on the Irish pattern is utterly disowned'. Warming to his subject, he went on to claim that most Welsh tenant farmers were 'almost morbidly anxious to express the goodwill existing between them and their landlords', their public utterances couched in 'mildness and moderation'.[72]

Clearly, nothing came of efforts to establish a Welsh Land League along Irish lines during Davitt's visit to north Wales in February 1886 and similar inaction attended similar efforts made at a meeting held at Rhyl in Flintshire the following June and one planned for Liverpool in the autumn.[73] Invited to Wales by kindred spirits in the persons of the earlier Welsh land reformer, Michael D. Jones, and Dr E Pan Jones, advocate of 'the land for the people', on 11 February Davitt visited Flint – where, testifying to the pan-Celtic embrace, he was joined by Dr G. B. Clark, the crofters' champion – and addressed an audience, which, however, did not include tenant farmers, but on whom he urged the wholesale abolition of landlordism. The following evening's venue was Blaenau Ffestiniog in Merioneth where, with Michael D. Jones, he addressed an assembly of mainly local quarrymen and drew attention to the strong resemblances between Welsh and Irish landlords. By this time the young David Lloyd George, already passionately committed to radical land reform, had come to see the need for founding a land league in his district modelled on Davitt's Irish Land League so that in an impromptu speech of response to Davitt at the Blaenau Ffestiniog meeting he was to remind working men of the power of combination, exhorting his listeners: 'When a Land League was started for Wales he hoped they would all join it'.[74]

[69] For a full report of the speech, see *Carnarvon and Denbigh Herald*, 16 Sept. 1892.

[70] *Carnarvon and Denbigh Herald*, 1 Dec. 1893. Salisbury was speaking at Cardiff.

[71] Some landlords, however, were averse to responding to tenants petitioning in concert for abatements, as, for instance, were the owners of the Cawdor Stackpole estate (Pembrokeshire) and the Rhiwlas estate (Merioneth) in the early 1890s: see BPP, 1894, XXXVII, qq. 28952–55, evidence of George Williams; and BPP, 1894, XXXVI, q.16623A, evidence of John Jones of Bala. For landowners' response to tenants' associations in Lancashire, see Alistair Mutch, 'Farmers' organisations and agricultural depression in Lancashire, 1890–1900', *AgHR* 31 (1983), pp. 26–36.

[72] Cited in Jones, 'Michael Davitt, David Lloyd George and T. E. Ellis', pp. 475–6.

[73] Vincent, *Land Question in North Wales*, pp. 11–12.

[74] Jones, 'Michael Davitt, Lloyd George and T. E. Ellis', pp. 457–70; Roy Douglas, *Land, people and politics* (1976), pp. 98–9; NLW, Voelas and Cefnamwlch Mss, B 10; T. W. Moody, *Davitt and the Irish Revolution* (1981), p. 548; although an initial founder of the Welsh Land League, Thomas Gee was to distance himself from the invitation to Davitt because he felt that with Gladstone's conversion to Home Rule announced in mid-December 1885, his visit would harm Liberalism in Wales: see Jones-Evans, 'Evan Pan Jones', p. 152.



FIGURE 3. *In the wake of Ireland*. Against a background of Irish disturbances, Dame Wales asks, 'Gracious! Can the law be fought THIS way in WALES!'

Source: Cartoon by J. M. Staniforth, *Western Mail*, 16 Mar. 1894.

Lloyd George's hope was not to materialize. For all the support shown by Lloyd George and Tom Ellis for Davitt, certain of the local land leagues, especially those in the Vale of Conway and Montgomeryshire, shied away from any Welsh land League associated with the Irish land reformer.[75] For a majority of the Welsh peasantry – imbibing their opinions from the Welsh newspapers – Davitt's views, such as his urging land nationalization and his sanctioning of violent methods to protect the Irish tenants from eviction, were perceived as too extreme and so ill-suited to improving their particular situation (Figure 3). Moreover, as Nonconformist Welshmen they were naturally antagonistic towards the visit of an Irishman to teach them and were also alienated by his criminal past.[76] Again, nothing resembling the Irish Plan of Campaign of 1886–90 was to grow up in the Welsh countryside; the Plan saw tenants of individual estates combine to offer their landlord reduced rents and as part of the campaign resorted to boycott and intimidation, landlords for their part carrying out mass evictions. (Ellis's support for the Irish cause was however unflagging; having the previous day been proclaimed the 'Parnell of Wales' at a meeting in Dublin, he was to witness at close quarters the 'Mitchelstown Massacre' (County Cork) of 9 September 1887.)[77] Welsh farmers did not adopt the Irish tactic of boycotting despite being urged to do so by Welsh newspapers in 1886 and 1887 as a means of gaining rent reductions.[78] Their reluctance to do so was condemned by *Y*

[75] Boucher, 'Working the land', ch. 2; Douglas, *Land, people and politics*, p. 99; see *The Times*, 13 Feb. 1886 for this attitude on the part of the Vale of Conway Farmers' Club; similarly, in south Wales where such farmers' clubs or associations were less common, the St. Clears' Tenant Farmers' Association founded in Jan. 1886 disassociated itself from militant tactics like the boycotting practised in Ireland. Bainbridge, 'Agricultural community', p. 37.

[76] Jones, 'Michael Davitt, David Lloyd George and T. E. Ellis', pp. 455–9, 470–2.

[77] For the Plan, see R. V. Comerford, 'The Parnell era, 1883–91', in Vaughan (ed.), *New history of Ireland*, VI, ii, pp. 70–2; for Ellis's visit, see Jones, 'Michael Davitt, David Lloyd George and T. E. Ellis', p. 480; Davies, 'Wales and Ireland compared', pp. 7–16; and Masterman, *Forerunner,* pp. 92–3.

[78] Vincent, *Land Question in North Wales*, pp. 16, 32.

Faner of 11 December 1886 as stemming from their 'unfaithfulness' to one another, a 'common evil' in Wales but exceptional in Ireland.

Contemporary rhetoric on both countries' land questions distorted the true picture. Although there were similarities between Wales and Ireland with regard to their land systems, differences nevertheless obtained which were crucial in determining the nature of rural ethnic mobilization. Welsh landlords were more popular within their communities, often coming from ancient Welsh stock. In contrast, those Irish landlords who owned *large* estates were throughout the nineteenth century often English Protestants, a state of affairs produced by the British government's confiscation of Catholics' lands in the sixteenth and seventeenth centuries.[79] This dispossession in Ireland meant that the nineteenth-century descendants of the Protestant newcomers were generally perceived 'as illegitimate confiscators who had acquired their position through military conquest'.[80] It certainly invested the Land League's slogan 'the land for the people' with nationalistic overtones – urging as it did that the land should be returned to its 'real' owners – and so strengthened its appeal.[81] The absence of an organized tenant movement in Wales against their landlords was also partly because there was far less poverty in the Welsh countryside. Wales, like Scotland, possessed far larger industrial sectors than did Ireland; these relieved rural poverty by providing a burgeoning consumer market for farm produce and siphoned off excess rural population into the towns, mainly those in the coalmining valleys of south-east Wales. While some of these features can be found in Ireland also, opportunities were fewer and the initial level of poverty to be surmounted was far deeper. For all the increase in farm sizes in Ireland between the 1840s and the 1870s, tenancies nevertheless remained throughout smaller than those in Wales thereby giving rise to congestion.[82] In Wales, on the other hand, it was the contention of the Welsh Land Commissioners that there was no need for the consolidation of farms.[83] Moreover, far less was spent on Irish holdings in the way of improvements by landlords than was laid out on estates in England and Wales.[84] This underlying poverty especially blighted the western counties and the depth of suffering experienced there in the late 1870s was not endured to anything like the same extent in Welsh farming neighbourhoods. Certainly there was a general collapse in farm prices in Wales in 1879–80, and a more serious one in the mid-1880s and again in the early 1890s,[85] but tenants struggled on and – as shown – apart from (successfully) petitioning for rent reductions there was no upsurge of violence against landlords. Simply the agrarian crisis was not so deeply felt as to spark a mass tenant movement co-ordinated by community leaders. It was this want of a tenant organization enforcing its own moral code in determining what rents should be paid for a holding that explains the unwillingness of tenants to practise

[79] Alan O'Day, 'Rural Catholic mobilisation in Ireland, 1850–1922', in David Howell (ed.), *Roots of rural ethnic mobilisation* (1993), pp. 14, 17–18; Michael J. Winstanley, *The Irish Land Question, 1800–1922* (1984), pp. 12–13; Foster, *Modern Ireland*, pp. 107–13, 132–3, 154–5. This distinction between the landowners of Wales and Ireland was made in 1877 by E.P.C., 'The Celts of Wales and the Celts of Ireland', *Cornhill Magazine* 36 (1877), pp. 661–78.

[80] Samuel Clark, 'Landlord domination in nineteenth-century Ireland', in *UNESCO Yearbook on peace and conflict studies* (1988 for 1986), pp. 7–29.

[81] Boyce, *Nineteenth-century Ireland*, p. 167.

[82] O'Day, 'Rural Catholic mobilisation', pp.13–14, 18–19; Cameron, 'Communication or separation?', p. 659 for Irish farm sizes.

[83] BPP, 1896, XXXIV, p. 357.

[84] Vaughan, *Landlords and tenants*, p. 123.

[85] Howell, *Land and people,* pp. 8–9.

boycotting whenever farms became vacant, rather than that they were 'unfaithful' to each other as *Y Faner* maintained.

Welsh landlords were certainly more popular than the clergy of the Established Church. Contrasting with the sympathetic response of the former to farmers' difficulties in the 1880s, it was the refusal of the clergy to grant tenants tithe reductions during the economic hardship of the mid-1880s that unleashed the tithe disturbances and, doubtless encouraged by their nonconformist leaders, led tenants to refuse to pay tithe on principle that it went to an alien church. The *Carnarvon and Denbigh Herald* for 17 January 1890 reflected that:

> To their great credit be it said, most Welsh landowners were prompt to sympathize with their suffering tenants and to relieve them by abatements of rent. Tithe abatements, on the other hand, had to be forced and wrung from the clergy – from the very men who should have been foremost in evincing sympathy from their hard-pressed parishioners.

Yet the tithe issue damaged the standing of Welsh landowners in the late 1880s through their becoming drawn into the dispute. Significantly, the Anti-Tithe League established in September 1886 was to broaden out a year later to embrace disestablishment and land reform – seeking fair rents, fixity of tenure, compensation for improvements and land courts – under its new title of The Welsh Land, Commercial and Labour League. Tom Ellis observed in 1892 that the question of disestablishment and the land 'were strikingly interwoven; the clergy and the landlords had fought into one another's hands, and the people had to strike against both'.[86] He made similar comments at a speech at Camarthen in late 1894 (Figure 4).

These tensions arising from their stance over tithe notwithstanding, their often continuing personal popularity as lenient landlords meant that no campaign of violence against them occurred. Absence of organized disturbance arguably sprang also from the wish of the Welsh in the late nineteenth century to be seen as law-abiding and respectable and to consciously dissociate themselves from their more troublesome fellow Irish Celts, thereby courting the approbation of the English and so be considered worthy of an imperial role. Significantly, one of the reasons for the Welsh people's antagonism towards Robert Ambrose Jones, 'Emrys ap Iwan', was his championing of Ireland and his efforts to undermine the Welsh veneration for the English; in *Y Faner,* the Welsh-language newspaper, between 1880 and 1882 he was to defend Davitt and his campaign.[87] An instance of this Welsh tendency to emphasize their disdain of Irish violence occurred during the Commons debate in 1872 on the appointment of Welsh-speaking judges, Osborne Morgan appealing to the Home Secretary 'Whether any portion of Her Majesty's subjects had given him so little trouble? We do not shoot our landlords. We do not require to be kept in order by Peace Preservation and Coercion Bills'.[88]

Even so, the Welsh campaign for land reform was directly influenced by Irish events; Matthew Cragoe argues that the Welsh land question 'was, as always, taken more seriously when conditions in Ireland were volatile – the growth of Michael Davitt's "plan of campaign"

[86] *Carnarvon and Denbigh Herald,* 11 Nov. 1892.

[87] Information provided in conversation with my friend, the late Professor Hywel Teifi Edwards.

[88] *PD Commons,* third ser., 209, 8 Mar. 1872, cols 1657–58, cited in David Howell, 'A "less obtrusive and exacting" nationality: Welsh ethnic mobilisation in rural communities, 1850–1920', in Howell (ed.), *Roots of rural ethnic mobilisation*, pp. 73–4.



FIGURE 4.
Words of encouragement.
Tom Ellis's speech at Camarthen: 'the passionate revolt of the Welsh people against the Anglican Establishment and tithe system – a revolt not spasmodic or intermittent, but determined and implacable'.

Source: Cartoon by J. M. Staniforth, *Western Mail*, 29 Nov. 1894.

formed the background to a new upsurge of political activity in Wales'. Welsh Liberals, he contends, were ready to 'play the Irish card', hoping to persuade English opinion that if Welsh social problems were not addressed then the region would slide into Irish-type disorder.[89] Crucially, too, the Irish Land Act of 1881 – just as it furnished an 'important model' for the Crofters Holdings Act of 1886[90] – influenced Welsh reformers towards seeking legislation guaranteeing security of tenure and fair rents.

Once again, however, the different circumstances of the Welsh agrarian system meant that the land campaign there differed from Ireland's in two respects. First, far greater importance was attached to tenant right in Ireland. The core of tenant right there lay in the right of free sale which allowed tenants to 'sell' an 'interest' ('whatever that was', Vaughan observes) in their holdings thereby peaceably – this stipulation in itself mirroring the tendency towards violence – making way for their successors. This was an important custom, for in the 1870s amounts paid for tenant right in its stronghold of Ulster gave many outgoing tenants as much as twenty years' purchase of the rent of their farms. It thereby introduced the notion of dual ownership, for tenant right accorded tenants 'as substantial an interest in their land as the landlord'.[91] The Ulster Custom operated, if to a lesser extent, elsewhere in Ireland.[92] It differed markedly in scale from the right to compensation for unexhausted improvements that obtained on English and Welsh estates.[93] Accordingly, free sale was to be one of the three celebrated 'three Fs' which tenant righters had called for since mid-century, an aspiration which would be granted in Gladstone's Act of 1881 which gave tenants 'a form of co-ownership of their holdings'.[94] In contrast, Welsh land reformers did not desire the implementation of free sale; for tenants did not pay goodwill upon entry to their farms in the Irish manner nor did they carry out the

[89] Cragoe, '"A contemptible mimic of the Irish"', pp. 100, 102.

[90] Cameron, 'Communication or separation?', p. 634.

[91] Vaughan, *Landlords and tenants,* p. 71.

[92] For its operation in County Cork, see Donnelly, *Land and the people*, pp. 212–18.

[93] Vaughan, *Landlords and tenants*, ch. 4: 'The tenant right custom'; K. Theodore Hoppen, *Ireland Since 1800: conflict and conformity* (1989), p. 89.

[94] Comerford, 'The Land War and the politics of distress, 1877–82', p. 47.

bulk of the permanent improvements needed for the maintenance of their holdings as did Irish tenants, the two crucial practices which gave the latter an interest in the soil.[95] Tom Ellis was to complain in 1892 that whereas down to mid-century the custom whereby tenants used to sell the 'goodwill' of their tenancies to incoming tenants had operated as a 'modified form of Ulster tenant right', it had thereafter been withdrawn by their landlords.[96]

In the second place, while the call for a peasant proprietary by means of land purchase had been an aim of the Irish National Land League – a process set in train by the Ashbourne Act of 1885, which would eventually lead to the eradication of the large landowner class – no such objective was pushed for by the generality of Welsh land reformers.[97] (Similarly, while the Ulster Orange Order sought to exploit the opposition to landlords among the peasantry to enhance its influence, there was no perception of the landowners as alien interlopers and no propaganda about the land not being rightfully theirs.)[98] Nor was peasant proprietary widely desired among the Welsh farming community; when landed estates came up for sale late in the century, tenants were anxious that, rather than have to purchase their own farms, the entire property would be sold to another landowner under whom they could continue their tenancy. In 1890 a telling exchange of views between Edward Jones of Velindre, a Carmarthenshire magistrate, and Tom Ellis, arose from the latter's having pronounced in a speech at Bala, Merioneth, that 'Wales was beginning to ask landlords by what title they hold their lands in Wales'. Jones informed Ellis that at the recent sale at Aberystwyth of a large property, those present, rather than hoping that the estate would be purchased by its rightful owners 'the people and the nation', were delighted when the entire property was purchased by a popular local landlord.[99]

III

If not generally perpetrating the agrarian terrorism dealt out by their fellow Irish Gaels,[100] the Scottish crofters – merely intensifying a tendency to protest already familiar in earlier

[95] Howell, 'A "less obtrusive and exacting" nationality', p. 75. The Welsh Land Commissioners in their *Report* of 1896, p. 917, pronounced with regard to free sale: 'We do not think that it is just or expedient to give a tenant the absolute right of assigning his holding'. Importantly, the Welsh estate system resembled England's insofar as landlords did the permanent improvements.

[96] *PD*, *Commons* 4th ser., 2 'Tenure of Land (Wales) Bill', 16 Mar. 1892; *Carnarvon and Denbigh Herald*, 13 Jan. 1893.

[97] Comerford, 'The Land War and the politics of distress, 1877–82', p. 35; Foster, *Modern Ireland*, p. 414; Cameron, 'Communication or separation?', pp. 657–8. After considering the desirability of peasant proprietary, the Welsh Land Commissioners concluded in their *Report* of 1896, p. 899, that what was best for Wales was the system of large estates, letting land on fair terms.

[98] I owe thanks to Professor Boyce for this observation as well as for his helpful comments on this Welsh-Irish comparison.

[99] *Carnarvon and Denbigh Herald,* 7 Nov. 1890, an episode also cited in Cragoe, *Anglican aristocracy,* p. 70 and in Masterman, *Forerunner,* pp. 136–7. Similar to Ellis, the *Genedl* for 9 June 1886 pronounced: 'Within less than three hundred years ago all the land belonged to the people, but by this time it has been usurped by a class of men who call themselves the lords of the land, which is hideous unrighteousness', cited in Vincent, *Land Question in North Wales,* p. 14. For the alternative claim that the tenant indeed saw land sales as a means of 'buying back the land of his people', see John Davies, 'The end of the great estates and the rise of freehold farming in Wales', *Welsh History Rev.* 7 (1974), pp. 210–11.

[100] Just as Henry Richard had pointed to the greater tendency to violence in Ireland than in Wales, so, too,

decades[101] – resorted to physical confrontation with the authorities from the start of the 1880s in their campaign for land reform. They adopted tactics of lawlessness which took the form of rent strikes – copied from Irish land campaigners – the 'raiding' of old lands, the breaking of farm fences and the harming of livestock.[102] This violent agitation was put down by the police and military, forces of law and order which were present in the Welsh countryside only during the tithe riots. As in Ireland once again, and unlike in Wales, the crofter land reform movement (if not nearly so tightly organized as the Irish National Land League and its successor the Irish national League)[103] had a well-organized political base in the form of the Highland Land Law Reform Association founded in 1883 – which became the Highland Land League in 1886 – whose various branches boosted around 7,000 crofter members and whose reform programme resembled that of the Irish Land League.[104] Moreover, the newly enfranchised crofters were to return five crofters' candidates to Westminster in the 1885 election.[105] Vital support for their cause came from Gaelic migrants living in the lowland cities who had organized their Highland societies.[106] Crucial backing came, too, from the local and national press, above all (in the 1870s) from *The Highlander*, edited by the influential pro-crofter champion John Murdoch – whose outlook and objectives were strikingly similar to those of Tom Ellis – and, from 1882, the *Oban Times*, under its editor Duncan Cameron. The press, of course, operating within the context of increasing literacy, was to play a similarly vital role in both Ireland and Wales in shaping and promoting national causes.[107]

The crofters also received the support of the clergy, a group once again involved in the land movements of all three regions. Of course, the clergy in Wales and Scotland were Protestant ministers, Welsh nonconformity being paralleled in crofting communities by the Free Church denomination which had come into being at the Disruption of 1843. Strikingly similar to what had happened in Wales in the early nineteenth century, the crofting communities of Gaeldom were converted by evangelical preachers appealing to their hearts through their native Gaelic tongue. Similarly, these preachers, both the ordained ministers and the 'Men' – the lay preachers – were increasingly drawn from the crofters themselves. As in Wales, also, the Highland landed gentry, the big farmers and professional families remained loyal to the Established Presbyterian Church of Scotland. In his recent revisionist study, MacColl

Note 100 *continued*
was a similar perception held by Highlanders of their own restraint compared with the violent Irish. The defending solicitor in a trial of crofters who had rioted at Bernera in Lewis in 1874 thus observed that the oppressive factor on the island would have faced far greater danger had the riot occurred in Connaught or Munster. See Cameron, 'Communication or separation?', p. 639.

[101] Ibid., p. 640; Andrew G. Newby, 'Land and the "Crofter Question" in nineteenth-century Scotland', *International Rev. of Scottish Studies*, 35 (2010), pp. 11–14.

[102] Withers, 'Rural protest', pp. 177, 179; Devine, *Clanship to Crofters' War*, p. 219.

[103] Cameron, 'Communication or separation?, pp. 643–4.

[104] Withers, 'Rural protest', pp. 184–5; MacColl, *Land, faith and the crofting community,* p. 104.

[105] John MacLean of Balemartin, Tiree, and his namesake, John MacLean of Mulbuie in the Black Isle, each wrote a song depicting them as victorious warriors in the traditional heroic mould. These appear as Poems 29 and 30 in Donald Meek (ed.), *Tuath Is Tighearna; Tenants and landlords* (1995), pp. 38, 248–51.

[106] I. M. M. Macphail, *The Crofters' War* (1989), pp. 88–92.

[107] Hunter, *Making of the Crofting Community*, pp. 129–30. For a discussion of the power of the press in mobilizing ethnic consciousness within Europe and Britain see Ellen Wiegandt, 'Understanding rural ethnic mobilisation', in Howell (ed.), *Roots of rural ethnic mobilization*, pp. 313–14.

has persuasively argued that the Free Church leaders actively supported the crofters in their struggle: 'the ministers' contributions to the success of the crofters' protests was substantial and has been greatly underestimated'.[108] HLLRA political meetings in the 1880s – often in Free Church premises – opened and closed with prayers, and Biblical stories of land dispossession suffered by the Jews were used by crofters' leaders to legitimize the campaign for land rights.[109] At the same time, MacColl emphasizes the keenness of Free Church ministers to counsel crofters to adopt peaceful means of agitation and to refrain from lawlessness and violence.[110] Such ambivalence characterized the Welsh nonconformist preachers' stance with regard to both the Rebecca and Tithe riots.[111] For Scottish and Welsh preachers to encourage and legitimize, on the one hand, the expression of grievances against the status quo and, on the other, to expect these hard-pressed rural peasantries to keep their protest within the law was naïve.[112]

There were also similarities to some extent between the two communities in their attitudes towards landlords. Unlike in Wales, the massive transfer of west Highland properties to rich Lowland and English industrial, commercial and professional interests in the 1820s and 1830s saw the arrival of a 'new' landed class, a phenomenon which had a profound impact on clearances. But in contrast to Irish Gaels, crofters, confronted with an alien landed elite, for whatever reason remained attached to their individual landlords notwithstanding the earlier clearances and evictions, although understandably this was the case especially if the landlord was descended from the old Highland aristocracy. This continuing individual reverence resembled the position on many Welsh estates and, as in Wales, when the Highland landed class was harangued, 'it was usually in anonymous terms' and blame was more often directed rather at factors, tacksmen, and sheep farmers.[113]

And that censure was commonplace. Despite the coming of better times in the 1860s and 1870s, crofters still felt insecure and lived in fear of eviction. On many estates the factor and his underling, the ground officer, behaved as tyrants and crofters were afraid to air their grievances.[114] Referring to the ground officer, a Scottish witness appearing before the Welsh Land Commission fulminated that crofters before 1886 were 'a great deal more afraid of him than they were of their Creator, in most cases. This menial ground officer could go home and tell a tale to the factor, and the factor could do what he liked, and get the crofter removed.'[115]

[108] MacColl, *Land, faith and the crofting community,* p. 5.

[109] Ibid., pp. 157, 162–3.

[110] Ibid., pp. 104, 117, 128, 132.

[111] For this ambivalence towards the tithe disturbances, see Dunbabin, *Rural discontent,* p. 294.

[112] MacColl, p. 104, points to the same dilemma being faced by Irish priests.

[113] Devine, *Clanship to Crofters' War,* pp. 58–9, 215; MacColl, *Land, faith and the crofting community,* p. 113. Cameron observes that there was an absence of the virulent anti-landlordism experienced in Ireland and attributes this to 'the greater politicisation of the Irish agitation', landlords being castigated as much on nationalist as on agrarian grounds, See his 'Communication or Separation?', p. 646.

[114] Devine, *Clanship to Crofters' War,* p. 217. Moving among them in the 1870s in his attempt to rouse them to protest, John Murdoch was struck by the fear which blighted their existence and dispirited them. See Hunter, *Making of the Crofting Community*, pp. 129–30; Cameron, 'Communication or Separation?', pp. 635–6.

[115] BPP, 1896, XXXV, q. 76157: evidence of Alexander Mackenzie, editor of the *Scottish Highlander.* For a balanced assessment of the onerous, alcohol-inducing workload of factors in the post-clearance years, which attributes their deep unpopularity to their role as enforcers 'on the ground' of resented estate policies, see Annie Tindley, '"They sow the wind, they reap the whirlwind": Estate management in the post-clearance Highlands, *c.*1815–*c.*1900', *Northern Scotland* 3 (2012), pp. 66–85.

Although Welsh tenants were dependent on the goodwill of landlords, agents and sub-agents and were unwise to step out of line – as over the taking of game – they did not generally live in a climate of fear.

It was the greater degree of suffering endured by the crofters in previous decades and in the depression of the 1880s in comparison to the less painful experience of the Welsh peasantry which also partly explains the different level of lawlessness between the two regions. Welsh peasants had suffered none of the trauma of famine, clearances and mass evictions which had afflicted Highland communities between the 1820s and the 1850s. These evictions of crofters and landless cottars were undertaken to turn land into large sheep farms – in response to a collapse in wool prices many by the 1880s had been turned into deer forests – the dispossessed who had not emigrated having been resettled in congested townships along the coast, a relocation which failed to achieve its aim of providing the small tenant with a more secure livelihood.[116] Although mass clearances petered out from the 1860s, a bitter memory of these dispossessions persisted and helped stoke the resentment against Highland landlordism that erupted in the 1880s.[117]

Scottish crofts were organized on a township system which involved a degree of communal farming and were far smaller than the general run of Welsh holdings. The resulting congestion which afflicted crofting communities was entirely absent from the Welsh countryside, congestion which in both the west of Ireland and – though less acute – the Scottish Highlands prompted the government to establish Congested District Boards in both regions in 1891 and 1897 respectively. Their small-size holdings meant that crofters were of necessity part-time farmers only, their livelihoods – far more so than was the case with Welsh farmers – dependent on by-employments, in the late century particularly from the earnings derived from migration to the east coast fisheries. When depression struck at the beginning of the 1880s they were severely hit, to an extent not experienced by Welsh farmers; following the havoc inflicted by the severe storms of the winter 1881–2, especially on fishing boats, the winter of 1882–3 saw acute suffering when the potato crop was badly affected and the vital income from the east coast fisheries fell drastically.[118] In all likelihood this subsistence crisis drove crofters on Skye and elsewhere to take up no-rent campaigns for, just as Irish peasants had felt at the close of the 1870s, crofters having grown used to better times in the 1860s and 1870s may have felt frustrated expectations upon the reversal in living standards.[119] Their resort to direct action was heavily influenced by events in Ireland. Crofters read in their newspapers, especially *The Highlander* (whose editor had lived in Ireland), about happenings there. Of even greater importance was the close knowledge of Irish events and tactics like rent strikes gained by Skye men through their annual summer migrations from the mid-seventies to work on Irish fishing boats.[120] Even so, for all this awareness of Irish methods, there was no general disposition to

[116] The failure of the resettlement policy in Sutherland is demonstrated in Tindley, '"Actual Pinching and Suffering"', p. 239. For evidence of sheep farms later in the century being turned into deer forests, see BPP, 1896, XXXV, q. 75737, evidence of Donald Macrae, for seven years the secretary of the HLLRA, and qq. 76116–18, evidence of Alexander Mackenzie.

[117] Devine, *Clanship to Crofters' War,* p. 207.

[118] Cameron, 'Communication or separation?', pp. 642–3 and 658–9; Devine, *Clanship to Crofters' War*, p. 221.

[119] Ibid., pp. 221–2; MacColl, *Land, faith and the crofting community*, p. 101.

[120] Devine, *From Clanship to Crofters' War,* p. 223.

emulate Irish violent tactics. Apart from the support given by *The Highlander* for what was happening in Ireland, other newspapers condemned Irish violence and, as in Wales, moderate reformers in the Highlands recoiled from images of Ireland. They consciously sought to dissociate their movement from the Irish one so as not to sully the reputation of the quiet and loyal Highlander.[121]

Perhaps the most striking affirmation of solidarity between the Irish and crofting communities was the warm welcome given to Michael Davitt when he visited the crofting communities in 1882 and 1887, this contrasting with the cool reception accorded him by Welsh farmers and their leaders.[122] When he toured the Highlands in the spring of 1887 his message to rent-striking and land-raiding crofters that they should agitate until landlords were toppled was, of course, enthusiastically welcomed. He was offered a Highland Land League candidature, albeit he declined it.[123] But here again qualification is needed, for, notwithstanding the warmth accorded him and his likeminded associates on their visits to the Highlands in the persons of Edward McHugh and Henry George, as in Wales their ideas on land nationalization were not embraced by the leaders of the crofting movement as the way forward for the crofters.[124] For all the qualification necessary in the claims made for Irish influence on the 'crofters' war', that same influence on the land question in Wales, if significant, was felt to a far less extent.

It was the public disorder on the part of both the Irish peasantry and the crofters which won concessions from the government in the form of the Irish Land Act of 1881 and ('based firmly' on the latter)[125] the Crofters Holdings (Scotland) Act of 1886. Crucially, by the mid-1880s the wide public and political support that had grown up for the crofters' struggle would not have tolerated undue coercion being brought to bear on the unrest, so that it was deemed necessary to grant some of the crofters' demands.[126] In taking the peaceful route towards achieving land reform Welsh radicals, it has been shown in the earlier discussion on Irish parallels, did not manage to achieve anything resembling the politically independent HLLRA.[127] While convincing Welsh farmers of the need for land reform legislation, they failed to build up a body of sympathetic public opinion in England owing to the counter-arguments forwarded by the landowners, who hired publicists and lawyers, notably the barrister J. E. Vincent, to defend them.[128] Nevertheless, and notwithstanding Gladstone's earlier insistence that the Crofters Act was an exceptional measure born out of recognition of the past injustice Highlanders had endured, the newly returned Liberal government of summer 1892, dependent as it was on the votes of the Welsh Liberal Parliamentary Party, succumbed to pressure from Welsh Liberal leaders by granting in March 1893 a Royal Commission to inquire into all aspects of landholding in Wales. This began its work in May. The Irish and Crofter legislation clearly influenced their deliberations. Upon consideration of both Acts, a majority of the Commissioners were to

[121] Newby, 'Land and the "Crofter Question"', p. 28; Cameron, 'Communication or separation?', pp. 636, 639.

[122] Ibid., p. 637.

[123] Hunter, 'Gaelic connection', pp. 187–8.

[124] Andrew G. Newby, 'Edward McHugh, the National Land League of Great Britain and the "Crofters' War", 1878–1882', *Scottish Historical Rev.* 82 (2003), p. 90.

[125] Cameron, 'Communication or separation?', p. 653.

[126] Devine, *From Clanship to Crofters' War,* p. 223.

[127] Only after 1886 did the newly named Highland Land League come to be increasingly identified with the Liberal Party, which led to a weakening of the crofters' campaign: Hunter, 'Politics of Highland Land Reform', pp. 58–9.

[128] Dunbabin, *Rural discontent*, pp. 308–9.

conclude 'that the precedents afforded by the Act of 1881, and the Act of 1886 are, upon the whole, applicable to Wales'.[129] Indeed, it was the 1886 Crofter legislation that arguably had the greater impact on Welsh leaders in the run up to the granting of the Welsh Royal Commission. Thus the Crofters Act had been alluded to in the addresses of certain Welsh Liberal candidates in the 1886 parliamentary election[130] and Tom Ellis declared that he had remodelled his Land Bill of 1892 and based it 'upon the finest agrarian enactment of modern times, the Highland Crofters act of 1886'.[131] The procedure of the Crofters Act was thus closely adopted in the new Bill so that a land court (in the Highlands, the Crofters Commission) was substituted for the hitherto desired arbitrators as the agency for determining fair conditions of tenancy and rent. However, the length of time – some two-and-half years – spent by the Commissioners taking evidence meant that although most of them recommended that Welsh tenants be granted legislation conferring security of tenure and fair rents, the return of a Conservative government in summer 1895 predictably saw no action being taken on the Welsh tenants' behalf.

Despite pressure being put on the Conservative government to enact legislation, nothing was achieved. Thus the Land Tenure Bill introduced in 1897 by M. Vaughan Davies, Liberal MP for Cardiganshire, calling for a Land Court to fix fair rents for five years and to guarantee satisfactory conditions of tenure was overwhelmingly defeated; it nevertheless enjoyed the support of the official Liberal leadership, Irish nationalists, including Michael Davitt, and crofter MP G. B. Clark as, too, the Glasgow Liberal and crofter-supporting MP, Charles Cameron. Similar bills brought in by Welsh MPs in 1898 and 1901 were likewise unsuccessful. Prominent in supporting all three bills was Brynmor Jones, barrister and Liberal MP for Swansea, himself one of the nine Land Commissioners in the early and mid-1890s. Rising prices after 1900, together with the easing of the social disabilities of Welsh nonconformists that followed from the local government legislation of the late 1880s and early 1890s and the Welsh Intermediate Education Act of 1889, cooled passions aroused by the land question to such a degree that it did not become an important issue in the 1906 election. Even so, down to 1920 certain Welsh farmers continued pressing the government to remedy the special problems associated with Welsh agriculture. However, despite the campaign of the Welsh Farmers' Union, founded in 1918, to provide amendments to the government's Agriculture Bill of 1920 granting separate treatment for Wales, neither a Welsh Land Court, a Welsh Board of Agriculture nor security of tenure were included in the bill which passed through the House of Commons at the close of 1920.[132]

Whereas the tenant's right of free sale, i.e. the right to sell his holding, as granted in Ireland, was not sought by Welsh land reformers, likewise the crofters' leaders and crofters themselves did not call for free sale of holdings and the 1886 Act, while granting security of tenure, fair rents and compensation for improvements, did not grant the tenant the right of freely selling or assigning his tenancy.[133] Lord Napier, chairman of the Royal Commission of Inquiry into

[129] BPP, 1896, XXXIV, p. 914.

[130] Morgan, *Wales in British politics*, p. 58.

[131] Masterman, *Forerunner*, p. 173.

[132] Howell, 'A "less obtrusive and exacting" nationality', pp. 75–7; Morgan, *Wales in British politics*, pp. 177–8; *PD Commons* fourth ser., 49, 19 May 1897; 56, 20 Apr. 1898; 89, 10 Feb. 1901.

[133] Cameron, 'Communication or separation?', p. 655; id., 'Setting the heather on fire', p. 114.

the condition of the Crofters and Cottars in the Highlands and Islands of Scotland set up in March 1883, had written to the leading Liberal politician William Harcourt in April 1884 that, in his opinion, conditions in the Highlands did not justify the right of free sale, perhaps thinking along the same lines of Lochiel who in the following December was to dismiss the crofter's improvements, which in contrast to those of the Irish tenant he maintained, were limited to 'the doors and windows of the miserable crofter's cabin – a species of tenant right which may be calculated in pence, not even in shillings'.[134] If not seeking outright free sale, crofters nevertheless wanted the right to sell freely within the family. Although the 1886 Act granted them the power to bequeath to members of the same family, crofters were dissatisfied with the restrictiveness of this, desiring a wider interpretation of the term 'within the family'. In their wanting the definition of family widened, they deemed the Act in this particular respect to be seriously defective.[135] The major difference between crofters and the Irish and Welsh peasantries lay, however, in their wanting more land, Highland land reformers calling for redistribution of land currently used for sheep farms and (the deeply disliked) deer forests in order to enlarge crofts and to create new holdings.[136] Girded with Scriptural sanction, crofters' leaders vilified the landlords for unjustly taking away the land from the Highland people during the clearances; accordingly, the crofting community, in particular the landless cottars, were to be frustrated by the failure of the 1886 Act to make any real provision for the restoration of ancestral land to the people which they – as had their forefathers – perceived as their inalienable right.[137] They consequently resorted to land raids and the occupation of land in 1886 and 1887, which once again necessitated the dispatch of military and naval forces to the Highlands.[138] Although they wanted more land, crofters, like Welsh peasants but unlike Irish ones, were not anxious to *own* their own land, an opportunity presented them by the Congested Districts Board established in 1897. In part, they were reluctant to take on the burdens of ownership given that the Crofters Act of 1886 provided them the security they had long sought.[139]

[134] Cameron, 'Communication or separation?', pp. 654–6.

[135] BPP, 1896, XXXV, qq. 75764–6, 75771–2, 75775: evidence of Donald Macrae. Devine, *From Clanship to Crofters' War*, p. 221, nevertheless sees the power granted to bequeath to a relative as a 'big concession indeed'.

[136] Hunter, 'Politics of Highland Land Reform', pp. 49, 52; for public dislike of deer forests see BPP, 1896, XXXV, qq. 76116, 76118: evidence of Alexander Mackenzie. He vividly described the objection to low ground being taken up for deer shooting: 'some of the sportsmen sit in an easy chair with a gillie on one side with a bottle of brandy, and a fellow with a bottle of soda on the other, and shooting them in hundreds as they are driven through a narrow valley'. This invites comparison with the decadent English battue system.

[137] For the crofters' continuing adherence to the 'ancient' belief that the land belonged to the people, see Hunter, *Making of the crofting community*, pp. 156–60; see also Donald Macrae's evidence to the Welsh Land Commission, BPP, 1896, XXXV, q. 75732: 'these people … were sensible of an inalienable right to live on their native soil and under equitable conditions: they believed they had as good a right to live there as the landlord himself, and, if anything, a better right than the alien large farmers and sporting tenants'.

[138] Devine, *From Clanship to Crofters' War*, p. 231.

[139] Ibid., pp. 238–9; Cameron, 'Setting the heather on fire', pp. 114–1; see also MacColl, *Land, faith and the crofting community*, p. 161.

IV

Tom Ellis was to display his pan-Celtic enthusiasm in a letter to a friend in February 1886:

> We must work for bringing together Celtic reformers and Celtic peoples. The interests of Irishmen, Welshmen and Crofters are almost identical. Their past history is very similar, their present oppressors are the same and their immediate wants are the same – riddance from landlordism and ampler opportunities for developing their own genius and their own powers.[140]

If a lofty ideal, the level of co-operation achieved between these Celtic peoples was hardly impressive. As mentioned at the outset, when Dr G. B. Clark, a leading light of the crofters' movement, convened a conference at Bonar Bridge in Sutherland in October 1886 to discuss problems shared by all three Celtic communities, the response was half-hearted. Whereas Wales sent Evan Pan Jones, Michael D. Jones and the Rev. Keinion Thomas, nobody represented Ireland; this absence can be explained variously on the grounds that either Parnell had given the initiative a frosty reception or, as Clark averred, the Irish were mounting a final appeal to the British Parliament to prevent a 'long and bloody' upheaval in Ireland. Although a motion calling for 'Home Rule all round' was carried and a Keltic League was set up, with J. S. S. Glennie as organizer for Scotland and Pan Jones for Wales, nothing came of the initiative.[141] Yet this is not surprising given that both Clark and Pan Jones were land nationalizers, out of step with the majority of moderate land reformers in the Highlands and Wales respectively. (It will be recalled that Clark had been present in north Wales earlier in the year, joining Evan Pan Jones and Michael D. Jones on the occasion of Davitt's visit.) Yet as Newby points out, Bonar Bridge did give rise to a short-lived pan-Celtic awareness, the *Glasgow Observer* in a report on current developments in the Welsh land campaign asserting that 'the Welsh are a peaceful folk enough, but when Taffy is roused his ire knows no bounds'.[142]

For all the seeming similarities between the Irish, Highland and Welsh peasantries – poverty, land hunger, rack-renting, insecurity of tenure (the last two grievances nevertheless exaggerated throughout the Celtic fringe) and 'feudal' attitudes emanating from landlords and their agents which grated on the sensibilities of the young generation of the last decades particularly those of an independent cast of mind – there were important differences in the agrarian systems and traditions between the three regions that were overlooked by the agrarian radical Tom Ellis and which shaped their separate land campaigns.

In Ireland, as the Young Ireland publicist James Fintan Lalor had urged in 1847, the winning of national independence lay through a mass peasant movement waging a struggle over the land problem.[143] Hence the New Departure's taking over the land agitation that had been initially sparked by farming depression. In the Land War the resort to traditional modes of violence was to play a crucial role.

[140] Cited in Jones, 'Michael Davitt, Lloyd George and T. E. Ellis', p. 450, and in Davies, 'Wales and Ireland', p. 7.

[141] Jones-Evans, 'Evan Pan Jones', p. 153; Andrew G. Newby, *Ireland, radicalism and the Scottish Highlands, c.1870–1912* (2007), pp. 144–5.

[142] Ibid., p. 151.

[143] Foster, *Modern Ireland,* p. 381.

In the Highlands, bitter memories, deep poverty, congestion and the Irish example sparked violence, which, though not so widespread and intense as in Ireland, was an important accompaniment to the political side of the crofters' movement. And if in the Highlands the land war was not viewed in the 1880s as the vital vehicle for the attainment of Home Rule, crofters, supporters of Irish Home Rule, began to advocate Home Rule for themselves in 1886, a sentiment stoked by the government's coercive policy in 1886 and 1887. Only Home Rule, they maintained, would secure them their rights, and, predictably, the Land League leaders were to the forefront in the activities of the Scottish Home Rule Association, established in 1886. At the same time, it is necessary not to exaggerate this demand for Scottish Home rule; indeed, there was no call for a separate nation state to be established.[144] However, Stuart Erskine, strongly influenced by Irish developments, later sought to harness the seething discontent among crofters in 1905 and 1906, manifested in land raids, to further the goal of Home Rule, thereby following the mantra laid down by Lalor.[145]

For all that Scottish and Welsh leaders embraced their respective, identical old proverb that 'the land is mightier than a lord', the crofters' land movement had closer similarities with events in Ireland and crofters accorded their Gaelic cousins greater support than did the Welsh.[146] If some tenants nursed a continuing bitterness over the political evictions of 1868, if some, too, felt that their landlord possessed too much power over them and resented the personal servility that perforce went with it, and if many disapproved of their landlord's want of Welsh, nevertheless they did not experience the deep poverty of their Irish and Scottish counterparts and were often better treated as tenants. In the absence of dire poverty and a sense of injustice stirring the peasantry, Welsh radical leaders pursued the aim of land reform peacefully and although they 'worked' the land for the benefit of Welsh Liberalism, they forged no connection between the land problem and the attaining of national independence. Moreover, if certain Welsh leaders, like Tom Ellis, T. J. Hughes and Thomas Gee, viewed Home Rule as necessary for achieving satisfactory conditions for Welsh agriculture besides other social gains,[147] there was no popular demand for it among Welsh people as there was in Ireland and, if to a far lesser extent, in Scotland.[148] As the tithe disturbances demonstrated, rural dwellers' overriding concern was religious equality, Arthur Humphreys-Owen, Liberal MP for Montgomeryshire, observing in 1890: 'Of all Welsh ideals, that of religious equality is the most widely spread and most closely embraced. What the land is to Ireland that the Establishment is to Wales'.[149]

[144] Cameron, 'Communication or separation?', pp. 663–4.

[145] Hunter, 'Gaelic connection', pp. 187–9, 194–5.

[146] For the proverb in its respective ethnic setting, see Morgan, *Wales in British politics,* p. 21 citing the Welsh proverb *Trech gwlad nag arglwydd* (a land is mightier than its lord), and Hunter, 'Politics of Highland Land Reform', p. 67 citing the Scottish proverb *Is treasa Tuath na Tighearna* (the people are mightier than a lord).

[147] T. E. Ellis, *Speeches and Addresses* (1912), pp. 187–93; T. J. Hughes, *Neglected Wales* (1888), p. 9.

[148] Morgan, *Rebirth of a nation*, p. 120.

[149] *Carnarvon and Denbigh Herald,* 4 Apr. 1890.

Hobby farming among the Birmingham bourgeoisie: the Cadburys and the Chamberlains on their suburban estates, *c*.1880–1914*

by Maureen Perrie

Abstract

This article examines the farming activities conducted by members of the Cadbury and Chamberlain families on their suburban estates in Birmingham. A case study of Austen Chamberlain's farm at Highbury is based largely on family correspondence. It shows that the farm provided fresh produce for the household, and also supplied the local market. Although most of the Birmingham landed bourgeoisie engaged in agriculture primarily as a leisure occupation rather than as a commercial enterprise, Austen Chamberlain took scientific farming seriously, and it is suggested that Highbury might be more appropriately described as a 'model farm' than as a 'hobby farm'. The article also considers the views held by certain members of the Chamberlain and Cadbury families on contemporary issues of agrarian reform, and concludes that their often radical ideas reflected their commitment to progressive politics in general, rather than their personal experience of small-scale farming on their estates.

According to the *Oxford English Dictionary*, the terms 'hobby farm' and 'hobby farmer' were not in common currency until the 1960s. They can, however, be found in the specialist literature before then. The Report of the Astor-Rowntree Enquiry, published in 1946, included the category of 'hobby farmer' in a discussion of the proportion of their time that different categories of farmers devoted to supervision of their farms as opposed to manual labour. The hobby farmer was defined as a 'Man of independent means whose main interest in his farm is non-commercial and who delegates the day-to-day management to a bailiff or agent'. The estimated number of such farmers in England and Wales in 1938 was 7500; the average size of farm was 400 acres; and they employed an average of eight full-time workers.[1]

Historians have often used terms such as 'hobby farm' in relation to non-commercial

* I should like to thank David Papadopoulos for inspiring me to research the history of the Highbury farm as part of a community project devoted to restoring the Highbury estate and exploring its heritage. I should also like to express my gratitude to Richard Hoyle, the Editor of the *Review*, for his advice and encouragement during the preparation of this article. Thanks too to Bill Perrie for help with the illustrations.

[1] *Mixed farming and muddled thinking. An analysis of current agricultural policy. A report of an enquiry organised by Viscount Astor and B. Seebohm Rowntree* (1946), pp. 101–2, following the terminology of G. T. Garratt (1930).

part-time farming before 1914.[2] The usage is not entirely anachronistic, since some contemporaries, too, used similar terminology. Rider Haggard was told by an auctioneer in Leicester that, in spite of the generally depressed situation in agriculture, 'Land would still let, especially to small people and to persons of the manufacturing classes who farmed for a hobby'.[3] The German architect and one-time cultural attaché at the German embassy in London, Hermann Muthesius (1861–1927), writing before the First World War, provided a particularly detailed account of the phenomenon:

> Most owners of country properties … do a little farming, which, though it may involve no more than cattle-rearing, requires a farmyard with cow-houses, pig-sties, a dairy, etc. Almost invariably too, there are enclosures for rearing poultry, which, should this be a particular hobby of the owner's, may assume considerable proportions. All these agricultural adjuncts have their own buildings, on which care is lavished in proportion as the owners regard farming as a hobby and the commercial viability of the operation is not the first consideration … In fact these farms exist as show-places rather than as commercial undertakings. Their justification lies in the owner's desire to provide for all the needs of the household from his own land, and the pride he takes in doing so. Dairy-farms that produce only milk, butter and cheese are the commonest. The milk and cheese dairies are models of hygiene and are equipped with every modern appliance, which makes them a pleasure to visit. … But the cow-houses and sheep-sheds too are luxuriously appointed.[4]

Rider Haggard and Muthesius did not specify the acreage of the hobby farms they mentioned, but an enquiry conducted in 1906 by the Board of Agriculture showed that, of the 28,403 farmers in Great Britain who stated that they did not farm for business purposes, only 2635 held more than 50 acres. Our source for this information does not use the term 'hobby farming', but rather its close equivalents, 'pleasure farming' and 'amateur farming'. Many of these farms must have been located in semi-urban localities: they were especially common in the Home Counties, with a fifth of farmers in Middlesex, a quarter of those in Surrey and half of those within the County of London describing themselves as pleasure farmers.[5]

Of these semi-urban hobby farms in the late nineteenth century, it is those in the Birmingham area that are best documented in the secondary literature, thanks to the encyclopaedic research of Phillada Ballard on the lifestyle of the city's upper middle class.[6] Ballard notes that relatively few Birmingham businessmen acquired large country estates (defined here as over 1000 acres) as their permanent residences and adopted a 'county' lifestyle. Before 1880 there were not many men sufficiently wealthy to purchase such estates at a time when the cost of agricultural land

[2] See, for example, B. A. Holderness, 'The Victorian Farmer', in G. E. Mingay (ed.), *The Victorian Countryside* (2 vols, 1981), I, p. 229 ('hobby-farming'); E. J. T. Collins, 'Rural and agricultural change', in E. J. T. Collins (ed.), *The Agrarian History of England and Wales*, VII, *1850–1914* (2 vols, 2000), (i), pp. 123, 171 ('hobby farmers'); G. E. Mingay, 'The Farmer', in ibid., p. 764 ('hobby-farming'); Collins, 'Conclusion', in ibid., (ii), p. 2150 ('hobby farms').

[3] H. Rider Haggard, *Rural England: being an account of agricultural and social researches carried out in the years 1901 and 1902* (2 vols, 1902), II, p. 267.

[4] Hermann Muthesius, *The English House* (pb edition, 1987, an abridged translation of the second German edition of 1908–11), p. 102.

[5] 'Pleasure Farming', *JRASE* 68 (1907), p. 86.

[6] P. D. Ballard, 'A commercial and industrial elite: A study of Birmingham's upper middle class, 1780–1914' (unpublished Ph.D. thesis, 2 vols, University of Reading, 1983).

was rising; and after 1880, although land prices declined during the agricultural depression, so too did rents and profits, making smaller suburban or semi-rural properties a safer investment. Such residences usually had grounds with enough space for recreational activities such as tennis, while secondary rural estates might be bought or leased for the weekend or holiday pursuit of country sports such as shooting and fishing.[7] The suburban location of their principal residences meant that the upper middle classes of Birmingham could continue to engage in business and social activities in the city, while enjoying a lifestyle not dissimilar to that of the rural gentry.[8] Thus while Birmingham businessmen followed a common English pattern in acquiring country residences as soon as they accumulated sufficient wealth to do so, their decision to live within commuting distance of the city centre meant that, unlike many industrialists in other districts, they did not make a clean break with urban life in order to adopt the pursuits of country gentlemen.[9]

As the urban sprawl of Birmingham extended ever outwards in the late nineteenth century, the upper middle classes began to move from suburbs located two to four miles from the city centre to new areas of settlement further afield, up to eight miles or more from the centre (Map 1). The improvement of public transport – trains, buses and trams – meant that it was possible to commute daily from these more far-flung suburbs to the central business districts. A number of prominent industrialists, including the members of the Cadbury and Chamberlain clans who will be the main focus of this study, moved from fashionable Edgbaston to the more outlying areas of Moseley, Moor Green and Northfield, in search of residences with larger grounds and a more rural atmosphere in which to raise their growing families. By the 1890s, however, speculative mass house-building was encroaching on these outer suburbs too.

When Joseph (Joe) Chamberlain's parents moved from London to Birmingham in 1866 and leased Moor Green Hall, his mother delighted in the 'then beautiful country which surrounded us'.[10] Even in 1883, when Richard Cadbury left Edgbaston and leased Moseley Hall, to be closer to his new chocolate factory at Bournville, his children were greatly excited at 'the thought of living in the country'.[11] By the end of the decade, however, the prospect of new development in Moseley led Richard to plan a further move. 'Had it been merely a personal question they would have moved several miles out into the country', his daughter wrote, 'for the town was fast pushing its long arms into the direction of Moseley and King's Heath'. But because of her father's commitment to voluntary Sunday work in the 'Adult School' at Highgate, he bought land in Moor Green, not far from Moseley Hall and 'almost in the country', where he built Uffculme in 1891.[12] The following year, he purchased the neighbouring estate of the Henburys, which was being sold by G. F. Lyndon because of building development on the adjacent Grange Estate. Cadbury thereby prevented the

[7] Ballard, 'Commercial and industrial elite', II, pp. 612–13, 948–9; see also J. V. Beckett, 'Agricultural landownership and estate management', in Collins (ed.), *Agrarian History,* VII (i), pp. 723–4.

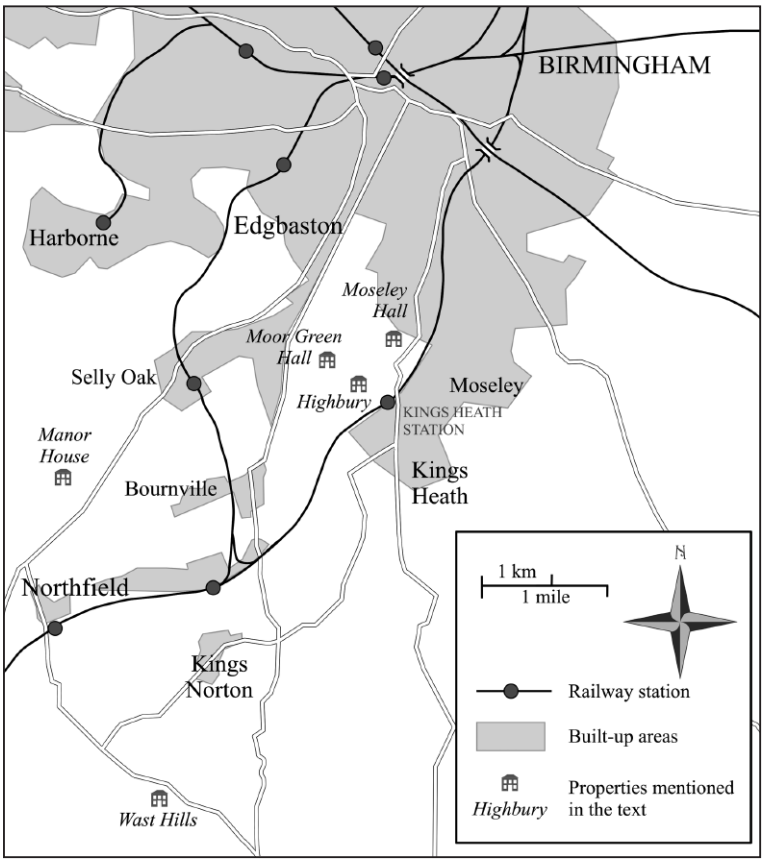
[8] Ballard, 'Commercial and industrial elite', I, p. 281.

[9] On the 'gentrification' of British industrialists through their purchase of country houses, see, for example, Martin J. Wiener, *English culture and the decline of the industrial spirit, 1850–1980* (sec. edn, 2004), pp. 12–14, 137–8.

[10] Ballard, 'Commercial and industrial elite', I, p. 354.

[11] Helen Cadbury Alexander, *Richard Cadbury of Birmingham* (1906), p. 213.

[12] Ibid., pp. 245, 254.



MAP 1. South Birmingham, *c*.1900.

Source: Based on the Ordnance Survey one inch to one mile map, Revised New Series (1902), Sheet 168.

Henburys land from falling into the hands of developers, and added about 65 acres to the original 13 acres of Uffculme.[13]

Uffculme bordered on Highbury, which Joe Chamberlain had built on land he purchased in 1878. He moved there from Edgbaston with his six motherless children in 1880, in order to be closer to his brother Arthur, who had taken over the lease of neighbouring Moor Green Hall on his father's death in 1874.[14] The proximity of Highbury to Kings Heath railway station also made it convenient for Joe to travel to London while Parliament was in session. The Chamberlains considered Highbury to have a rural setting, even in the 1890s, as may be seen in Figure 1. Joe's elder son Austen commented to his half-brother Neville, perhaps with a touch of self-conscious irony, that he felt like a 'country gentleman' on his farm.[15] In 1894, when the Chamberlains leased some of the Henburys estate from Richard Cadbury, Joe's third wife, Mary, wanted to retain the existing hedges, 'to preserve the countrified look and have the new land rather as farm than park. She is afraid the iron railings and planting will make it look

[13] Phillada Ballard, *Highbury Park, Moseley, Birmingham. Historic Landscape Appraisal* (Birmingham City Council, 2009), pp. 23–4, 43.

[14] Ballard, 'Commercial and industrial elite', II, pp. 552–3.

[15] Cadbury Research Library, Special Collections, University of Birmingham, AC5/3/4, Austen Chamberlain to Neville Chamberlain, 28 Apr. 1891.



FIGURE 1. The 'Dutch garden' at Highbury, 1903, with the house in the background and cows in the field in between.

Source: Photograph in the Chamberlain papers (C9/58), Cadbury Research Library: Special Collections, University of Birmingham.

suburban and like all the houses in Edgbaston which have a few fields.'[16] In 1895, however, when a 'building society' began to construct small houses on the Grange Estate, on the far side of the railway line that marked Highbury's new border, the Chamberlains were quick to express their indignation at the intrusion.[17]

In addition to Richard Cadbury's move to Moseley, other members of the Cadbury family moved from Edgbaston to more outlying parts of Birmingham. In 1881 Richard's younger brother George leased Woodbrooke, on the Bristol Road in Selly Oak, to be nearer to the factory in Bournville, and in 1894 he purchased The Manor House in Northfield, about a mile further out of town.[18] On his marriage in 1902, Richard's second son, William Adlington Cadbury, made his home in Edgbaston, but soon afterwards he bought a farm south of Kings Norton, where he built a new house, Wast Hills. Until 1910 it was his home in the summer

[16] NC1/14/73, Ethel to Neville, 19 Jan.1894.

[17] NC1/15/3/44, Hilda to Neville, 19 Feb. 1895; Joe to Mary, 6 Mar. 1895, pr. in J. L. Garvin, *The life of Joseph Chamberlain*, II, *1855–1895. Disruption and Combat* (1933), pp. 626–7; AC5/3/104, Austen to Neville, 30 Mar. 1895; NC1/15/3/50, Hilda to Neville, 12 Apr. 1895; NC1/14/112, Ethel to Neville, 12 Apr. 1895; AC5/3/105, Austen to Neville, 12 Apr. 1895. The 'building society' that developed the Grange Estate was the Freehold Land Society: see Ballard, *Highbury Park*, p. 23, n. 21. The new houses were the red-brick terraces that are still standing today.

[18] A. G. Gardiner, *Life of George Cadbury* (1923), pp. 69, 128.

months only, but the purchase of his first car meant that he could live there all year round. Before moving permanently to Wast Hills, this energetic businessman sometimes bicycled out there at 5 a.m. from Edgbaston, and did an hour or more of mowing before going to Bournville for breakfast.[19]

The Chamberlain and Cadbury estates in Moseley, Moor Green and Northfield were large enough to permit such sports as tennis and croquet; and George Cadbury even had a seven-hole golf course laid out in the fields at The Manor House.[20] There were lakes and streams at Woodbrooke, The Manor House, Highbury and Moseley Hall, where the families and their friends could fish; and stables that catered for recreational horse-riding. These suburban estates were generally too small for shooting, although in January 1894 his sisters reported to Neville Chamberlain in great excitement that one of the gardeners had shot five wild duck in a row on a pool on their newly leased land.[21] Neville and Austen Chamberlain did however shoot on sporting estates leased by friends and by members of their extended family;[22] and their sisters Ida and Ethel tried their hand at hunting on country estates rented by their uncles Herbert and Walter Chamberlain.[23]

Richard and George Cadbury, perhaps because of their Quaker principles, did not engage in field sports, but in 1897 they jointly purchased Wind's (or Wynd's) Point, in the Malvern Hills, as a leisure estate for their family and friends.[24] In 1900 three of George Cadbury's sons bought land on the Lickey Hills. Henry Tylor Cadbury, the third son, farmed there until he was recruited by his father to the management of the *Daily News* in 1907. His two older brothers, Edward and George jun., built country houses on the Lickeys, on sites close enough to Northfield for other members of the family to cycle out for the day to visit them at weekends. Richard Cadbury's elder son, Barrow, built a country house in the same area in 1907.[25]

Small-scale farming was the country pursuit most regularly practised by Birmingham upper middle-class families. The tradition of farming on suburban estates went back to the late eighteenth century, when James Watt, the pioneer Birmingham industrialist, had a farmyard attached to his Heathfield Hall at Soho,[26] and it may have reflected a distinctively middle-class ethos that preferred to make productive use of even modest acreage, rather than leave it as ungrazed parkland. In the late nineteenth century, cows and other livestock were kept on small estates such as those which predominated in Edgbaston and the neighbouring suburb of Harborne. These estates, of between five and fifteen acres, typically had the farm buildings (cowshed, piggery and fowl pens) located in the fields rather than in a formal arrangement near the house. On estates of 15 to 100 acres the farm buildings were grouped to form a farmery, usually at some distance from the house. Small country estates of over 100 acres had separate home farms.[27] No sets of farm records have survived for the suburban estates, but Ballard's impression is that the activity was more recreational than commercial, part of the general social

[19] W. E. Cossons (ed.), *William A. Cadbury, 1867–1957* (1958), pp. 31–4.

[20] Gardiner, *Life of George Cadbury,* p. 253.

[21] NC1/14/70, Ethel to Neville, 4 Jan. 1894; NC1/13/2/11, Beatrice to Neville, 4 Jan. 1894.

[22] Ballard, 'Commercial and industrial elite', I, p. 401.

[23] Ibid., I, pp. 374–5, 401–2.

[24] Alexander, *Richard Cadbury*, pp. 282–6; Gardiner, *Life of George Cadbury*, pp. 257–8.

[25] Ballard, 'Commercial and industrial elite', I, p. 418; II, p. 593; Gardiner, *Life of George Cadbury*, p. 229.

[26] Ballard, 'Commercial and industrial elite', II, Plan 1, p. 706.

[27] Ibid., II, pp. 913, 918.

status that attached to land ownership.[28] More practically, the farms provided the households with dairy products of a superior quality to those which were available commercially; and they supplied fresh produce for the large-scale entertaining that was engaged in by families such as the Cadburys and Chamberlains.[29]

We know that farming was conducted by Arthur Chamberlain at Moor Green Hall and by his brother Joe at Highbury. Other members of the extended family, who had remained in Edgbaston or Harborne, kept small dairy herds there: Joe and Arthur's brother, Walter Chamberlain, at Harborne Hall; and five of Joe's brothers-in-law: William Kenrick at The Grove and Frederick Ryland at Baskerville House, both in Harborne; John Arthur Kenrick at Harborne House; Archibald Kenrick at Berrow Court, Edgbaston; and Charles Beale at Maple Bank, Edgbaston.[30] Richard Cadbury farmed both at Moseley Hall and at Uffculme,[31] as did his brother George at Woodbrooke and The Manor House. George Cadbury's livestock at Woodbrooke is described in some detail in the diary of a visit paid to the estate by his mother-in-law, Gulielma Tylor, in May 1884. 'A playful young heifer greeted us in its own fashion', she wrote. '[T]here are plenty of sows with litters of pigs in the meadow, and in the farmyard a fine show of cocks, hens and chickens and also ducklings; a splendid mottled farm-horse "Darling" in one of the stables; three calves in the field; all looked so happy'. On both visits to the Woodbrooke farm which Gulielma describes, she encountered a Mrs Maldron, who appears to have been in charge of the dairy: 'she has a fine lot of poultry, 70 chickens besides some ducks; they rove about fields and yard and barns at their own free will and consequently thrive well. There are 17 cows, two died last year, valuable milkers'.[32] At The Manor House, according to George Cadbury's grandson, John F. Crosfield, 'There was a dairy farm where the children could watch the milking, and turkeys which gobbled and scared the wits out of them.'[33] The farmland included a 6-acre field which was ploughed in October 1913 in order to grow turnips, presumably as fodder for the livestock.[34] At Wast Hills, William Adlington Cadbury improved the farm, 'so that clean milk might be provided for the family, and also for the Convalescent Home at Moseley Hall, which had been given to the City as a Children's Hospital after Richard Cadbury built Uffculme'.[35] Even after the First World War, the younger Cadburys were expected to continue the family tradition of dairy farming on their suburban estates. George Cadbury reported in 1919 that his eldest daughter Isabel and her husband had acquired Selly Wood, near Bournville: 'It is a lovely situation, with a fine garden, rockery, etc., and two fields, so that I think they will be keeping three cows'.[36]

It is not clear how far the older generation of Cadburys and Chamberlains were personally involved in the management of their farms, or whether they were concerned with the

[28] Ibid., II, pp. 920–1. On this aspect of land purchases by businessmen, see also Beckett, 'Agricultural landownership', p. 723.

[29] Ballard, 'Commercial and Industrial elite', II, pp. 921–3.

[30] Ibid., II, p. 923.

[31] On Moseley Hall, see Alexander, *Richard Cadbury*, p. 228. On Uffculme, see the photograph of cows in a field in ibid., facing p. 256; also Ballard, *Highbury Park*, p. 44, and a photograph from 1908 (Figure 25), p. 45.

[32] John F. Crosfield, *A history of the Cadbury Family* (2 vols, 1985), II, pp. 444–5.

[33] Ibid., II, p. 463.

[34] George Cadbury, circular letter to his family, 22 Oct. 1913, pr. Gardiner, *Life of George Cadbury*, p. 261.

[35] Cossons, *William A. Cadbury*, p. 33.

[36] George Cadbury, circular letter to his family, 17 July 1919, pr. Gardiner, *Life of George Cadbury*, p. 265.

introduction of modern agricultural methods. At The Manor House, George Cadbury had a farm bailiff who was, according to the biographer of his second wife, 'completely illiterate but very efficient'.[37] Nevertheless, George's biographer tells us that he himself took his farming activities extremely seriously:

> Not the least absorbing of his domestic concerns was his farm. He had always taken a very practical interest in agriculture, and both at Woodbrooke and the Manor carried on experimental farming. The home farm at the Manor developed into a considerable enterprise, and George Cadbury took hardly less interest in demonstrating the effect of good conditions on the health and productiveness of cattle than he did in the influence of environment on workpeople. His cattle sheds and pigsties were models of sanitation and commonsense as applied to farming, and he delighted to prove how profitable good methods could be made. For the farm was not a hobby. It, too, was an object lesson, and its value lay in conducting it on strict business principles.[38]

This suggests that George Cadbury's main concern was to provide his livestock with good housing, in the interests of productivity, just as his model factory and model village at Bournville were designed to promote the productivity and profitability of the family chocolate firm, as much as the welfare of its employees. The term 'object lesson', which his biographer employs in order to describe George's attitude towards his farm, he also uses in relation to Cadbury's business methods, to denote examples of good practice that he hoped would be followed by others.[39] There is no indication, however, that George used modern technology or scientific methods on the farm: it was only during the First World War, in the light of the labour shortage it created, that he began to mechanize his farming operations. In June 1915 he wrote to his family:

> We have made a start with our hay harvest; it is almost impossible to secure men to help so we are making as much use as we can of machinery. We have a machine which puts the hay in long ridges ready for loading into the cart, one man and a horse do more work in this way than four men would do.

He added: 'We have also bought a machine for milking cows – it milks four at a time, a man and a boy can in half an hour do the work that took three or four men one and a half hours, and it is very much cleaner than the old plan'.[40]

The one member of the Birmingham upper middle class for whom we do have detailed evidence of his adoption of scientific farming methods, well before 1914, is Austen Chamberlain, Joe's elder son. In December 1894 Professor James Long, erstwhile Professor of Dairying at Cirencester, visited the Highbury farm and published a highly favourable account of the experience.[41] He contrasted Austen's 'agricultural enthusiasm' and practical grasp of the subject with the 'dilettante practices' of other politicians who engaged in farming. Long had ascertained

[37] Richenda Scott, *Elizabeth Cadbury, 1858–1951* (1955), p. 56.

[38] Gardiner, *Life of George Cadbury*, pp. 254–5.

[39] See, for example, ibid., pp. 84, 93, 95, 125, 142, 144.

[40] George Cadbury, circular letter to his family, 23 June 1915, pr. Gardiner, *Life of George Cadbury*, p. 263.

[41] For biographical information about Long, see his obituaries in *The Times* and *Manchester Guardian*, 3 Oct.1931.

from his visit to Highbury that 'Mr. Chamberlain … is not only well informed agriculturally, but working upon thoroughly sound and advanced lines'. The author further commented that, 'In the ordinary way where farming is taken up as a leisure occupation, even though it be based upon business principles, the custom of a district or a class is usually observed'. At Highbury, however, 'the custom outlined by the scientific observation and research of the past few years is followed'.[42] The Chamberlain family correspondence enables us to provide a wide-ranging case study of Austen's farming activities at Highbury, and to judge how far they measured up to Professor Long's assessment of them.[43]

I

Joe Chamberlain's original purchase of land for his Highbury mansion comprised 25 acres of grounds, which were landscaped by Edward Milner, a garden designer from Surrey. The landscape plan drawn up by Milner in 1879 did not indicate that any of the land was intended for agriculture, but shortly afterwards Joe bought an adjoining 7-acre piece of pasture, known as Spring Field or Spring Meadow, where he constructed farm buildings which are shown in the Ordnance Survey map of 1883/4.[44] We do not know much about the Chamberlains' farming activities at Highbury in the 1880s, but when Joe became engaged to Mary Endicott in 1888, he told her that the house and gardens on the estate occupied about 18 acres, while the fields, 'where the cows and horses pasture', comprised a further 12 acres.[45] Joe's own main passions in relation to the grounds at Highbury were the gardens and the extensive hothouses, especially those in which he cultivated his famous orchids.[46] We may perhaps be safe in assuming that his attitude to the farm reflected what James Long described as 'the custom of a district or a class', and that the livestock was managed by the estate workers, with Joe himself performing only a broadly supervisory role.

Early in 1888 Austen Chamberlain returned to England after spending a year in Germany, where he had extended his practical knowledge of foreign affairs, as part of the education in statesmanship that his father designed for him.[47] On his return, he was adopted as the prospective Liberal Unionist parliamentary candidate for Hawick, in the Scottish Borders. Although he conscientiously nursed the constituency, making regular visits to Scotland, Austen had sufficient time on his hands to devote to the farm at Highbury, which Joe seems to have entrusted to him soon after his homecoming. It was probably at this time, too, that he began the serious study of agriculture for which he was later to be praised by

[42] Professor [James] Long, 'Mr. Austen Chamberlain, MP, as a farmer', *The Rural World*, 6 (314), 21 Dec. 1894, p. 911. The descriptive part of his article was summarized in The Times: 'Mr. Austen Chamberlain as a farmer', *The Times*, 20 Dec. 1894, p. 10.

[43] A particularly rich source of information about the farm is provided by the regular letters that his siblings wrote to Neville between 1891 and 1897, when he was working on the family's sisal plantation on Andros in the Bahamas. Ballard made only limited use of the Chamberlain papers for her discussion of the farm: 'Commercial and industrial elite', II, pp. 922–3; Ballard, *Highbury Park*, pp. 34–40, 48.

[44] Ibid., pp. 24–42.

[45] JC28A/1/25, Joe to Mary, 31 May 1888.

[46] Phillada Ballard, '"Rus in Urbe": Joseph Chamberlain's Gardens at Highbury, Moor Green Birmingham, 1879–1914', *Garden Hist.* 14 (1986), pp. 61–76.

[47] For Austen's early life and political career, see Sir Charles Petrie, Bt., *The Life and Letters of the Right Hon. Sir Austen Chamberlain K.G., P.C., M.P.*, (2 vols, 1939–40), I, chs.1–2.

James Long.[48] In 1892 a by-election arose in the East Worcestershire constituency, in which Highbury was situated. Austen was released by Hawick, and adopted as their candidate by the Liberal Unionists in his home constituency. He was returned unopposed in the by-election in March, and re-elected by a majority of more than two to one in the General Election of July 1892. In the parliament of 1892–5 he served as Junior Whip to the Liberal Unionist group, which was then in opposition to the government; but he evidently still had adequate leisure for his farming activities. In 1894 these activities were significantly extended when Joe Chamberlain leased about 42 acres of the western part of the former Henburys estate from Richard Cadbury. This was mostly pasture land, but it also included an 8-acre arable field in the south-eastern corner.[49] Thus at the beginning of 1894 the entire Highbury estate comprised over 70 acres, of which the house and gardens occupied about 18 acres; the meadowland, around 46 acres; and the arable field, eight acres.

There is evidence of Austen's 'enthusiasm' for the farm even before 1894. His eldest sister, Beatrice, told Neville in December 1893 that she and other members of the family had agreed to buy Christmas cards depicting pigs for Austen, 'who is infatuated about his pigs'.[50] In early 1894 his enthusiasm seems mainly to have been aroused by the acquisition of the Henburys land and the prospects it provided for re-landscaping the Highbury grounds. Austen himself wrote to Neville: 'Linden's [sic] land is most exciting and interesting'.[51] Beatrice reported that Austen had been lured out to ride and walk by 'the fascination of the new fields';[52] and Hilda, that Austen had 'new land fever'.[53] Ethel, however, implied that Austen's enthusiasm was for agricultural pursuits more broadly, when she wrote that her brother 'cannot exist long without the farm'.[54] In May 1895 Hilda reported that Austen was spending the weekend at Highbury because he had to make a speech somewhere in Worcestershire on the Friday night, 'and is going to spend Saturday and Sunday at his dear farm. I say this advisedly for Highbury [presumably, the house and gardens] is nothing and the farm everything to him nowadays'.[55]

Of Austen's siblings, it was Ethel, the youngest, who took the greatest interest in the farm. When Austen was in the Bahamas visiting Neville in the autumn of 1892, Ethel was delegated to manage the farm and keep the accounts in his absence, although Beatrice was concerned that the responsibility for 'so many cows' was too heavy for her.[56] Ethel reportedly kept the books 'most conscientiously', and was 'hugely important and serious over the farm': Beatrice told Austen that their sister was even touchier than he was 'over the slightest criticism of any farm production'.[57] Until her marriage in 1900, Ethel had the primary responsibility for poultry-rearing on the Highbury farm.

[48] Austen had read at least one of James Long's own practical manuals on farming: in a letter to his step-mother, in relation to milk yields, he wrote that, 'Prof. Long in his book speaks of 600 [gallons per cow per year] as a fair average'. Austen to Mary, 19 Feb. 1891, pr. in Petrie, *Life and Letters*, I, p. 40.

[49] Ballard, *Highbury Park*, p. 43.

[50] NC1/13/2/9, Beatrice to Neville, 16 Dec. 1893.

[51] AC5/3/70, Austen to Neville, 5 Jan. 1894. See too his comment later in the month, also in relation to the new land: 'I find the whole thing most interesting and exciting': Austen to Neville, 25 Jan. 1894, AC5/3/72.

[52] NC1/13/2/14, Beatrice to Neville, 26 Jan. 1894.

[53] NC1/15/3/7, Hilda to Neville, 14 Feb. 1894.

[54] NC1/14/76, Ethel to Neville, 16 Feb. 1894.

[55] NC1/15/3/53, Hilda to Neville, 2 May 1895.

[56] BC2/1/71, Beatrice to Neville, 13 Dec. 1892.

[57] BC2/1/66, Beatrice to Austen, 6 Nov. 1892.

Although the account- and record-books for the Highbury farm have not survived,[58] the family correspondence does provide an indication of their contents, and shows that they included figures for production as well as income and expenditure. Austen wrote to Mary in February 1891,

> I have spent the morning making up farm statistics. Here are some results:
>
> Amount of milk used by household during the year (as milk, cream, or butter), 4,500 gallons! Eggs consumed, 6,000. Average yield of milk per cow, 760 gallons. Last year it was 725 …
>
> Bridget has just been sold for £16 5*s* (Between ourselves we only gave £16 for her!). I have therefore now only five cows, one heifer, which will have her first calf this year, one yearling, and two very young calves, one of which is pure Jersey and the other is the calf of my Ayrshire …
>
> Thus at the end of this year we shall have six cows in milk if all goes well.[59]

The siblings regularly reported to Neville about the buying and selling of cows, and the prices that had been paid or charged for them. When Austen was in the Bahamas in 1892, Ethel's letters to him included detailed information about the purchase of cows, as well as butter production, milk yields, the birth of calves, and the slaughter of sheep and geese.[60] The numbers of lambs born each spring were often recorded in family correspondence: in 1895, for example, the birth of 39 lambs to the first 20 of their 31 ewes was reported not only to Neville by both Austen and Beatrice, but also by Joe to Mary, who was then on the Riviera.[61] Ethel in her letters to Neville frequently mentioned the number of piglets in the latest litter, as well as noting the weekly egg production of her hens.

The main aim of the Chamberlains' farming activity was to supply the consumption needs of the household – the family and their employees both at Highbury and in their London house (in 1889 butter and cream was delivered daily from Highbury to 40 Prince's Gardens).[62] But meeting the demand of the household (which included provisioning their often extravagant entertainments) had to be balanced against the availability of fodder for the livestock. The cows competed for pasture with the Chamberlains' riding- and carriage-horses, which were kept in the stables to the north of the Highbury mansion house, and they also had to compete with the horses for hay. In February 1891, however, Austen wrote to Mary about 'friction' over the hay for the horses: 'Ours is not good enough really and, the land being what it is, cannot be made good enough. The horses waste perhaps a third of what is given them'. He proposed 'to give up pretending to supply the stables', to make only what he needed for the cows, and to keep more cows.[63] This suggests that better-quality hay for the stables was then bought in, while the dairy herd was gradually expanded to make efficient use of the additional Highbury hay

[58] Ballard, *Highbury Park*, p. 26.

[59] Austen to Mary, 19 Feb. 1891, pr. Petrie, *Life and Letters*, I, p. 40.

[60] NC1/14/155–7, Ethel to Austen, 9–11 Oct., 18 Oct. and 7–8 Nov. 1892.

[61] AC5/3/101, 103, Austen to Neville, 1 Mar. and 21 Mar. 1895; NC1/13/2/60, Beatrice to Neville, 23 Mar. 1895; Joe to Mary, 7 Mar. 1895, pr. in Garvin, *Life of Joseph Chamberlain*, II, p. 627.

[62] Diana Whitehill Laing, *Mistress of Herself* [a biography of Mary Endicott Chamberlain] (1965), p. 76.

[63] Austen to Mary, 19 Feb. 1891, pr. Petrie, *Life and Letters*, I, p. 40.

that was thus made available to them.[64] By the summer of 1891 Austen had 'eight milch cows and a young calf';[65] in October he bought a new Jersey cow at an auction sale at Bingley Hall, bringing his stock up to nine cows and a calf;[66] another cow was purchased in November,[67] and two more in October 1892.[68] Even this does not quite seem to have been sufficient to meet the demand from the household for dairy products, at least over the winter: although Beatrice reported to Neville in June 1891 that the farm had provided all the milk and cream for a large party of visiting schoolchildren, as well as butter and cream for a weekend house party and Devonshire [clotted] cream for two meals,[69] Ethel informed Austen in October 1892 that they had had to buy some cream for a dance, 'as we had not nearly enough';[70] and in December 1892 Beatrice told Neville that they were not sure whether to sell the cow called Lady Josephus, in view of the probability that they might be short of butter through January.[71]

The main incentive for the expansion of the Highbury livestock holdings, of course, was provided by the acquisition of the Henburys land from Richard Cadbury in 1894, which increased the grassland available to Austen fourfold, as well as adding the 8-acre arable field for fodder crops. In March 1895 Austen wrote to Neville:

> My stock at the moment is very numerous.
> There are of cows and heifers in milk or in calf – 17
> – cow-calves – 6
> – bull-calves – 4
> – and Highland store cattle – 10
> – besides the 31 ewes which are now beginning to lamb
> – and two or three more calves which are shortly expected.
> These with an in-foal mare, a pony and two carthorses are a pretty heavy stock for 60 acres to carry![72]

Thus the dairy herd had increased by more than 50 per cent since 1892, and the store cattle were a new addition to the livestock. The number of sheep kept, moreover, had doubled from the 15 which were reported in the spring of 1894.[73]

The size of the dairy herd kept on the Highbury farm was no doubt limited not just by the demand from the household for dairy products, but also by the cost of housing the animals. Joe allocated Austen £500 in the spring of 1894 as expenditure on the farm for the year,[74] and this sum seems to have included the building of a new cow-house and calf-pen, plus a Dutch barn to store the additional hay, as well as the purchase of additional livestock. The new farm buildings were completed by November 1894. The cow-house could accommodate 14 animals,[75]

[64] It may have been at about the same time, and for the same reason, that Austen began to keep sheep, which are not mentioned in the correspondence until 1892.

[65] BC2/1/11, Beatrice to Neville, 7 July 1891.

[66] AC5/3/20, Austen to Neville, 11 Oct. 1891.

[67] AC4/3/225, Mary to her mother, Mrs. Endicott, 6 Nov. 1891.

[68] NC1/14/156, Ethel to Austen, 18 Oct. 1892.

[69] BC2/1/10, Beatrice to Neville, 29 June 1891.

[70] NC1/14/156, Ethel to Austen, 18 Oct. 1892.

[71] BC2/1/71, Beatrice to Neville, 13 Dec. 1892.

[72] AC5/3/101, Austen to Neville, 1 Mar. 1895.

[73] NC1/14/80, Ethel to Neville, 15 Mar. 1894; NC1/13/2/24, Beatrice to Neville, 3 Apr. 1894.

[74] AC5/3/83, Austen to Neville, 28 Apr. 1894.

[75] AC5/3/91, Austen to Neville, 9 Nov. 1894.

and the calf-pen had room for 4–5 calves.[76] The capital expenditure on the buildings meant that only limited funds remained for the acquisition of livestock. Beatrice wrote to Neville in April 1894 that, 'Austen spends much time thinking how he can keep within the limit of expenditure Papa has assigned, and at the same time improve his stock and develop his farming operations. He has bought two cows at the Tring Sale, but Brenda and another are to be sold, and he hopes not to have a very large difference to make up'.[77] The cows that Austen bought at Tring were Jerseys (from Lord Rothschild's herd), while Brenda – who was to be sold – was not a pedigree animal. The improvement of the stock to which Beatrice referred involved the replacement of non-pedigree cows with pure-bred Jerseys – a policy which had already begun well before the leasing of the Henburys land, as Mary explained to her mother in November 1891: 'Another cow has been purchased and we now have a fine herd of ten, from which all the bad ones have gone, and those left are chiefly Jerseys, so they look very pretty'.[78] The 'prettiness' of the pedigree Jerseys was often remarked on in the Chamberlains' correspondence. This might suggest that it reflected a 'hobby' mentality, were it not for the fact that the professional agriculturalist James Long made a similar point, when he observed that in addition to the Jerseys, Highbury also had 'a small herd of West Highland Cattle, whose extremely romantic and characteristic appearance is as pleasing to the eye as that of the Jerseys themselves'.[79] The aesthetic quality of 'prettiness' sometimes came into conflict with the practical criterion of 'improvement': Ethel complained to Neville that Austen wanted to keep Brenda's cow-calf, even though it had no pedigree, because he thought that it was pretty. 'How is the farm to be made to pay under such circumstances!' she exclaimed.[80]

Farm produce that was surplus to the needs of the household was sold on the open market. There is no mention of the Chamberlains' consuming home-reared beef, so the Highland store cattle were presumably raised solely for the market. Mutton and lamb from the Highbury sheep flock were consumed by the family, but most of the lambs were sold as 'fat lambs' in the spring. In April 1894 Ethel reported that they planned to sell 20 of their expected 25 lambs as fat lambs as soon as they were old enough, and to run the others on till the autumn, since they would have grass to spare.[81] Pig-meat was consumed within the household, both as pork and as home-cured bacon: sides of bacon were regularly sent out to Neville in the Bahamas. Some pigs were annually fattened and sold at Christmas to a butcher on Gooch Street, in the Highgate district, who used the Chamberlain brand name as a marketing tool. Austen reported to Neville in 1891 that he had seen their monster pig there, labelled 'bred and fed by the Rt. Hon. J[oseph] C[hamberlain]', with a crowd looking on.[82] And in 1894 Ethel saw their fat pig at Gooch Street as she drove to the station, with a label reading: 'This fine pig was bred and fed by Austen Chamberlain Esq. of Highbury. Aged one year and 10 months'.[83]

The poultry and eggs produced at Highbury were all consumed within the household (the

[76] NC1/14/97, Ethel to Neville, 6 Nov. 1894.

[77] NC1/13/2/24, Beatrice to Neville, 3 Apr. 1894.

[78] AC4/3/225, Mary to Mrs. Endicott, 6 Nov. 1891. Apart from the Ayrshire cow that Austen mentioned in his letter to Mary of 19 Feb. 1891, there are references in the correspondence to shorthorn crosses, Guernseys and 'a small alderney'.

[79] Long, 'Chamberlain'.

[80] NC1/14/70, Ethel to Neville, 5 Jan. 1894.

[81] NC1/14/82, Ethel to Neville, 6 Apr. 1894.

[82] AC5/3/28, Austen to Neville, 21 Dec. 1891.

[83] NC1/14/124, Ethel to Neville, 18 Dec. 1895.

correspondence does not refer to any off-farm sales). Chickens, ducks, geese and turkeys were reared. The geese and turkeys were raised especially for slaughter at the Christmas holiday season. On New Year's Eve 1891 Beatrice reported to Neville that they were to have the largest turkey from the farm for dinner that night.[84] In December 1892 the butcher was said to be at work on three turkeys, which were a very good size;[85] and two turkeys killed in December 1893 weighed 18 and 19 lbs.[86] The household had one of Ethel's turkeys for Christmas dinner in 1895 ('a very fine bird!'),[87] and the turkey for the New Year's Eve family party of 1896 'was a giant and was much admired'.[88] In 1897 they also had a turkey for Thanksgiving (Mary Chamberlain was an American from New England) which, however – to Ida's regret – was served without sausages.[89]

The milk produced by the dairy herd was mostly consumed by the household, as liquid milk, cream, clotted cream or butter. There are however occasional references to the sale of milk, even before the expansion of the farm in 1894.[90] In 1897 Austen, complaining to Beatrice about the bad conditions for farming in general, noted that 'Nothing pays but milk'.[91] In 1898 Ida reported that 'Uncle Arthur' (Joe Chamberlain's brother, who farmed the neighbouring Moor Green estate) was 'going to build a corrugated iron dairy in the rickyard for Mary and she is to really set to work and make cheeses this year'.[92] It is not clear whether this plan was ever implemented, but – apart from providing a new pastime for Mary – it may have reflected a desire to use up surplus milk produced on the farm in a less perishable form than butter. Occasionally the surplus dairy produce was fed to the pigs. In February 1894 two pigs were being fed on the best separated cream: Ethel joked to Neville that they should advertize 'Highbury Cream-Fed Bacon'.[93]

The crops produced on the arable field were primarily used as fodder for the livestock, although Ethel refers to the selling of turnips in 1895.[94] Surplus hay was sold even before 1894: Ethel told Neville in January 1893 that they were planning to sell about 5 tons for £6 per ton.[95] The acquisition of the Henburys land greatly increased the amount of hay produced. James Long noted, in his December 1894 article about Highbury, that, 'The foreman was very fortunate during the past season in securing his hay in very fine condition. Ricked very smartly on one part of the farm, it is stacked under an extensive and somewhat elaborate Dutch Barn with a wooden floor on the other; and, if sold, is certain to realise a good price, in spite of the large supply in the country.'[96] In fact the winter of 1894/5 was a harsh one, and the sheep and store cattle had to be fed with corn and hay, which made significant inroads into the haystacks, as Austen complained to Neville: 'In spite of the very big crops of hay last year it is doubtful whether there will be very much left in the rickyards when the hay harvest comes round again'. He hoped that prices would rise, and enable him to sell a little at a good profit.[97] In December

[84] BC2/1/39, Beatrice to Neville, 31 Dec. 1891.
[85] NC1/14/49, Ethel to Neville, 14 Dec. 1892.
[86] NC1/14/69, Ethel to Neville, 29 Dec. 1893.
[87] NC1/14/125, Ethel to Neville, 27 Dec. 1895.
[88] NC1/14/151, Ethel to Neville, 1 Jan. 1897.
[89] BC1/2/16, Ida to Beatrice, 8 Dec. 1897.
[90] NC1/14/155, Ethel to Austen, 9–11 Oct. 1892; NC1/28/9, Austen to Ethel, 10 Nov. 1892.
[91] BC1/4/2, Austen to Beatrice, 31 Dec. 1897.
[92] BC1/2/31, Ida to Beatrice, 6 Feb. 1898.
[93] NC1/14/77, Ethel to Neville, 22 Feb. 1894.
[94] NC1/14/120, Ethel to Neville, 5 Nov. 1895.
[95] NC1/14/53, Ethel to Neville, 18 Jan. 1893.
[96] Long, 'Chamberlain'.
[97] AC5/3/101, Austen to Neville, 1 Mar. 1895.

1897, in the letter to Beatrice in which he grumbled that nothing paid but milk, Austen also complained that hay was 'dirt cheap'.[98]

It is not clear from the sources whether Austen charged the household for all the farm produce he supplied for domestic consumption. I have found only two pieces of evidence that suggest that a monetary value was attached to items consumed domestically. James Long wrote in his article for *The Rural World* that some of the Highbury sheep were 'killed for home consumption, and very generously supplied for this purpose at less than market price'.[99] And in May 1896 Ethel, reporting that six of her chickens had been sent to 40 Prince's Gardens to be eaten, complained to Neville that Austen had let the house have them for a 'ridiculously low price'.[100] It seems unlikely on the face of it that Austen would have charged the kitchen for every pound of butter or pint of cream, although the fact that he meticulously recorded the amount of milk and numbers of eggs consumed by the household means that that possibility cannot be ruled out. He certainly kept detailed farm accounts. Writing to Mary in 1896, the future Chancellor of the Exchequer reported: 'I have been busy farming since you left, looking at my cows when out of doors and trying to make my accounts balance and find a vanished 12*s*. 10*d*. when indoors. But after all my efforts there was an "irrecoverable balance" of 11*s*. for which there was no accounting'.[101]

But even if Austen kept comprehensive records of its income and expenditure, it is difficult to decide whether the Highbury farm can be judged as a commercial enterprise, since its economy must have been inextricably bound up with that of other elements of the estate. Labour appears to have been shared with the house, gardens, hot-houses and stables, depending on the seasonal pattern of work in each of these areas (only Wileman, the stockman, appears to have devoted all of his time to the farm) and it is unlikely that detailed records were kept of the number of days or hours that estate employees spent on every task. The farm was the most intensively productive element of the estate: the ornamental gardens, the kitchen garden, the orchard and the hot-houses also provided consumables which would otherwise have had to be bought in – flowers for interior decoration, fruit for the table and vegetables for the kitchen – but such elements of the estate as the gardens and hot-houses must be considered primarily recreational, and expenditure on them classified as conspicuous consumption rather than investment. Land-rent for the productive acreage of the farmland would also be difficult to separate out from that for the landscaped amenity areas of the estate parkland. Thus Austen's farming activity at Highbury fits James Long's category of 'a leisure occupation … based upon business principles'; but we cannot assess its profitability or otherwise as a commercial enterprise, and to that extent it may be valid to describe it as a 'hobby farm'.

II

If the Highbury farm was run on 'business principles', as James Long claimed, what is the evidence in support of his assertion that Austen Chamberlain's farming operations were

[98] BC1/4/2, Austen to Beatrice, 31 Dec. 1897.
[99] Long, 'Chamberlain'.
[100] NC1/14/140, Ethel to Neville, 5 May 1896.
[101] Austen to Mary, 7 Sept. 1896, pr. Petrie, *Life and Letters*, I, p. 72.

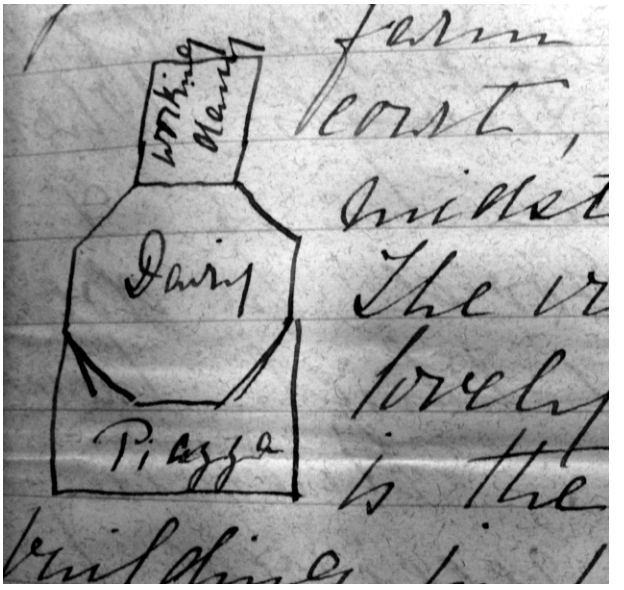


FIGURE 2. Mary Chamberlain's sketch-plan of the dairy at Highbury, in a letter to her mother dated 28 June 1890.

Source: The Chamberlain papers (AC4/3/155), Cadbury Research Library: Special Collections, University of Birmingham.

conducted on 'sound and advanced lines' and based on 'scientific observation and research'? Some of this evidence is provided by Long himself, on the basis of his inspection of the farm in December 1894. 'Mr. Austen Chamberlain,' he wrote,

> possesses a herd of Jerseys, among which are a number of extremely useful animals. They are housed in a neat, well-arranged and substantial building constructed solely for their comfort and without any attempt at display or ostentation. Rations are carefully provided and prepared with the object of obtaining a maximum yield at a minimum cost; and I was enabled to glean that, while Mr. Chamberlain has a keen appreciation as to the value of the albuminoid ratio, *i.e.*, an economic ration, his stockman has an equally keen appreciation of the money value of the food. The milk is separated in a Laval machine in a very perfectly-arranged dairy erected by the Dairy Supply Company, and equipped with the best modern appliances for making butter.

The other livestock too, Long judged – the Highland cattle, Shropshire sheep and Tamworth pigs – were 'of the very best type'.[102]

The cow-house that Professor Long admired so much was presumably the one which had been completed in November 1894: Beatrice referred to it as the cows' 'new palace',[103] while Austen himself described it as 'bright and airy', with improved sanitation.[104] The working dairy had been erected earlier, in 1889–91, as an adjunct to an ornamental thatched dairy, with verandah, that Mary had ordered to be built soon after her marriage, on a site that would hide the farmyard from the view from the house (Figures 2 and 3).[105] The 'appliances'

[102] Long, 'Chamberlain'.

[103] NC1/13/2/40, Beatrice to Neville, 6 Nov. 1894.

[104] AC5/3/91, Austen to Neville, 9 Nov. 1894.

[105] AC4/3/114, Mary to Mrs Endicott, 8 Nov. 1889. There is a sketch of this construction, showing the 'working dairy' to occupy only a fraction of the area of the ornamental dairy and its 'piazza' (shown in Figure 2), in a letter from Mary to her mother: Mary to Mrs Endicott, 28 June 1890 (AC4/3/155).



FIGURE 3. A photograph of the front elevation of the dairy in Charles H. Curtis, 'Highbury Gardens, Birmingham', *The Gardeners' Magazine*, 18 April 1903, p. 256.

Source: Copy in the Chamberlain papers (JC4/12/2), Cadbury Research Library: Special Collections, University of Birmingham.

were installed in April and May 1891. They included the separator, which Mary described as 'a very extraordinary machine' and 'a great toy'.[106] Even Wileman found the separator to be a novelty: Austen informed Neville that all the visitors were taken to see it.[107] At about this time Austen bought some test tubes to assess the percentage of cream in his milk, but these turned out to be too crude: they were graduated only to 25 per cent, while his new Jersey cow gave about 28 per cent.[108] In February 1894 he sent some cows' milk to London to be tested;[109] but in November, when the new cow-house was finished, he acquired a new milk tester which, according to Ethel, kept him happy and busy in the wet weather.[110] In February 1894 Ethel reported that Austen had acquired a new 'disc churn' on approval. It was supposed to make butter in 5–10 minutes, but the first attempt took half an hour. The second attempt was more successful, but the machine was too hard work for Mrs Wileman without one

[106] AC4/3/186, Mary to Mrs Endicott, 27 Mar. 1891; AC4/3/187, Mary to Mrs Endicott, 1 Apr. 1891.
[107] AC5/3/10, Austen to Neville, 4 July 1891.
[108] AC5/3/20, Austen to Neville, 11 Oct. 1891.
[109] NC1/14/75, Ethel to Neville, 10 Feb. 1894.
[110] NC1/14/98, Ethel to Neville, 14 Nov. 1894.

of the men to help, and only made small quantities, so no decision had yet been taken on whether to purchase it.[111]

We have already noted that Austen sought to improve the quality of his dairy herd by acquiring pure-bred Jerseys to replace his non-pedigree stock of less prestigious breeds; and many of his new Jerseys were purchased from Lord Rothschild's highly regarded herd at Tring. In December 1893 Austen spent two days at Tring Park, where he acquired 'useful hints' from the agent. Austen discovered that he was over-feeding his cows, since Jerseys would over-eat if allowed to: Lord Rothschild's cows were always tethered, even at grass, and before calving they were allowed only chopped straw. This regime, according to the Tring agent, kept the cows healthy but small, and produced a combination of great milking capacity with good looks.[112]

For poultry-rearing, too, the Chamberlains used modern technology, although it caused them some problems. In February 1891 Austen told Mary that, 'The incubator is crazy, and requires a week's careful watching at least'.[113] The following year the news was better. Austen informed Neville that his big incubator had proved a great success: 'It hatched 46 chickens out of 52 eggs and they are all strong and healthy; and it has done equally well with ducklings'.[114] Difficulties continued, however, in subsequent years. In March 1894 Ethel reported that the chickens had done badly, because the incubator was not hot enough.[115] There were problems again in 1896, although the numbers were larger: 100 chickens had hatched, but many continued to die in the shell.[116] By comparing the hatchings of chickens at Highbury in 1895 with those on Arthur Chamberlain's neighbouring farm at Moor Green – which was evidently not so technologically advanced – Ethel was convinced of 'the advantage of an incubator'.[117] But in 1898 the situation was reversed, much to the chagrin of the Chamberlain sisters. Ida reported to Beatrice: 'Ethel has got 29 chickens out of about 80 eggs in the incubator. She was congratulating herself on having at least done better than last year when round came those horrid Moor Greens and announced that they had 45, and that they had had two broods of 10 and one of 11 from under hens. Did you ever hear anything so aggravating?'[118]

Because of the limited December daylight, James Long was unable to inspect Austen's arable crops during his 1894 visit, but he claimed in his article that they were 'produced upon a principle, the object of which is to provide as much feeding material on a small area as possible'.[119] According to Long's article, the crops grown were vetches, lucerne, roots and cabbage; the correspondence mentions potatoes, turnips, mangels, parsnips and carrots as root crops, and rye and red clover in addition to vetches and cabbages. In the first year, the winter-sown crops seem to have been quite successful: Ethel reported in April 1895 that a gentleman who had seen the vetches and rye from a passing train had offered to buy them.[120] The second year was not so good. Hilda noted in April 1896: 'Poor Austen's winter crops this year can hardly be deemed a success.' The cabbages were running to seed, and the red clover

[111] NC1/14/75, Ethel to Neville, 9 Feb. 1894.
[112] AC5/3/68, Austen to Neville, 4 Dec. 1893.
[113] Austen to Mary, 19 Feb. 1891, pr. Petrie, *Life and Letters*, I, p. 40.
[114] AC5/3/42, Austen to Neville, 23 Apr. 1892.
[115] NC1/14/79, Ethel to Neville, 10 Mar. 1894.
[116] NC1/14/134, Ethel to Neville, 21 Mar. 1896.
[117] NC1/14/111, Ethel to Neville, 5 Apr. 1895.
[118] BC1/2/31, Ida to Beatrice, 6 Feb. 1898.
[119] Long, 'Chamberlain'.
[120] NC1/14/111, Ethel to Neville, 5 Apr. 1895.

had been overgrown by chickweed. The vetches had been planted too late, and never came up. The rye grass had also been planted too late and was only half the height it ought to be.[121]

The only element of Austen's farming operation about which James Long was at all critical was his production of silage. Reporting that the aftermath of the hay harvest had been converted into silage, 'Johnson's Apparatus being used', Long noted that 'this is the only *partially* successful feature on the farm; but it was an experiment, and simply emphasises the suggestions I have often made, to the effect that stacked silage is not economic as compared with silo storage'.[122] Long's mild criticism of Austen's silage was nothing, however, compared with his sisters' scorn. Hilda wrote to Neville in December 1894: 'Austen has just cut into his silo. The results are awful. The ensilage is said to be very good, but at present all the animals have refused it'. Wileman suggested cutting it up and mixing it with chaff. Hilda continued: 'I expect they *will* eat it, but am thankful it is not going to be given to the cows as I think the milk, butter and cream would suffer. Fortunately Austen thinks so too. The smell is horrible at present, but we hope it will go off in a day or two'. Joe had said that he couldn't smell it, but everyone else, including Austen, said it was disgusting. The beef cattle to whom it was offered did accept it, Hilda added: 'The bullocks and Highlanders generally have consented to eat the ensilage, but Austen is now not quite sure whether it is sufficiently high and is thinking of sending a sample to Moor Green to see what Uncle Arthur thinks of it'.[123] It is not known what Arthur Chamberlain's opinion was, but Austen found reassurance elsewhere. In February 1895 he and Ida visited 'Sugden', a local farmer, from whom they bought two cows. Austen wrote to Mary: 'Sugden was feeding all his dairy cows on ensilage ranker and blacker than mine, and the cowhouse smelt strongly of it, but he says he has had no complaint of the milk'.[124] Austen went ahead with feeding the silage to his cattle: Ethel reported in April 1895 that it was being fed to 'the different beasts in nearly all the fields', though she still complained of the smell.[125]

The one area in which James Long suggested improvements to Austen's farming operation was his use of fertilizer. He stated in his article that Austen was 'keenly alive to the value of artificial fertilisers', but the family correspondence for this period makes little mention of the application of fertilizer to the land. The few references to manure seem to refer to animal manure; only in one letter, of 1891, does Austen refer specifically to non-animal fertilizer, when he attributes his 'splendid crop' of hay to the use of soil, lime and clay on the fields.[126] Long, however, strongly advocated the application of artificial fertilizer (potash, nitrogen and phosphate) to arable land. He proposed that Austen conduct tests, by devoting two days to the arrangement of three plots, each of one tenth of an acre, on which swede seeds would be sown in identical fashion, but with three different types of manure. In this way, Long explained to his readers,

> we are not only enabled to ascertain under which system of manuring we get the heaviest and best crops, but we are enabled to demonstrate to others how easily and how simply

[121] NC1/15/3/76, Hilda to Neville, 3 Apr. 1896.

[122] Long, 'Chamberlain'. Long's obituary in *The Times* recorded that he 'was an early advocate of ensilage': *The Times*, 3 Oct. 1931.

[123] NC1/15/3/35, Hilda to Neville, 27 Dec. 1894.

[124] Austen to Mary, 3 Feb. 1895, pr. Petrie, *Life and Letters*, I, p. 65.

[125] NC1/14/112, Ethel to Neville, 12 Apr. 1895.

[126] AC5/3/14, Austen to Neville, 24 July 1891.

> valuable information is obtained. The crops are seen growing side by side; they are weighed when lifted, and, in future, we are able to deduce that by using the manure employed in raising the largest crop, we may succeed in producing a better average yield.

Such an experiment, he claimed, 'would probably provide an object lesson which would be of immense value to a large number of people, and I venture to think that if Mr Chamberlain, who … from the study he has devoted to the subject is well qualified to carry it out, would provide such a lesson, he would contribute more than his share towards the amelioration of the difficulties under which agriculture is suffering'.[127]

There is no evidence that Austen ever carried out such experiments at Highbury, and indeed Professor Long's suggestion that the M.P. should – presumably – write up and publish the results of such fertilizer trials, as a contribution to the improvement of British agricultural productivity, was a somewhat unrealistic one. Nevertheless, Long's proposal raises some interesting questions about the relationship between a 'hobby farm' and a 'model farm'. Long himself in his article does not use either term, but the contrast he draws between the 'dilettante practices' of some landowners and the seriousness of Austen Chamberlain's commitment to scientific farming suggests that if he had used the term 'hobby farm', he might have done so in a somewhat pejorative manner, to indicate the more frivolous end of the leisure-farming, pleasure-farming or amateur-farming spectrum. Another writer made such a distinction: as we have already noted, George Cadbury's biographer claimed that his farm was 'not a hobby' but an 'object lesson' and an experiment. For others, however, 'hobby farm' and 'model farm' were virtually synonymous. Muthesius commented, in relation to the hobby farms that he described: 'To denote this type of farm attached to a large country property the English use the term model farm, which in itself indicates that all the details have been worked out with careful consideration and without stint'.[128] Muthesius may have misunderstood the significance of the epithet 'model' in this context, as meaning 'ideal' rather than 'exemplary', but his testimony nevertheless provides a valuable indication that the term was widely used in the late nineteenth century in relation to hobby farms. Indeed, one journalist who wrote a feature article on Highbury referred to 'Mr Austen Chamberlain's model farm'.[129] Several decades later, the Astor-Rowntree Report noted that, 'The hobby farmer is the modern semi-urbanised successor of the great landlords of the eighteenth and early nineteenth centuries, whose "home farms" were once the centres of agricultural progress'.[130] Thus where in the late eighteenth century the home farms of large landlords might serve as models of good practice for their tenants and neighbours,[131] a century later James Long hoped that Austen Chamberlain's suburban hobby farm would provide an 'object lesson' for ordinary smallholders.

Although the evidence suggests that in the 1890s Austen Chamberlain took his farming activities seriously, devoting considerable time and effort to the management of the land and livestock on the most modern principles available to him, and engaging with the market as well as supplying the consumption needs of the household, James Long was perhaps

[127] Long, 'Chamberlain'.

[128] Muthesius, *English House*, p. 102.

[129] Innes Adair, 'Highbury, Birmingham: the home of the Right Hon. Joseph Chamberlain, M.P.', *The Weekly Scotsman*, 8 July 1899 (copy in JC4/12/1).

[130] *Mixed Farming and Muddled Thinking*, p. 103.

[131] See, for example, Stuart Macdonald, 'Model Farms', in Mingay (ed.), *Victorian Countryside*, I, pp. 214–26.

disingenuous in suggesting that his commitment to agriculture was – or realistically could be – anything more than a leisure occupation. As his political career took off – between 1895 and 1905 he was successively Civil Lord of the Admiralty, Financial Secretary to the Treasury, Postmaster General and Chancellor of the Exchequer – Austen had an ever-diminishing amount of time and energy to devote to the farm. After Neville's return from the Bahamas in 1897, our main source of detailed information about the farm dries up, but the indications are that from the late 1890s Austen was less involved in agricultural activity than he had been previously. Wileman, who had been warned about his conduct since at least 1898, was finally dismissed for drunkenness in 1904.[132] A new farm bailiff (evidently the employee referred to as 'Perrett' in the post-1904 family correspondence) was recruited, and a cottage was built for him.[133] Ida reported to Neville in January 1905 that 'the new man at the farm' was restoring Austen's interest in it, and that he was 'full of plans for future improvements'.[134] But whatever new interest he took in the farm seems to have been short-lived. The Liberal victory in the 1906 General Election meant that in theory Austen, being again in Opposition, would have more time for his leisure occupations, but his marriage and move into a new London house (although he continued to use Highbury as his constituency base), followed by the births of his three children, provided him with an alternative emotional outlet to livestock-raising. Ida assumed the main responsibility for the farm, but after Joe's stroke in July 1906 she and her sisters spent much time in the south of France helping Mary to care for her invalid husband. On Joe's death in July 1914 the household dispersed and Highbury passed into institutional use.

III

Finally, let us consider how far, and in what ways, their own experiences of farming and estate ownership may have influenced the Chamberlains' and the Cadburys' views on current agrarian issues.

A major aim of James Long's article on Highbury in *The Rural World* in December 1894 was to bid for Austen Chamberlain's support for farmers' interests, especially those of smallholders. By implication, Long was hoping that Austen would take up the cause of agricultural reform that his father had championed in the 1870s and '80s, but which Joe subsequently neglected in favour of grander national campaigns such as opposition to Irish Home Rule. 'If the farmers of Great Britain are not to have the advantage of the powerful advocacy of the Right Hon. J. Chamberlain, MP, the distinguished leader of the Liberal Unionist party', Long's article began, with a hint of reproach directed at the elder Chamberlain, 'they doubtless have his sympathy; and they have something more than the sympathy of his son Mr. Austen Chamberlain, MP, who has not only joined the ranks, but has been quietly following the occupation of a husbandman during the leisure which Parliament places at his disposal'. And Long went on to argue that Austen's practical experience on his Highbury farm, 'which may, not inaptly, be described as a small holding, inasmuch as it is not a large one', was likely to

[132] BC1/2/23, Ida to Beatrice, 7 Jan. 1898; NC1/20/1/42, Neville to Mary, 20 Mar. 1904.

[133] Ballard, *Highbury Park*, p. 48.

[134] NC1/16/1/2, Ida to Neville, 12 Jan. 1905.

have led him to sympathize with 'the rank-and-file farmer who is endeavouring to live, under difficulties, by following the same occupation'.[135]

There was indeed a basis for Long's hopes that Austen Chamberlain would act as a parliamentary champion of agrarian reform. In his by-election address of March 1892 Austen had praised the social reforms of the Unionist government, noting that 'They have passed two Allotment Acts, of the value of which my intimate connection with the Rural Labourers' League has given me ample proof'.[136] He continued, however, that much remained for the government to do: 'They have already introduced a Bill into Parliament for the creation of small-holdings. I desire to see it supplemented by a measure facilitating and cheapening the transfer of land, and by such changes in the law as may be necessary to secure the provision of proper cottage accommodation in the country districts'.[137] The Rural Labourers' League, to which Austen referred in his address, had been formed in 1888 by Jesse Collings, a long-time friend and political associate of Joe Chamberlain, and a fellow Liberal Unionist M.P. for a Birmingham constituency. Collings, who was an influential advocate of land reform, had been instrumental in recruiting Joe Chamberlain to the cause, and they had campaigned together under the famous slogan of 'three acres and a cow' in 1885.[138] Joe's advocacy of agrarian reform does not seem to have had any connection with his creation of the farm on his Highbury estate: rather, it was part of his broader commitment to a radical programme of social change, against the background of the agricultural depression, and at a time when growing sections of the rural population were becoming enfranchised.

James Long himself was a champion of land reform, and had given evidence to the Royal Commission on Agriculture in 1894.[139] In December 1894 he served as a judge at the annual Cattle and Poultry Show held at Bingley Hall in Birmingham, and on that occasion he and his wife were invited to dinner, along with Austen and Ethel Chamberlain, by Jesse Collings.[140] (It was presumably during this visit to Birmingham that Long conducted the inspection of the Highbury farm on which he reported in *The Rural World*.) But if Long had hoped to encourage Austen to become a leading advocate of land reform, his hopes were not realized. In the General Election of 1895, Austen's election address was less forthcoming on the issue of land reform than its 1892 equivalent had been. Noting that the recently formed Unionist government was committed to introducing 'practical measures of social reform', he listed '[t]he prolonged depression of agriculture' as only one of 'the questions to which the new Government will direct their attention'.[141] Austen's main priority as a politician was to support his father's great causes: opposition to Home Rule; and later, at the beginning of the twentieth century, tariff reform and imperial preference. Tariff reform, of course, offered a degree of protection to all types of farmers who produced for the market – but that was not the main motivation for the Chamberlains' promotion of the policy.

[135] Long, 'Chamberlain'.

[136] Petrie, *Life and Letters*, I, p. 46.

[137] Ibid., I, p. 46.

[138] On Collings and his relationship with the Chamberlains, see, for example Jesse Collings and Sir John L. Green, *Life of the Right Hon. Jesse Collings*, with an introduction by Austen Chamberlain (1920), pp. 91–106, 175–81 and passim.

[139] BPP, 1894, XVI, 'Minutes of evidence taken before HM Commissioners appointed to inquire into the subject of agricultural depression', II, pp. 395–415.

[140] NC1/14/102, Ethel to Neville, 6 Dec. 1894.

[141] Petrie, *Life and Letters*, I, p. 70.

Austen Chamberlain's concern for the welfare of smallholders, as expressed in his 1892 election address, seems to have derived primarily from his and his father's association with Jesse Collings: contrary to James Long's assumption, there is little evidence that his practical involvement in managing his Highbury 'small holding' enabled him to identify in any meaningful way with the problems of ordinary farmers. For George Cadbury, however, a commitment to land reform did derive from his personal experience – but primarily from his experience of the model village at Bournville, rather than of the farms on his estates. Cadbury believed that the evils of society, and especially of urban industrial society, stemmed from the alienation of the people from the land, and that these evils could best be overcome by reconnecting the lives of the workers with the natural world.[142] It was largely for this reason that he and his brother Richard decided to relocate their chocolate factory in 1879 from central Birmingham to the then rural setting of Bournville.[143] For the same reason, George invited thousands of poor children from the city slums every summer for day trips to his estates, first at Woodbrooke and later at The Manor House, where he built a large rustic-style hall to cater for the young visitors who played in the grounds; Richard Cadbury laid on similar entertainments at Moseley Hall and Uffculme.[144] Bournville village, which George Cadbury began to construct in 1895, provided low-density housing in a rural environment: there were only seven houses to the acre, and each house occupied no more than a quarter of the land allocated to it, the rest being garden on which the household grew fruit and vegetables as well as flowers. Surveys showed that the gardens produced £58 worth of food per acre per annum, compared with £5 worth per acre per annum on pasture land.[145] On the basis of this evidence, George was converted to the idea of the intensive cultivation of small-scale landholdings, whether in cottage gardens or on smallholdings of 20–30 acres that could be worked co-operatively, on the Danish model. At the same time, he advocated a new tax on land values, and the compulsory purchase of rural land for the relocation of factories and their workforce. In 1916, in a letter to the Trades Union Congress, he criticized large landowners for the low productivity of their estates: 'The wealthy hold the land, millions of acres of which provide for a mere handful of men sport, such as hunting, shooting, and racing. This land might produce ten times as much food if properly cultivated, and many million acres set apart for deer forests might produce timber and provide healthy and profitable employment'.[146] George Cadbury clearly did not regard his own modest estate at Northfield, with its model dairy farm, as deserving the same censure as these large landholdings; his acquisition of rural residences for himself and his family reflected the idea of the spiritual benefits of reconnection with the natural world that also underpinned his creation of the factory and village at Bournville. Unlike other Victorian advocates of 'back to the land', he did not reject industrialization, but rather sought the relocation of factories in the countryside.

George Cadbury's second son, George Cadbury jun., who had followed his father into the family firm, was also an advocate of agrarian reform. In 1908, along with Tom Bryan, a tutor

[142] Gardiner, *Life of George Cadbury*, pp. 84, 121, 143, 301–4.
[143] Ibid., pp. 31–6.
[144] Ibid., pp. 128–30; Alexander, *Richard Cadbury*, pp. 221–2, 257.
[145] Gardiner, *Life of George Cadbury*, pp. 148–9.
[146] Ibid., pp. 84, 121, 161, 165–6.

at Woodbrooke, the Quaker college founded by George Cadbury sen. on the site of his old home in Selly Oak, he published a book entitled *The Land and the Landless*. This provided a historical survey of the alienation of the population from the land, from the late middle ages to the Small Holdings and Allotments Act of 1907. In their Preface, the authors identified 'the revival of English rural life' as '[o]ne of the pressing problems of the day', and argued that it was 'essential both to individual and national well-being that the English people should be brought into closer relationship with English land'. The answer lay in the creation of smallholdings and allotments, but this in itself was insufficient: successful reform would also involve the development of co-operatives, the encouragement of small manufacturing industries in the countryside, and the promotion of a liberal general education, as well as technical agricultural training, in rural schools.[147] In 1925 George Cadbury jun. founded Avoncroft college, near Bromsgrove, for the education of agricultural workers. Like Fircroft, the adult education college in Selly Oak that he had set up in 1909 (with Tom Bryan as its first warden), Avoncroft was modelled on the Danish High Schools to which he attributed much of the success of smallholder farming in Denmark.[148]

IV

Thus several prominent members of the Chamberlain and Cadbury families, in line with many other middle-class people of their time, professed a concern with types of agricultural reform that would protect and promote the interests of smallholders.[149] This concern, however, seems to have sprung from their general espousal of radical politics, rather than from their personal experience of small-scale farming. Like many industrialists in the Victorian era, the Cadburys and the Chamberlains purchased rural estates as soon as they acquired sufficient wealth to invest in such properties. As was the case of other Birmingham businessmen, however, their estates were only of modest size; and they were located on the outskirts of the city, within commuting distance of the centre, so that they involved no sharp break with urban life. For the majority of the Birmingham bourgeoisie, the small livestock farms on their estates were simply one of the trappings of landownership, a status symbol to be left to the care of a bailiff or other 'outdoor servant'. For some, however – notably Austen Chamberlain at Highbury and, to a lesser extent, George Cadbury sen. at The Manor House, Northfield – the management of their farms was a much more serious enterprise which, while never amounting to fully commercialized agricultural production, went beyond 'hobby farming' and came closer to a miniature version of the 'model farming' of the progressive landowners of the late eighteenth century.

[147] George Cadbury, Jun. and Tom Bryan, *The land and the landless* (1908).

[148] Winifred Marks, with Christopher Cadbury, *George Cadbury Junior, 1878–1954* (1982?), pp. 25–9.

[149] On this phenomenon, see, for example, John R. Fisher, 'Agrarian Politics', in Collins (ed.), *Agrarian History,* VII (i), pp. 321–57.

Accounting for agriculture: The origins of the Farm Management Survey

by Paul Brassley, David Harvey, Matt Lobley and Michael Winter

Abstract

The Farm Management Survey was a sample survey set up by the Ministry of Agriculture to assess the level of farm incomes in England and Wales. It continues to the present day as the Farm Business Survey. The article sets the original Survey in its intellectual context, pointing out that Britain was a relative latecomer to such survey work, and explains why civil servants in the 1920s and 1930s thought it important to have the data that it produced. It traces the initial difficulties encountered in establishing the Survey and follows its subsequent development through the Second World War and into the 1960s, pointing out that the surviving fieldbooks and summary forms constitute an invaluable source for agricultural historians of the wartime and post-war periods.

The Farm Management Survey (FMS) of England and Wales began in 1936 and has continued, now as the Farm Business Survey, to the present day. Its main purpose was, and remains, to assess the level of farm incomes, by collecting detailed data on outputs, inputs and capital investment from over 2000 farms. Initially, these data were gathered at a national level only but they now feed into the Farm Accountancy Data Network of the European Union, thereby contributing to the statistical evidence base relevant to the operation of the Common Agricultural Policy. Rather than being a function of a civil service unit directly attached to the Ministry, the survey has always been carried out by independent university- or college-based research staff working under contract to the responsible government department.[1] This article explores the origins of the FMS, focusing on what its origins tell us about the relationship between state organizations and key individuals interested in the agricultural industry in the mid-twentieth century. The FMS is used as a lens to discuss these relationships at a national level. Although the FMS itself is about the economics of practical farming[2], its genesis tells us more about the professionalization associated with an increasing bureaucracy and 'state' interest in all aspects of the economy. The reach of the state was growing in the 1930s. Through reconstructing the detailed processes of how the FMS begun, the article outlines the form and nature of the burgeoning relationship between state and agriculture.

[1] In England, the Ministry of Agriculture and Fisheries, then the Ministry of Agriculture, Fisheries and Food, and now the Department for the Environment, Food, and Rural Affairs. All archival references in this paper, unless otherwise indicated, are to series in the National Archives.

[2] For example, the authors are currently analysing the field books held at Exeter as part of an investigation into economic and technical change: ESRC Grant no. RES–062–23–1831

It is important to emphasize that this article does not deal with the potential of the FMS for exploring the history of agriculture in the twentieth century, although it may be helpful to historians considering the survey as a source of data. The original data collection field books, containing the names and addresses of co-operating farmers, remained in the university and college departments responsible for completing them, and only anonymized summary forms were sent to the Ministry. With the demise of the Ministry of Agriculture, Fisheries and Food in 2001 these summary forms were transferred to the Museum of English Rural Life (MERL) at Reading, where they are now publicly available for consultation.[3] The original field books are not yet available to the general public or researchers outside the relevant universities and colleges. Since the inception of the survey, the fieldbooks have from time to time being used by staff of the originating department for research purposes subject to the confidentiality clauses of successive contracts with the ministry. However, their survival even within the host universities or colleges is patchy. Those relating to Devon and Cornwall and parts of Somerset and Dorset are still held at the University of Exeter, whereas those that were held at the Universities of Manchester and Nottingham appear to have been destroyed. Some field books up to the 1960s survive at Reading and there is a large, but uncatalogued, collection at Aberystwyth.[4] Some anonymized data from the Farm Business Survey from 1985 onwards are available on the University of Essex Economic and Social Data Service website.[5] The field books contain detailed data for individual farms, year-by-year, on outputs of crops, animals, and animal products such as eggs and milk, crop, milk and egg yields, details of inputs such as fertilizers, feedingstuffs, seeds, labour, and machinery, and very often information on purchases of new machinery. Although, in theory, no farm was meant to stay in the survey for more than 15 years, in practice some remained for much longer, so that it is possible to trace the evolution of farm businesses for, in a few cases, as long as 40 years. It is also worth noting that the FMS should be distinguished from the wartime National Farm Survey (NFS) of England and Wales, which was a complete survey of all farms, whereas the FMS was always a sample survey, so that while farms in the FMS between 1941 and 1943 should appear in the NFS, the reverse is rarely true.[6]

As with many of the joint activities of the governmental and academic worlds, the story is partly one of policy, partly of people, and partly of contemporary ideas, and this article attempts to follow each of these. It is based to some extent on published sources, but mainly on archival material, mostly from the National Archives. Curiously, these do not seem to have been used before, either by Whetham in her study of the agricultural economics profession, by Winnifrith or Foreman in their studies of the operation and history of the Ministry of Agriculture, Fisheries and Food, or by other writers who have discussed the FMS.[7] Before

[3] University of Reading, Museum of English Rural Life, MERL, SR FMS A/2. These forms cover the years 1936–87.

[4] We are grateful to Professor David Colman (Manchester), Dr Paul Wilson (Nottingham), Dr Rod Vaughan (Reading), and Dr Tony O'Regan (Aberystwyth) for this information.

[5] www.esds.ac.uk.

[6] B. Short, C. Watkins, W. Foot and P. Kinsman, *The National Farm Survey, 1941–1943: state surveillance and the countryside in England and Wales in the Second World War* (2000).

[7] E. Whetham, *Agricultural economists in Britain, 1900–1940* (1981); J. Winnifrith, *The Ministry of Agriculture, Fisheries and Food* (1962); S. Foreman, *Loaves and Fishes: an illustrated history of the MAFF, 1889–1989* (1989); J. Murdoch and N. Ward, 'Governmentality and territoriality: the statistical manufacture of Britain's "national farm"', *Political Geography* 16 (1997), pp. 307–24; H. C. Crowe, 'Farming at the margins:

examining this archive material in detail, however, it is important to set the beginning of the story in its intellectual context.

I

To some people – who would probably have included many of the farmers of the time – the idea that agriculture in the late nineteenth century might have an 'intellectual context' might appear risible. Nevertheless, it is important to recognize that the collection of farm income data from the 1930s onwards did not emerge, fully formed, from an intellectual vacuum. As historians of science have argued, by the mid-nineteenth century scientists were searching for objective knowledge, 'knowledge unmarked by prejudice or skill, fantasy or judgment, wishing or striving'.[8] Before long, similar ideas began to emerge in the social sciences and in public life. As Porter argued, 'In public affairs, reliance on nothing more than seasoned judgement seems undemocratic … Ideally, expertise should be mechanized and objectified' and 'The reverence of social scientists for statistics enshrined a vision of personal renunciation and impersonal authority in the name of higher truths and public values'.[9] The initial institutional result in Britain of this epistemic change was seen in the formation of the London Statistical Society in 1834 (it became the Royal Statistical Society in 1887).[10] In the nineteenth century the Society was concerned to further the collection of useful information about society in the form of facts and figures more than with statistical theories and methods, and the same appears to be true of the International Statistical Institute, founded in 1883 to bring together government statisticians from various countries. Major Craigie's report to the Royal Statistical Society on the 1897 meeting of the International Statistical Institute at St Petersburg listed the topics under discussion as agricultural statistics, including crop statistics and forecasts, annual data on crop areas and livestock numbers, the distribution of landed property, and rural enquiries, in addition to population, judicial, commercial, labour and anthropometric statistics.[11] Theoretical mathematical work formed the minority of papers in the deliberations of British and international societies, although of course basic ideas of probability, estimation, variation, error,

Note 7 *continued*
upland agriculture in Westmorland, 1919–47' (unpublished D.Phil thesis, University of Sussex, 2009); ead., 'Profitable ploughing of the Uplands? The food production campaign in the First World War' AgHR 55 (2007), pp. 205–28; R. Moore-Colyer, *Farming in Wales, 1936–2011: Seventy-five years of the Farm Business Survey* (2011). Dr Crowe's work is based on the summary forms held at MERL. It is interesting to note that the online catalogue of the National Archives produces very few results for the search term 'Farm Management Survey' for the period 1930–50, when the FMS began. However, the typescript lists at Kew show a clear evolution of the archives of the FMS.

[8] L. Daston and P. Galison, *Objectivity* (2007), p. 17.

[9] T. M. Porter, *Trust in numbers: the pursuit of objectivity in science and public life* (1995), p. 7; id., 'Statistics and statistical methods', in T. M. Porter and D. Ross (eds), *The Cambridge History of Science*, VII, *The modern social sciences* (2003), p. 250.

[10] M. Shabas, 'British economic theory from Locke to Marshall', in Porter and Ross, *Cambridge History of Science*, VII, p. 179; D. A. Mackenzie, *Statistics in Britain, 1865–1930: the social construction of scientific knowledge* (1981), p. 8.

[11] Ibid., p. 8; A. Desrosières, 'The part in relation to the whole: how to generalise? The prehistory of representative sampling', in M. Bulmer, K. Bales and K. K. Sklar (eds), *The social survey in historical perspective, 1880–1940* (1991), p. 232; P. G. Craigie, 'Notes on the subjects discussed at the St. Petersburg meeting of the International Statistical Institute', *J. Royal Statistical Soc.* 60 (1897), pp. 735–88.

regression and so on were being formulated in the nineteenth century by Laplace, Gauss, Quetelet, Poisson and other pioneers of statistical theory. But basic ideas of social research using sampling methods appeared only from the end of the nineteenth century, and were still being debated in the International Statistical Institute in the late 1920s.[12] Unemployment, welfare and the cost of living became matters of state intervention and legislation in the first 30 years of the twentieth century and consequently became the concerns of government statistical bureaux.[13] Thus the environment within which policy makers and administrators in general worked in the early twentieth century was increasingly objectified and quantified.

This trend was also apparent in the agricultural field. The agricultural counterpart to the International Statistical Institute was the International Institute of Agriculture, which had been established in Rome in 1905. After World War I it was associated with the League of Nations. By the 1930s, when 60 countries were affiliated to it, the Institute was producing a wide range of statistical, economic and scientific publications, and in 1930–31 it conducted a world agricultural census.[14] However, despite the expansion of agricultural education from the 1890s and the increased availability of research funding from the Development Commission after 1910, in this period Britain was lagging behind continental Europe, especially Germany and the Netherlands, and the USA.[15] This was certainly true as far as agricultural economics and farm management specifically were concerned. Although the UK had had an agricultural census – the June returns – since the 1860s, it collected physical data only, and thus provided no information on incomes or any other financial measure.[16] Similarly, the 1908 estimates of agricultural output of Great Britain were also produced entirely in terms of acres, tons, and gallons etc.[17] In contrast, the US Department of Agriculture began to collect data on the costs of growing wheat from the 1890s, and at about the same time simple cash expenditure and receipt systems were being applied to German farms. In Switzerland, Professor Ernst Laur, a leading figure in the Swiss Peasants' Union, published the first statement of Swiss farm accounts in 1901, and farm accounting societies were established in Denmark from 1910. The Cornell Agricultural Experiment Station surveyed farms in New York State in 1911 and developed the idea of 'efficiency factors' such as output per labour unit. The *Journal of Farm Economics*, first published in the USA in 1910, can be seen as a baseline for the profession of agricultural economics, and many of the British agricultural economists of the inter-war period spent some of their student years at Cornell or Iowa State universities.[18]

Britain was about 20 years behind. Among the pioneers of agricultural data collection in the UK were Sir Daniel Hall, who acted as adviser to Guinness for their hop farm (and in 1904 devised a full-cost accounting system), James Wyllie (of the West of Scotland Agricultural

[12] Porter, 'Statistics and statistical methods', pp. 238–42; Desrosières, 'The part in relation to the whole', pp. 217–18.

[13] Desrosières, 'Managing the economy', in Porter and Ross (eds), *Cambridge History of Science*, VII, p. 559.

[14] J. A. Venn, *The foundations of agricultural economics* (sec. edn, 1933), pp. 443–4.

[15] P. Brassley, 'Agricultural Science and Education', in E. J. T. Collins (ed.), *The agrarian history of England and Wales*, VII, *1850–1914*, (two parts, 2000), i, pp. 613–22; Jan Bieleman, *Five centuries of farming: a short history of Dutch agriculture, 1500–2000* (2010), p. 161.

[16] Foreman, *Loaves and Fishes*, p. 87.

[17] Board of Agriculture and Fisheries, *The Agricultural Output of Great Britain*, Cd. 6277 (1912).

[18] Whetham, Agricultural economists, pp. 25–9.

College), James Mackintosh (of Reading University), and A. G. Ruston, who began to collect cost accounting data in Leeds University.[19] Hall later became the leading figure in the Development Commission, which funded the establishment of the Agricultural Economics Research Institute (AERI) at Oxford University. Its Director, C. S. Orwin, published *Farm accounts* in 1914, and *The determination of farming costs* in 1917. A revised edition of the latter work, under the title *Farming costs*, followed in 1921, and it is interesting to note that many of the references cited in the bibliography were American or German.[20] Notwithstanding these hesitant beginnings of data collection, some problems appeared to be enduring. The full-cost accounting method, as John King, the advisory economist at the Midland Agricultural College at Sutton Bonnington, pointed out, required some brave assumptions about the contribution of each enterprise to what we would now call fixed costs (e.g. items such as rent and labour). These complexities required considerable time, expertise and effort to analyse just one farm, even assuming that the farm kept records in the necessary detail.[21] Thus the idea of collecting comparable data over the range of different farming types, enterprises and regions to be found in the UK was impracticable, unless some alternative method could be found.

The only realistic alternative was the survey method, which involved the collection of a more straightforward set of financial and physical data from a wider range of farms, subsequently analysed by type of farming and size of farm. This practice had been pioneered in the USA by Dr G. F. Warren and his co-workers at Cornell in the first decade of the twentieth century. As Sir Thomas Middleton, a former professor of agriculture, leading civil servant in the Ministry of Food, and at that time secretary to the Development Commission, who clearly had personal knowledge of the procedure, subsequently wrote:

> [Warren] was personally very familiar with the types of farming followed in the Eastern States. Being himself unable to visit the hundreds of farmers whose business methods he wished to study, he drew up a careful schedule of questions, of a kind he knew farmers could answer; he then selected post-graduate students and sent them to collect and write down answers to his questions. Interesting information was thus collected which he interpreted with great skill.[22]

By the 1920s Warren's approach was known and practised in the UK. Despite Orwin's expertise in cost accounting methods, the AERI over which he presided conducted a series of surveys, including Orr's studies of Oxfordshire (1916) and Berkshire (1918) and the four volumes on rural industries published in 1926 and 1927. There were also national land use and woodland surveys in the inter-war period, but these were hardly Warren-type surveys.[23] Warren's influence was, however, reflected in J. Pryse Howell's work on hill farming, which has been

[19] Ibid., pp. 23–4; P. Lamartine Yates, *Food production in western Europe: an economic survey of agriculture in six countries* (1940), pp. 391, 467.

[20] C. S. Orwin, *Farm Accounts* (1914); id., *The determination of farming costs* (1917); id., *Farming costs* (sec. edn, 1921).

[21] J. King, *Cost accounting as applied to agriculture* (1927).

[22] T 161/487 (Survey of Farm Management), Middleton to Barnes, 10 June 1931.

[23] The AERI studies are all listed in Agricultural Economics Research Institute, *Agricultural economics, 1913–1938: being the twenty-fifth annual report of the Agricultural Economics Research Institute* (1938); details of the land use and woodland surveys are in Short *et al.*, *National Farm Survey*, p. 22.

identified by Richard Moore-Colyer as 'the first British example of a carefully-conducted farm management survey'.[24] John Maxton wrote a report on Warren's methodology (of which the Ministry of Agriculture was aware, to judge from its presence in their files) for the Empire Marketing Board, and Currie and Long had employed it for their survey of 17 parishes around Dartington in South Devon.[25] In 1930 the Cambridge University Farm Economics Branch (one of whose members, R. McG. Carslaw, had studied farm management research in the USA) produced a survey of Hertfordshire. Most of the UK agricultural economists were by this time, it seems, leaning towards the survey approach, believing that in order to understand farming, the only meaningful method was the large scale survey of inputs/outputs, costs and incomes.[26] Thus there was an intellectual context within the strict confines of agricultural economics and policy that encouraged the systematic collection of data sets. Of course, this coincided with the advent of large-scale data gathering exercises in other branches of social science in the inter-war period, such as the work on land use by Dudley Stamp.[27]

II

One possible explanation for why the Ministry of Agriculture might need a Farm Management Survey was its need for evidence on the success or otherwise of policy. Moves to investigate farm incomes had begun by the end of the nineteenth century, when the Royal Commission on the Agricultural Depression 1894–6 printed nearly one hundred examples of farmers' own accounts, mainly income and expenditure accounts, from across the country.[28] They were taken further by the end of the First World War when pressures for a national post-war policy for agriculture were gathering pace. An Agricultural Wages Board committee investigating the financial aspect of farming issued a 'Form of return of farm receipts and expenditures', which requested details of acreages, livestock numbers, sales receipts and input costs for the years 1913/14 to 1917/18. About 1500 of these forms were sent out but only 119 were returned. In its report, the committee, reflecting on the 'disappointing' response, suggested that farmers would have been wise to provide the information requested and emphasized '… the immediate urgency of undertaking investigations and preparing records showing the general financial results of farming'.[29] The 'urgency' lay in the development of price support

[24] J. Pryse Howell, *The productivity of hill farming* (1922); Moore-Colyer, *Farming in Wales*, p. 9.

[25] J. Maxton, *The survey method of research in farm economics* (1929). Maxton was on the staff of the Agricultural Economics Research Institute at Oxford at this point. A copy of this document, which was published by the Empire Marketing Board, is in MAF 38/198 (FMS proposals, 1928–31). J. R. Currie and W. Harwood Long, *An agricultural survey in south Devon* (1929).

[26] Whetham, *Agricultural economists*, pp. 58–61. It is worth noting that collection of farm account data in Britain was probably still lagging behind that in continental Europe. By the end of the 1930s farm account data was being collected on a significant scale in Switzerland, Denmark, the Netherlands, Belgium, and Germany, where it was compulsory for larger farms (over about 250 acres) to keep accounts. See Lamartine Yates, *Food Production*, pp. 82, 149, 212, 391, 467.

[27] Dudley Stamp's First Land Utilisation Survey in the 1930s is the most obvious example: L. D. Stamp, *The land of Britain: its use and misuse* (1948).

[28] M. E. Turner, J. V. Beckett and B. Afton, *Farm Production in England, 1700–1914* (2001), p. 38.

[29] BPP, Agricultural Wages Board, *Report of the committee to enquire into the financial results of the occupation of agricultural land and the cost of living of rural workers*, Cmd. 76 (1919), pp. 3–4, 38. The form is printed as App. XIII to the report. We are grateful to

policies in the immediate post-war period which led to the Agriculture Act 1920, but a year later the legislation was repealed, in the so-called 'Great Betrayal'.[30] The next significant policy intervention came in the form of a subsidy to sugar beet production under the terms of a 1924 Act (and there were subsequent investigations of financial returns to sugar beet growers). However, the idea of public financial support for the agricultural industry as a whole was rejected by the 1926 White Paper on agriculture.[31] But vacillation over the whether or not to subsidize agriculture has to be put alongside a growing perception that data were needed in a modern state. The emergence of similar farm accounting schemes in the USA and Germany at this time, in the absence of farm support policies, suggests that specific policy objectives and discourses were less important to the development of the FMS than the growing realization that economies are broken up into state units, the increasing meaning given to national/territorial boundaries, and a corresponding interest in measuring and collecting information as part of defining and demarcating states.[32] For example, in November 1928, R. J. Thompson, the Ministry's assistant secretary in charge of the advisory economics service, wrote an internal minute (probably to the Minister's private secretary) arguing for an 'investigation and enquiry … into the economics of agriculture from a national point of view'. It is worth quoting his reasons in some detail:

> There is no question that there is an increasing need for the study of the economics of agriculture. The agricultural situation is unsatisfactory and at any moment the Ministry may be asked to advise on remedial measures involving large expenditure; although as a matter of fact we have not got the detailed information required as a basis for sound judgement.
>
> Discussions are always taking place on the unremunerativeness of arable farming, the reversion of arable and pasture, the advantages of grass farming, the burden of wages, the inefficiency of labour, the relative advantages of small and large holdings and of ownership and tenancy and other similar questions; but exact information is woefully deficient and in the main we are dependent on casual evidence and observation which may be very misleading, whereas reasonably exact statistical data can be obtained and ought to be available for the information of the Government as a guide on questions of policy.[33]

Before sending off his minute, Thompson went on to dismiss the cost accountancy approach

Note 29 *continued*
Dr Hilary Crowe for drawing this report to our attention. The Agricultural Wages Board had been established under the provisions of the Corn Production Act, 1917 (A. Howkins and N. Verdon, 'The state and the farm worker: the evolution of the minimum wage in agriculture in England and Wales, 1909–24', *AgHR* 57 (2009), p. 267).

[30] E. Whetham, 'The Agriculture Act 1920 and its repeal: the "Great Betrayal"', *AgHR* 22 (1972).

[31] P. Brassley, 'British farming between the wars', in P. Brassley, J. Burchardt and L. Thompson (eds), *The English countryside between the wars: regeneration or decline?* (2006), pp. 190–1; Whetham, *Agricultural economists*, p. 59.

[32] See R. Jones, *People/states/territories: The political geographies of British state transformation* (2007).

[33] MAF 38/198, minute from R. J. Thompson, 8 Nov. 1928. As late as 1937, in an article discussing the annual agricultural output figures, which the Ministry of Agriculture and Fisheries had produced since 1925, Thompson noted that 'To make the picture complete, one would need to know the corresponding cost of production, but in regard to this very little information is available'. R. J. Thompson, 'Changes in the value of the agricultural output of England and Wales', *J. Royal Statistical Soc.*, 100 (1937), pp. 291–5.

favoured by Orwin as 'not sufficiently uniform or extensive to provide a basis for the consideration of national problems' and to examine the problems of financing the work. Subsequently, in 1931, Sir Thomas Middleton, who by then had considerable experience of the workings of government, added: 'It is not difficult to visualize immediate uses for the figures resulting from such surveys in the work of a government office. They would provide answers to many topical questions, and thus be useful to Ministers'.[34] This latter point was reiterated by Thompson's successor, R. R. (later Sir Ralph) Enfield, in an internal Ministry minute written in July 1935, by which time price support policies were again in the policy frame, in which he argued that the need for the survey 'has not only become obvious from the modern trend of policy involving as it does State action in support of prices, output and employment, but the frequent requests for information of this kind which we have received during recent months from the Minister'.[35] He repeated the argument in 1937, in an internal Ministry paper outlining the scheme that was then in operation:

> During the last five years we have frequently had questions or enquiries addressed to us by the late Minister which required, for their adequate answer, much more information upon farm incomes and expenditure and other farm management data than we actually possessed. I hope, therefore, that this scheme will eventually fill this gap in our knowledge.[36]

Its main purpose, he argued, was to extend the provision of agricultural statistics 'into the field of farm finance which will give us direct statistical data of farm incomes and farm expenditure upon which alone we can form a satisfactory judgement of the course of agricultural prosperity'. It would also, he added, 'enable us to follow changes in farm practice resulting from changing economic conditions'.[37] The USA, Denmark, Switzerland and Germany had for some time, he pointed out, been able to produce farm income estimates based on farm accountancy material, which the UK had not been in a position to do until the FMS was established.

It is interesting to note, however, that Jock Currie, one of the pioneers of the survey method, saw things from a different perspective. In his Presidential Address to the Agricultural Economics Society in 1956, he confirmed that farm management studies were used for 'political purposes', arguing that the inter-war depression 'encouraged exclusively political approaches to farmers' problems. On the one hand, to determine subsidies, and on the other, for "price fixing"', and that '[t]his was almost inevitable, as we see when we look back on the general outlook of the late twenties and the thirties'. But, in his view, it was something to be regretted: 'Unquestionably it frustrated the search for, and consideration of, more suitable methods of studying "Farm Management" problems'.[38] In a telling phrase, Currie talks of 'the original

[34] T 161/487, Middleton to Barnes, 10 June 1931.

[35] MAF 38/199 (FMS: grants to centres), minute from Enfield to H. E. Dale, 6 July 1935.

[36] MAF 38/200 (Farm Management Investigation – memorandum on the scheme), report on the Farm Management Scheme, signed R. R. E[nfield], 26 Apr. 1937, p. 6. The late Minister to whom he referred was presumably Walter Elliott, Minister of Agriculture and Fisheries, 1932–36. Ministers, junior ministers, and permanent secretaries in the Ministries of Agriculture and Fisheries, Food, and Agriculture, Fisheries and Food (after the merger of the two ministries in 1955) up to 1960 are listed in Winnifrith, *Ministry of Agriculture, Fisheries and Food*, pp. 260–3, and thereafter in Foreman, *Loaves and Fishes*.

[37] Ibid., R. R. E[nfield]'s report, p. 1.

[38] J. R. Currie, 'A review of fifty years' farm management research', *J. Agricultural Economics* 11 (1956),

objective of the Farm Management studies in financial profitability [being] to throw light on the internal' environment of farming.[39] In other words, he saw one of the main purposes of the survey as obtaining knowledge 'to guide farmers in their quest for improved farming systems to meet the severe competition from overseas'.[40] This was about international competitiveness rather than state support.

During wartime, with more direct intervention in agricultural markets in place, the FMS data was just as important in informing policy, if not more so. J. H. Kirk, one of the two Ministry civil servants most directly in control of the survey during the war, argued in a letter to a colleague in 1941 that:

> [T]he data is an essential part of the statistical information required by the Minister for the determination of agricultural policy and administration. We managed to do without much financial data until 1936 since by and large agricultural policy was on a laissez faire basis, but increasingly agriculture has become planned and managed, and there is every sign that planning rather than laissez faire will continue after the war. During the war the financial data have been of particular value since agricultural prices and wages have become increasingly detached from the market, and the Farm Management Survey has therefore afforded a valuable check on the extent to which wage and price policy have [sic] resulted in profits or losses.[41]

Sir Donald Fergusson, the Permanent Secretary at the Ministry of Agriculture during the war, writing a little earlier, made the same point and added that the survey also provided data for 'the confidential information of the Minister'.[42] More than 20 years later, remarks in an internal minute by his successor, Sir John Winnifrith, made it clear that the reasons for maintaining the survey were essentially similar: 'we need reliable information about incomes on farms of different categories. This is, indeed, the only weapon with which to counter the NFU's own similar survey.' He was responding to a report on the FMS that he had asked the Economics Division to produce about two months earlier. On 1 May 1964 John Ashton, a senior economist in that division, wrote a memo to one of his subordinates, J. A. Evans, requesting him to draft the report, saying that it 'stems from the Minister's pre-occupation with the average income of full-time farmers. Generally most people are fairly certain that it must be of the order of £1,500 p.a. but no one seems to be able to prove it'. He also requested comments on a scheme

Note 38 *continued*
pp. 350–60. The passages quoted may be found on p. 357. Currie (1891–1966) was born into a Scottish farming family and studied at Glasgow University and at Cornell with G. F. Warren. In 1928 Leonard and Dorothy Elmhirst appointed him to the post of adviser on farm policy and agricultural economist on the Dartington estate in south Devon, where he remained for the rest of his life. With Harwood Long he produced a pioneering economic survey of south Devon farms in the late 1920s and was later involved in numerous initiatives to improve grassland, livestock, mechanization and farm management. He was elected President of the Agricultural Economics Society in 1955 (see obituary, *J. Agricultural Economics*, 18, 1967, pp. 321–2).

[39] Currie, 'Fifty years farm management research', p. 357.

[40] Ibid., p. 350.

[41] MAF 38/199, J. H. Kirk to W. R. Black, 24 Oct. 1941.

[42] D4/115 (Development Commission, Agricultural advisory work, England and Wales, year ending 30 Sept. 1942. Application of the Ministry of Agriculture and Fisheries – Farm Management Survey), Fergusson to the Secretary of the Treasury, 16 June 1941.

that the National Farmers' Union was then running to collect income data from farmers, which revealed, not surprisingly, a lower average income ('their income of £600 p.a. and all that!'). Evans's report made it clear that the basic reasons for conducting the FMS had not changed: 'to assemble a body of economic and financial facts about farms for use in farm management advisory work, in teaching and research and as an aid to decisions on agricultural policy', although the emphasis on teaching and advisory work was perhaps greater than it had been earlier. He dismissed the NFU scheme, which was less detailed than the FMS and 'cannot be represented as entirely objective considering that the sample is selected by NFU county secretaries'.[43] The importance of objectivity had been stressed by Winnifrith's own book on the Ministry, published two years earlier, in which he pointed out that since the FMS data 'is considered at the annual price review … it was felt desirable that the selection of farms and collection of information should be in "neutral" [i.e. university rather than Ministry] hands'.[44] Evans also argued that Inland Revenue farm income statistics were no substitute for the FMS, as they 'do not distinguish between full-time and part-time businesses nor can they be analysed by size, type or location of farm', besides being less up to date than the FMS data. The FMS could not hide 'the fact that many farms earn low profits', Evans felt, 'because it is true. But it could be used to rebut the inference that the fault for this lies in Government policy by showing the extent that low income is caused by undersized farm businesses or poor management'.[45]

This succession of Ministry of Agriculture documents reveals a variety of reasons for maintaining the FMS from the 1920s to the 1960s involving both its policy purposes and its pedagogic – potentially transformative – potential for the industry. Not long thereafter, in 1973,when the UK joined what became the European Union, a further justification took over, as the data was needed for the UK's contribution to the European Farm Accountancy Data Network. Although the main purpose of the FMS was to produce data for internal government policy purposes, inevitably its wider potential rapidly became apparent. In particular, the possibility of providing farm management data for use by farmers was recognized, and the publication of annual farm management handbooks became routine in each of the FMS provinces from the early 1960s. The data were also used in other research publications from the provincial centres from the outset although the scope and frequency of these varied between the provinces. Essentially, however, the Ministry economists wanted the information so that they had some idea of the effects of current policy and a body of data upon which they could base their responses to ministerial questions. Nevertheless, although

[43] MAF 283/507 (FMS scope and functions, 1964), minutes by J. Ashton, 1 May 1964 and J. Winnifrith, 6 July 1964; report by J. A. Evans on 'The scope and function of the Farm Management Survey', June 1964, pp. 2 and 6. The NFU scheme was established as a check on the FMS soon after the 1947 Agriculture Act began the practice of annual price negotiations between the farmers' unions and the Ministry of Agriculture. It relied on farm accounts being submitted on an anonymous basis by accountants. They were therefore accounts prepared for tax purposes, using accountancy definitions rather than FMS definitions, and different acreages and herd sizes. In 1975 an NFU economist demonstrated that, after correcting for these differences, the income data produced could be reconciled with FMS data, allowing for a six-month lag or lead time, and the Union therefore discontinued the scheme, preferring to use the costs and clerical time required for other purposes. We are grateful to John Malcolm, formerly Chief Economic Adviser to the NFU, and to Derek Shepherd, sometime NFU economist, for this information.

[44] Winnifrith, *Ministry of Agriculture, Fisheries and Food*, p. 217.

[45] MAF 283/507, Evans report, p. 6.

the need for the survey might be apparent within the Ministry, its cost had to be justified to the Treasury, both before its initial establishment and through to the 1960s when the Evans report was written, and that did not always prove straightforward. Furthermore, the academic economists involved, and the universities and colleges for which they worked, also had to be persuaded to co-operate.

III

In order to understand the initial difficulties in setting up the Farm Management Survey, it is first necessary to outline briefly the system of advisory provision between the wars. It was constituted on two levels: county and province. Before the First World War some counties had begun to make provision for agricultural education, and during the First World War County War Agricultural Committees had been set up. After 1920 permissive legislation was introduced to allow counties to establish a county agricultural organizer, a post that was often combined with the principalship of the county farm institute in those counties that had one. By 1939 there were 55 such organizers, with a total of 468 staff.[46] The role of these people was educational and advisory, and they were supported, for more complex questions, by the Provincial Advisory Service, based on universities or national agricultural colleges, with specialists in, for example, agricultural chemistry, dairy bacteriology, plant pathology, economics, and so on. This system was in operation by 1928, when there were 12 provincial agricultural economists, each doing what seemed appropriate for their province.[47]

It was on 8 November 1928, as we have seen, that the assistant secretary in charge of the advisory economics service in the Ministry of Agriculture, R. J. Thompson, wrote his minute arguing for a farm management survey, probably, to judge from the initials, to the Permanent Secretary, Sir Charles Howell Thomas. The cost of the survey, estimated at between £5,000 and £10,000, might, he suggested, be met by the Empire Marketing Board (EMB), who were 'currently taking a great interest in economic questions and particularly in the use of the survey method'. He proposed a semi-official approach to the EMB to enquire whether there was a 'reasonable probability' of a grant being made, followed by a meeting of 'the Agricultural Economists' (presumably the Provincial Agricultural Economists) to discuss the details.[48] Thomas discussed the idea with one of the influential figures in the agricultural establishment, Sir Daniel Hall, who supported Thompson's proposal.[49] It was duly forwarded to the Minister,

[46] P. Brassley, 'Agricultural education, training and advice in the United Kingdom, 1850–2000', in N. Vivier (ed.), *The State and rural societies: policy and education in Europe, 1750–2000* (2008), p. 265.

[47] C. J. Holmes, 'Science and the farmer: the development of the Agricultural Advisory Service in England and Wales, 1900–39', *AgHR* 36 (1988), pp. 78–9.

[48] MAF 38/198, R. J. T[hompson], minute to the Permanent Secretary, 8 Nov. 1928.

[49] Hall was the founding principal of Wye College from 1894 to 1902, head of the Rothamsted research institute (1902–12) and later the Development Commission (1912–17), secretary to the Board of Agriculture during the First World War, chief scientific adviser to the Ministry of Agriculture (1920–27) and at that time head of the John Innes Research Institute. Hall himself had worked on agricultural accounts, and also chaired the Ministry's Agricultural Costings Conference of Mar. 1922, when it attempted unsuccessfully to achieve some agreement on methods of treating agricultural costings. See K. A. H. Murray, 'Agricultural economics in retrospect', *J. Agricultural Economics* 13 (1960), pp. 374–98; *ODNB*, 'Hall, Sir (Alfred) Daniel (1864–1942)'.

Walter Guinness (later Lord Moyne), with a covering minute in which Thomas stated that 'I am of the opinion that the time is ripe for the development of an Economic Survey of Agriculture by agreement with and through Advisory Economists attached to Universities'. 'I agree', replied Guinness. By the middle of December Thompson had discussed his proposal with Orwin at Oxford, Ashby at Aberystwyth, and J. A. Venn at Cambridge, and with members of the economic committee of the EMB. The importance of critical individuals to the development of the FMS should not be under-estimated: these personal networks and personalities provide a 'peopling' of the state, the importance of which has been highlighted in recent scholarship by Rhys Jones.[50] At the beginning of the new year, in January 1929, Maxton's report, *The survey method of research in agricultural economics* (see above), was published by the EMB, so it was presumably supportive of the methodology, but there is no evidence that it was prepared to produce the £5,000 that Thompson required.[51] In January 1930 Thomas wrote, instead, to the Treasury requesting a grant of £6,000 for the survey. In response the Treasury enquired whether the work could be done by grants to the research institutions. There was then a gap of six months until H. L. French of MAF wrote to the Treasury saying that the various institutions concerned could not be persuaded to agree.[52]

At the same time, the Ministry was becoming increasingly exasperated by the failure of the Committee on Agricultural Economics to co-ordinate research. The Committee consisted of the provincial agricultural economists, representatives from the Ministry, and staff from other bodies such as the Development Commission, the Agricultural Research Council, and the Scottish Department of Agriculture. With the exception of a national survey on sugar beet growing costs, started in 1926, little had been achieved. 'The divergence of views was extreme on most of the important issues; unanimity was rarely, if ever, reached; the views of majorities were seldom accepted for working purposes'.[53] In addition, R. R. Enfield, Thompson's successor and thus the leading economic specialist in the Ministry, and C. S. Orwin, head of the AERI at Oxford, just did not get on with each other.[54] In some ways the Committee seems to have combined the functions of a co-ordinating body and a learned society. It failed, however, to co-ordinate very much, and in 1926 a learned society for agricultural economics had been established. By the end of the 1920s, therefore, the reconstitution of the Committee was under active consideration. The Ministry was not interested. It simply wanted a meeting of the provincial agricultural economists with a small number of relevant Ministry officials, which is what it established in 1930 as the Conference of Advisory Economists. By the end of that year the Conference had recognized the Ministry's desire for uniform approaches to research questions, and had decided to proceed with a milk production survey through all the provincial centres, a poultry survey at three centres, and a farm management survey at two or three centres.[55] Consequently, in February 1931, Thomas again wrote to the Treasury requesting funding for a farm management survey, this time 'to proceed on a provincial basis', beginning

[50] Jones, *People/States/Territories*.

[51] MAF 38/198, minutes.

[52] T 161/487 (Survey of Farm Management, Jan. 1930–Oct. 1931), H. L. French (MAF) to C. L. Stocks (Treasury), 26 June 1930.

[53] Murray, 'Agricultural economics in retrospect', p. 376.

[54] A. W. Coats, 'The development of the agricultural economics profession in England', *J. Agricultural Economics* 27 (1976), p. 386.

[55] Murray, 'Agricultural economics in retrospect', pp. 377–8.

with a survey of the eastern counties to be carried out by the provincial agricultural economists at Cambridge, with possible follow-on studies from Oxford and Aberystwyth. The Treasury consulted the Development Commission on the soundness of the proposed methodology, and received a favourable report from Sir Thomas Middleton, but then the economic problems of the depression intervened. There were pressures for government expenditure cuts, and nothing more was heard of the farm management survey until 1935.[56]

In the interim, the need for the kind of information that could be provided by a survey, to monitor the effects of policy and enable the Ministry's economics specialists to answer questions from their Minister, had not gone away, as Enfield emphasized in a minute written in July 1935, when he once again argued for funds to support it. The previous month an unidentified Ministry civil servant had sent a minute to Enfield suggesting that 'circumstances are such' that the AERI at Oxford could not be relied upon to perform the whole job – perhaps as a result of the poor interpersonal relationship between Enfield and Orwin – and, therefore, arguing that the provincial advisory economists should be given the task. In order to do so they would require additional funding, and the minute suggested that an approach should, therefore, be made to the Treasury. The writer implied that the money would need to come from the Development Fund, and thus would also require support from the Agricultural Research Council (ARC).[57] This link between the Treasury and the Development Commission is, in fact, less confusing than it might appear at first sight. As the Commission's official history points out, government departments with the appropriate areas of responsibility (and thus especially the Ministry of Agriculture and Fisheries) saw the Commission as providing 'a source of money which was additional to their normal Parliamentary allocations'.[58]

By July 1935 Enfield had passed the June minute on to H. E. Dale (his immediate superior in the Ministry), who approved the proposal, and W. C. (later Sir William) Dampier (secretary of the ARC), had written in support. In September, an application for £3,300 from the Development Commission to finance FMS work in 11 provincial centres went to the Treasury, and in November the Treasury agreed in principle to the grant.[59] Enfield lost no time. In December 1935 he convened a meeting of the Conference of Advisory Economists to discuss the construction and operation of the survey, and the conference in turn appointed a sub-committee to draft a scheme for the FMS. This sub-committee, which consisted of four representatives from the provincial agricultural economists (Ashby from Aberystwyth, Carslaw from Cambridge, Dawe from Bristol and Dinsdale from Newcastle), Orwin or Archie Bridges from the AERI, Dampier and Joe Duncan representing the ARC, and Arthur Jones and Enfield, from the Ministry who took the chair, met six times and produced a draft scheme

[56] MAF 38/198, Thomas to the Treasury, 13 Feb. 1931; T 161/487, note from Barnes (Treasury) to Stocks (Treasury), 11 June 1931, report from Middleton (Development Commission) to Barnes, dated 10 June 1931.

[57] MAF 38/199, minute to Enfield, 13 June 1935; minute from Enfield to Dale, 6 July 1935.

[58] A. Rogers, *The most revolutionary measure: a history of the Rural Development Commission, 1909–99* (1999), pp. 31–5. In 1937–8, for example, the Commission provided, through the Treasury and the Ministry of Agriculture and Fisheries, a total of £87,047 to fourteen universities and colleges for agricultural advisory and research work, of which £24,734 was for work in agricultural economics. D4/113 (Consolidated grants for agricultural advisory work, 1937–8 to 1945–6).

[59] MAF 38/199, minute by Dale, 15 July 1935, letters from Dampier, 30 July 1935, French, 3 Sept. 1935, and the Treasury, 22 Nov. 1935.

which was presented to a further meeting of the Conference in July 1936. Jones's report states that the Conference accepted the draft scheme and reconstituted the drafting committee as the Permanent Farm Management Investigation Committee to manage it.[60] He makes no mention of the opposition to the proposal, but opposition there clearly was. On 14 July 1936 Dr V. E. Wilkins of the Ministry wrote to the eleven provincial centres offering an extra £290 of annual funding for FMS work covering 200 farms. Almost by return of post Dr Charles Crowther, Principal of Harper Adams College, replied saying that the survey would involve too much travelling for not enough money, Principal Henderson Hogg of Seale-Hayne said the same and added that he had no room for the extra staff required and, in any case, his staff were already too busy, while the Vice-Principal of Aberystwyth made the same point about accommodation. Bristol, Reading, Oxford, and Leeds, on the other hand agreed to the terms offered. It appears that, in some cases at least, the enthusiasm of the economists for the survey had outstripped that of their managers, but by the autumn of 1936 Crowther and Henderson Hogg had been won round.[61]

The most serious opposition came from Wye. There, the economist, James Wyllie, seems to have been intellectually unconvinced by the scheme, and the college governors took his side. As late as April 1937, Mr Kendall of the Ministry was writing an internal minute to Enfield complaining that:

> There is no doubt that Mr Wyllie has behaved rather badly on this occasion as on many others. It would have been easy for him to have raised these difficulties at a much earlier stage. Mr Jones and I have considered whether there is any action which could usefully be taken to prevent a recurrence of this kind of situation, and to make Mr Wyllie more tractable in future … Our own view is that it would be useless to raise the issue on this occasion unless we are prepared to follow it up, if need be, by a general expression of opinion to the governors of Wye on Mr Wyllie's difficult attitude.[62]

Kendall's instinct was correct. The previous month R. M. Wilson, the Principal of Wye, had written to Dr Wilkins referring to the 'grave doubts as to the value of the Scheme' held by his governors, although they were prepared to put it into operation as long as the Ministry bore the full cost. The matter was finally smoothed over at the end of April 1937, when Principal Wilson called on Dr Wilkins on another matter, and they took the opportunity to discuss the FMS problem. The 'grave doubts', it transpired, came from some of the farmers on the governing body who were not convinced that they would be able to fill in the FMS form, having to rely to some extent on memory, but Mr Wyllie was now co-operating with the scheme.[63]

In October 1936 the Ministry received official approval (as opposed to the approval in principle of the previous year) to spend not more than £3,300 on the FMS between 1 October 1936 and 30 September 1937. The first farm accounts, relating to the harvest year 1936–37, were

[60] MAF 38/200 (Farm Management Investigation, Memorandum on the Scheme), undated (but from internal evidence 1936), report by Arthur Jones on 'The genesis of the Scheme'.

[61] MAF 38/199, letter by Wilkins, 14 July 1936; letters from Crowther, 15 July, Henderson Hogg, 15 July and 19 Oct., Owen 16 July, Barker, 15 July, Orwin, 29 July, Orr, 30 July, Comber, 16 Oct. and letter to all of these 12 Nov. 1936.

[62] Ibid., minute by Kendall, 12 Apr. 1937.

[63] Ibid., minute by Wilkins, 30 Apr. 1937.

collected in that year. It seems clear from subsequent correspondence that there was some confusion, at least on the part of the Treasury, over whether it had sanctioned a grant for five years of FMS work, or a grant for the initial five years of the FMS. In other words, was the survey meant to be permanent, or for five years only? Much of the correspondence in a file covering grants to the Oxford AERI in this period centred on this question.[64] Then in June 1941 Donald Fergusson of MAF wrote to the Treasury requesting a continuation of Development Commission funding for the FMS, now at a level of £4,400 per annum. In August his letter was supported by an enthusiastic report on the success of the Survey from the Development Commission itself.[65] The Treasury appeared to be baffled. In October 1941 Mr Biggs of the Treasury wrote to Mr Black of the Ministry of Agriculture and Fisheries on the question of a further five-year grant for the FMS, confessing that:

> We find ourselves, however, rather puzzled about it all. The scheme had been operating for five years now and you want us to agree to its continuance for another five years. But we are in the dark as to the progress that has been made with the work up to the 30th September last and how much longer it is anticipated that it will be necessary for it to proceed in order to complete the job.[66]

Black passed this to J. H. Kirk, who was by then the Ministry economist in charge of the survey, who replied, perhaps a little testily:

> I also am rather surprised that Biggs should think that the Survey is a 'job' to which a definite completion date can be assigned. As you yourself very well know, the results of the Survey are analogous on the financial side to those of the June returns on the physical side, and I think we agree that it is just as desirable to have this financial data each year for an indefinite period ahead as it is to have the physical data. In both cases the data is an essential part of the statistical information required by the Minister for the determination of agricultural policy and administration.[67]

There are also further notes in the Development Commission file which were clearly aimed at resolving two misunderstandings on the part of the Treasury: that the FMS was not the same as the 1941 National Farm Survey, and that the initial 1936 grant was not for a time-limited study, but for five years in the first instance. It is tempting to suggest that back in 1935 the Ministry had realized that asking the Treasury to fund an ongoing survey was less likely to meet with success than a request for a five-year-only project, so, while they were careful never to state that it was the latter, they were equally careful to avoid mentioning that it could be the former. By 1941 the Survey was up and running, there was a clear need for it, and agriculture was much more politically important than it had been five years earlier. FMS funding was continued.[68]

[64] Ibid., letter from the Treasury, 16 Oct. 1936; MAF 33/289 (Grants to AERI, Oxford).

[65] D4/115, Fergusson to the Secretary of the Treasury, 16 June 1941; Development Commission report by Havelock and Middleton, 20 Aug. 1941.

[66] MAF 38/199, Biggs to Black, 20 Oct. 1941.

[67] Ibid., Kirk to Black, 24 Oct. 1941.

[68] D4/115; details of the National Farm Survey are in Short *et al*, *National Farm Survey*; MAF 38/199, Treasury confirmation of further FMS funding, 12 Nov. 1941.

IV

The first years of the FMS were not without their problems. These were of two kinds: administrative, and what for want of a better term might be called operational. One immediate question concerned the extent to which the survey sample accurately represented farming in England and Wales as a whole. The problem was that the survey contained either too many large farms, or was conducted in areas that contained more large farms than the national average, as Professor Ashby pointed out in a letter to the Ministry from Aberystwyth in 1938.[69] J. H. Kirk and Harry Whitby, who together ran the FMS in the Ministry during the war, were aware of this, and in a note prepared for a meeting of the economists' sub-committee quantified the disparity (Table 1). The under-representation of small farms, they noted, was 'to some extent deliberate, being due to a ruling of the Farm Management Scheme that expressly discourages the inclusion of "small specialist farms"', although it was also a result of 'the greater willingness of large farmers to join the scheme and keep the necessary records'. They suggested that future expansion of the scheme should include more smaller farms and more from areas such as the Fens and the Vale of Evesham where such farms might be found.[70]

The economists doing the survey in the provinces also commented on the difficulties of finding farmers willing to cooperate: in 1937, for example, echoing in some ways the doubts that had earlier been expressed by the governors of Wye College, Mr Henderson wrote from Seale-Hayne College worrying that the time taken to complete the form might reduce the level of future co-operation.[71] At the Ministry itself, Enfield was also sensitive to this issue. Writing a minute to keep the Permanent Secretary informed on the progress of the survey in 1939, he concluded:

> I think I should add that the whole of the information obtained under this scheme is furnished voluntarily by co-operating farmers through the provincial advisory centres, and it is extremely important that nothing should happen to alienate their interest in the work, which would inevitably cause the scheme to break down. For this reason, I think it is desirable to avoid so far as possible, at this stage, any reference in public to the investigation, or to the results it may disclose.[72]

The importance attached by the Ministry to this close and confidential relationship between the provincial staff and their sample of farmers is also illustrated by the response to one suggestion for cutting the cost of data collection during the war. Wartime petrol cost increases had an immediate impact on the costs of the Survey, and in 1944 M. Allan Knox, the provincial economist at what was then the Midland Agricultural College at Sutton Bonnington, suggested that his department could get an accountant to provide information on six or seven of his

[69] MAF 38/201 (Farm Management Investigation: comments on the memorandum on the scheme), letter from Ashby, 21 May 1938; a similar criticism has been made more recently in Murdoch and Ward, 'Governmentality and territoriality', p. 315.

[70] MAF 38/199. The note is undated but was probably (to judge from internal evidence) written before 1944. See also MAF 38/467 (FMS – wartime developments 1944–5) for further discussion on the representativeness of the survey.

[71] MAF 38/203 (Revised scheme and amended primary returns), letter from Henderson, 8 Sept. 1937.

[72] MAF 38/200 (Memo on scheme 1937–9), minute from Enfield to Secretary, 11 Mar. 1939.

TABLE 1. Distribution of farms by size in the sample and the Universe

Size group (acres)	*FMS sample (%)*	*England and Wales (%)*
1–50	9.0	43.5
51–100	18.5	23.0
101–150	17.0	13.0
151–300	35.0	15.0
301–500	13.0	4.0
500+	7.5	1.5
Total	100.0	100.0

Source: MAF 38/199, Farm Management Survey (Note for discussion at next meeting of Economists' Sub-Committee) p. 1. The title of this table is the one used in the original document.

clients' farms for only a small extra cost. Both Whitby and Kirk reacted strongly against this. Kirk replied to Knox pointing out the importance of FMS staff having personal knowledge of farms in the sample and also noting that:

> It is, as you know, the essence of the present agreement between the Agricultural Departments and the NFU's [sic] that the data used for price fixing should be collected by independent economists … we should not favour any development which could be represented, even perhaps not altogether justly, as contrary to the intention of the agreement.[73]

The analysis of the data was not always straightforward either. In 1938, for example, some of the provincial economists were asking questions of Harry Whitby in the Ministry about what should count as income and profit, and he in return was writing notes about the importance of valuations.[74] Bringing together the data from the provincial centres to produce the national report also took more time than originally envisaged. Professor Ashby commented in 1938 that the AERI had had the first year's data for about a year without producing a report, and when Whitby eventually received the second report (during the Battle of Britain in 1940), he 'found it very heavy reading, not because of its profundity but because it is a procession of facts with no attempt at emphasis'.[75]

Administrative issues were mostly concerned with costs and the difficulty of producing the information for the £290 provided in the first year. Carslaw at Cambridge claimed that it cost £1 per record for collecting the data alone, with subsequent analysis occupying a technical assistant and two clerks for six months.[76] Technical staff and clerks were paid at differing rates. Seale-Hayne paid £150 p.a. to the 'man engaged' to carry out the work, Newcastle £180, Reading

[73] MAF 38/467, letters from Knox, 11 Dec. and by Kirk, 19 Dec. 1944.

[74] MAF 38/202 (Programme of research on data).

[75] MAF 38/201, letter from Ashby, 21 May 1938; MAF 38/204 (AERI Oxford reports), minute by Whitby, 21 Sept. 1940.

[76] MAF 38/199, Carslaw to Kendall, 25 Sept. 1937.

£200, Manchester £275, and Cambridge £300. FMS staff were in an anomalous position in universities. Being, in effect, paid by the Ministry, they were quasi-civil servants, and meetings of the provincial agricultural economists in the post-war years often contained discussions about their salary scales and the problems caused by the fact that they were not straightforward university employees.[77] Eventually, in 1965–66, this position was regularized somewhat by the transfer of financial responsibility for the Provincial Agricultural Economics Service to the University Grants Committee.[78]

The impression that emerges from a reading of this material is one of a close-knit group of people, aware of each other's strengths and weaknesses. They were spread all over the country but familiar with each other through frequent meetings, not only on Ministry business, but also through their membership of the Agricultural Economics Society and attendance at its conferences. The minutes of the Conference of Advisory Economists for 10 January 1941, for instance, reveal a list of members very similar to that of a similar meeting held in July 1936. The provincial economists included Ashby (Aberystwyth, but formerly at Oxford), Bridges (Oxford), Dawe (Bristol), Dinsdale (Newcastle) Henderson (Seale-Hayne), Jones (who in 1941 represented the Manchester department, but who had been a MAF economist), Menzies Kitchin (Cambridge, replacing Carslaw, who had been at the 1936 meeting), Knox (Sutton Bonnington), Long (Leeds, but formerly at Seale-Hayne), McGregor (Harper Adams, but at one time a colleague of Long's), and Thomas (Reading). Apologies were received from Wyllie (Wye).[79] Frequent correspondence with their MAF colleagues kept them aware of common problems and developments, and most of them had been in post long enough to have seen the development of the Survey and be, perhaps, personally involved in its success or failure.

V

It seems clear from this exploration of the FMS material in the National Archives that the original impetus for the Survey came from agricultural economists in the Ministry of Agriculture and Fisheries who needed some evidence upon which to base their assessments of the effectiveness of agricultural policy and their answers to ministerial enquiries. They had a range of questions to answer. On one side, the Treasury and the taxpayer would want to know why farmers needed to be given so much money. On the other side, the farmers, represented by the NFU, wanted to know why they were so poor and given so little money. Ministers of Agriculture needed to answer both, and needed their economists to provide the answers. This was the case, both in the inter-war period when the Survey began, and in the post-war period when it was firmly established as part of the Ministry's (and later the EU's) statistical portfolio. Putting it in these terms runs the risk of over-simplification. Nonetheless, it appears to capture the essence of the evidence emerging from the archive.

Actually producing the evidence in some form that could be justified statistically and politically was more difficult. The FMS however, together with a smaller-scale survey of milk

[77] MAF 38/605 (PAES Committee – minutes of meetings, 1945–52), minutes of the meeting of 27 Apr. 1950.

[78] MAF 283/512–4 (Transfer of responsibility of PAES from MAFF to UGC).

[79] MAF 38/199, minutes of conferences held on 17 July 1936 and 10 Jan. 1941.

prices immediately preceding it, marked the first point at which the provincial agricultural economists were brought together to work on a national basis. It was not the first national compilation of agricultural statistics – the June census had, after all, been going since the 1860s – but it dealt with much more sensitive information and, therefore, had to be introduced with considerable care (as Enfield's plea to the Permanent Secretary for confidentiality in 1939, discussed above, suggests). That the process was ultimately successful, and enjoyed the confidence of the farming industry, is suggested by a note sent by Jeremy Thorpe, at that time MP for North Devon, to the then Minister of Agriculture, Christopher Soames in 1961. Enclosing a copy of the Bristol II *Farm Management Handbook*, based on the FMS data, he wrote 'I have been asked *by some of my farmers* [our italics] to draw your attention to the enclosed admirable survey'.[80] This, and the fact that participation in the survey was voluntary, perhaps raises some questions about Short *et al*'s conceptualization of agricultural statistics as 'state surveillance'.[81] Although it is certainly true that the state was enquiring into the detailed business affairs of those to whom it was distributing subsidies, it was careful to do so in a way that preserved their anonymity, in particular from the Inland Revenue, and equally careful to ensure that only volunteers were involved in the survey. In addition, our evidence suggests that the categorization by Murdoch and Ward of the FMS as inherently biased to larger and more commercially oriented farms is also an exaggeration. The risk of this was recognized early by those responsible both for the management and implementation of the survey. And as far as rural historians are concerned, the result is that there remains a body of data which should in future provide much useful evidence for a vital period of agricultural change.

[80] MAF 38/864 (FMS general papers and correspondence, 1947–61), Thorpe to Soames, 1961. Bristol II was at that time the region covering Cornwall, Devon and Dorset, with investigation officers based first at Newton Abbot and later at Exeter.

[81] Short *et al.*, *National Farm Survey*.

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ALBERY, ALAN, 'Woodland management in Hampshire, 900–1815', *Rural Hist.,* 22, pp. 159–81.

ALEXANDER, JENNIFER S. and SUNLEY, HARRY, 'Kenilworth Abbey barn: its construction and uses', in Monckton and Morris (eds), *Coventry: medieval art, architecture and archaeology,* pp. 327–43.

ALLEN, MARTYN and SYKES, NAOMI, 'New animals, new landscapes and new world views : the Iron Age to Roman transition at Fishbourne', *Sussex Arch. Coll.*, 149, pp. 7–24.

ALLEN, PETER, 'Settlement patterns in the parish of Bingham, Nottinghamshire from the Mesolithic to modern times', *Trans. Thoroton Soc.*, 115, pp. 33–62.

ALLEN, ROBERT C. and WEISDORF, J. L., 'Was there an 'industrious revolution' before the industrial revolution? An empirical exercise for England, *c.*1300–1830', *EcHR*, 64, pp. 715–29.

ALMOND, RICHARD, 'A huntsman's home: a rare glimpse of a medieval mural at Madingley Hall', *Hist. Today,* 61, pp. 6–7.

ANDERSON, BEN, 'A liberal countryside? The Manchester Ramblers' Federation and the "social readjustment" of urban citizens, 1929–1936', *Urban Hist.,* 38, pp. 84–102.

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NEW BOOKS AND PAMPHLETS PUBLISHED IN 2011

ALDERBURY & WHADDON LOCAL HISTORY RESEARCH GROUP, *More of the mosaic of Alderbury & Whaddon.*

ARGYLL, JOHN CAMPBELL, 5th Duke of, *Kintyre instructions: the 5th Duke of Argyll's instructions to his Kintyre Chamberlain, 1785–1805 / transcription by Eric R. Cregeen; commentaries by Angus Martin.*

ASHLEY, PETER, *Cross country: English buildings and landscape from countryside to coast.*

BAINBRIDGE, VIRGINIA (ed.), *The Victoria history of the counties of England. A history of the county of Wiltshire, XVIII, Cricklade and environs.*

BAKER, SALLY and BROWN, B. J., *Mothers, wives and changing lives: women in mid-twentieth century rural Wales.*

BARNES, GERRY and WILLIAMSON, TOM, *Ancient trees in the landscape: Norfolk's arboreal heritage.*

BATTY, J. and BLAKE, J. (eds), *The Victorian farm*

BINNEY, RUTH, *The English countryside: amazing and extraordinary facts.*

BISHOP, BRUCE B., *Banffshire, the people and the land: some notes on the history and people of the baronies, estates and lands of Banffshire prior to 1850. Part 9, the parish of Aberlour from 1755 to 1850.*

—, *Banffshire, the people and the lands: some notes on the history and people of the baronies, estates & lands of Banffshire prior to 1850: pre–1855 death and burial records for the parish of Aberlour.*

BLYTHE, RONALD, *At the yeoman's house.*

BOHSTEDT, JOHN, *The politics of provisions; food riots, moral economy, and market transition in England, c. 1550–1850.*

BOWEN, JANE (ed.), *Further aspects of Belford.*

BOXFORD HISTORY PROJECT TEAM, *Boxora to Boxford: a short history of an ancient Berkshire village.*

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BROWN, JAMES, *Villagers: 750 years of life in an English village.*

BROWN, JANE, *The omnipotent magician: Lancelot 'Capability' Brown, 1716–1783.*

BROWN, JONATHAN, *Barrett Exall & Andrewes, the Reading Iron Works: the firm and its products.*

—, *Tracing your rural ancestors: a guide for family historians.*

—, *Water power and watermills: a historical guide.*

BURNETT, JOHN A., *The making of the modern Scottish Highlands, 1939–1965: withstanding the 'colossus of advancing materialism'.*

BUTLER, SIMON, *The war horses: the tragic fate of a million horses sacrificed in the First World War* (sec. edn).

CARMICHAEL, MARY (ed.), *The crofters and the war: recollections of Skye, Raasay, Lochalsh and Wester Ross during the Second World War: an anthology of oral histories and memorabilia.*

CARTER, JOHN, *Journey into farming*

CHAMBERLAIN, MARY, *Fenwomen: a portrait of women in an English village.*

CLAYTON, GERALD D., *Lost farms of Brinscall Moor: the lives of Lancashire hill farmers.*

COHEN, SUSAN, *The Women's Institute.*

COLLINGHAM, LIZZIE, *The taste of war: World War Two and the battle for food.*

COLLINGWOOD, RALPH, *Shawbury: the people and how they lived, 1538–1725.*

CONFORD, PHILIP, *The development of the organic network: linking people and themes, 1945–95.*

COOPER, KATHRYN J., *Exodus from Cardiganshire: rural-urban migration in Victorian Britain.*

CORDLE, CELIA, *Out of the hay and into the hops: hop cultivation in Wealden, Kent and hop marketing in Southwark, 1744–2000.*

COSTEN, MICHAEL D., *Anglo-Saxon Somerset.*

COUNTRY LIFE MAGAZINE, *Curious observations: a country miscellany.*

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CUNNINGHAM, JOHN, *Conquest and land in Ireland: the transplantation to Connacht, 1649–1680.*

CURTIS, L. PERRY, *The depiction of eviction in Ireland, 1845–1910.*

DAVIES, DAVID L., EVANS, GEOFFREY and CYNON VALLEY HISTORY SOCIETY, *The land your fathers possessed: an anthology on the Cynon Valley from the 16th to the 20th centuries.*

DAVIS, PETER; edited by MARTIN DAVIS, *The diary of a Shropshire farmer: a young yeoman's life and travels, 1835–37.*

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DUNLOP, LESLEY and GREENAWAY, DICK, *Around the three valleys: an exploration of the geology, landscape and history of the Lambourn, Kennet and Pang valleys in West Berkshire.*

EDWARDS, ELAINE M., *Scotland's Land Girls: breeches, bombers and backaches* (2010).

ELLIOT, PAUL A., WATKINS, CHARLES and DANIELS, STEPHEN, *The British arboretum: trees, science and culture in the nineteenth century.*

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GEORGE, KEN J., *Place-names in the historical parishes of Talland and St Martin by Looe.*

GERRISH, HELENA, *Edwardian country life: the story of H. Avray Tipping.*

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HOLT, JENNIFER S. (ed.), *The diary of Thomas Fenwick Esq. of Burrow Hall, Lancashire, and Nunriding, Northumberland, 1774–94,* I, *1774–84,* II, *1785–89* (List and Index Soc., Special Ser., 47, 48).

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RADAM, BRIAN, *Lawnmowers and grasscutters: a complete guide.*

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SOMERSET VERNACULAR BUILDINGS RESEARCH GROUP, *Somerset villages: traditional buildings in the parish of Stogursey* (2010).

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STOKES, PENELOPE, *Enborne & Wash Common: an illustrated history.*

SUTHERLAND, JON and CANWELL, DIANE, *Images of the past: farming industry.*

TAGGART, CAROLINE, *The book of English place names: how our towns and villages got their names.*

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TOWNLEY, SIMON (ed.), *The Victoria history of the counties of England. A history of the county of Oxfordshire, XVI, Henley on Thames and its environs: Binfield Hundred, pt 1.*

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WARD, STEVE, *Don't learn my sons no sums: a school and its village.*

WATSON, MERRYNE, *A farmer's boy.*

WHITE, GRAEME J., *The medieval English landscape, 1000–1540.*

WILLES, MARGARET, *The making of the English gardener.*

WILLIAMS, SAMANTHA, *Poverty, gender and the life-cycle under the English Poor Law, 1760–1834.*

WOODWARD, HEATHER, JAMES, DAVID and DEWAR, ARTHUR, *Wadhurst back in time: 1901–1936.*

WOOTTON, CHRISTINE, *Radley: farms and families, 1600–2011.*

YORKE, TREVOR, *The English village explained.*

Book Reviews

Britain and Ireland

JOHN ABERTH, *An environmental history of the Middle Ages. The crucible of nature* (Routledge, 2012). xvi + 326 pp., 25 illus. £24.99.

This book fills a notable gap in the literature. There are books surveying environmental history that include some discussion of the Middle Ages, but this is the first to be devoted entirely to the period. Aberth has written a number of books on the more sensational aspects of the Middle Ages, such as the Black Death and the apocalyptic disasters of the fourteenth century; he is also the author of *A knight at the movies*, which deals with the cinematic treatment of the period. The work reviewed here is a scholarly book, aimed mainly at students and general readers. The book is divided into three sections, one called 'Air, water, earth', surveying developments in medieval science, folklore, and climate over a thousand years, followed by an exploration of the 'Forest', and ending with a wide ranging consideration of the 'Beast'. He suggests that relationships between humans and the natural world in the medieval period changed significantly. In the early Middle Ages people feared the natural world and regarded it as an adversary. A greater confidence in the years 1000–1300 led to a more collaborative interaction between humans and their environment, but that broke down in the fourteenth century when nature seemed to punish man.

Aberth interweaves effectively a number of themes. He gives a helpful account of the intellectual background, and guides the reader through a brief history of medieval science, which spills over into theology and magic. He traces the development of agricultural technology, and reflects recent thinking about the rise of horses as draught animals and the severity of the cattle plague of 1319–22. Aberth is similarly up to date on woodland management, forest law and the organization of hunting. The control of water as a source of power, and for drainage and irrigation is discussed, alongside the measures to supply drinking water to towns. He gives a brief outline of climatic history from the medieval warm period to the Little Ice Ages. He refers to the Lincolnshire clergyman, William Merle, who kept a weather journal – the earliest known – in the early fourteenth century. Pollution and the measures to control it also feature. He is anxious to explore the cultural dimensions of the environment, from the escapist fantasy of the greenwood in the Robin Hood ballads to St Francis and his advocacy of harmony with the natural world.

The book provides a brisk survey of a very large subject and helps the reader who wishes to know more with voluminous footnotes and a long bibliography. Aberth develops some subjects in some detail, and guides the reader through the various contending interpretations. He pursues at length the environmental history of plague and particularly the Black Death, comparing modern theories with contemporary beliefs in the role of 'bad air', infectious animals, and poisoned water supplies. He has a very useful discussion of the arguments for and against the view that in the era of the *grands défrichements* (1100–1300) forest clearance made dramatic strides, concluding that the importance and scale of the movement has been overrated. In the later Middle Ages he is concerned to investigate the idea that woodland regenerated after the Black Death, and decides that this was probably not a major feature of the period. He is fascinated by the academic debates about the differences between humans and animals: was the possession of reason confined to humans? This had implications for popular culture, for at the end of the Middle Ages animals that had wounded, killed or eaten humans were tried and executed. Aberth doubts that this showed a belief in animals' reasoning powers, and aligns himself with those who see a link with the witch craze, in which social outcasts were charged with damaging their neighbours' crops and livestock. He shows the range of attitudes to animals, from the belief that their function was to be exploited by man, to the sentimental attachment to horses and dogs that were treated as pets. Occasionally he devotes a little too much space to more lurid aspects of the subject such as bestiality and poaching.

This book is based on an impressively thorough reading on a complex range of themes. Aberth has done a useful job in opening a new subject and showing its

interest and potential. In particular, by exploring the academic and scientific works alongside agrarian and landscape history, he indicates a potential for these hitherto separate areas of research to be more closely aligned.

CHRISTOPHER DYER
University of Leicester

GRAEME J. WHITE, *The medieval English landscape, 1000–1540* (Bloomsbury Academic, 2012). xvi + 277pp., 40 figs. £19.99.

Landscape is proving to be a particularly popular topic for academic research, and as such this new book by Graeme White joins a crowded field. Its structure is traditional – with chapters on farming and hunting, rural settlement, towns and trade, religion, and fortifications – and although some use is made of archaeological evidence, the book is written from an essentially historical perspective (the author is Emeritus Professor of Local History at the University of Chester). We are told, for example, that 'The approach taken here is to emphasize the surviving landscape as an historical source wherever possible', yet there is little real discussion of the concept of the 'historic landscape' or the sources and methods of historic landscape analysis which are now used so widely within both academic research and heritage management. There is not a single extract from an early Ordnance Survey map to show the reader what a remarkable record of the medieval landscape these are, and, while standing buildings are discussed, field- and place-names receive little attention. This is essentially a textbook – there are no new hypotheses to further our understanding of the past – which in itself is not a bad thing: there are numerous detailed, academic studies that have explored different aspects of the medieval landscape of England in recent years, and this more general overview will be a valuable guide for students and the general reader alike.

As a textbook, however, and in particular as a textbook on landscape, the quality and quantity of its illustrations is poor: some of the photographs are so dark that they are unintelligible, and there is not a single map or plan. The chapters on 'The landscape of farming and hunting' and 'The landscape of rural settlement' will be the main focus of the *Review's* readership, and they provide good overviews of some recent scholarly debates with regard to the origins and early development of villages and open fields, although the late medieval period is not discussed as fully as it should be (not least because this period was so crucial in forming the landscape of today): 'enclosure by agreement', for example, is briefly considered but the Black Death is only referred to three times in the entire book. It is refreshing to see brief discussions of topics such as industrial settlements and peasant houses, although, in a book with a stated aim of emphasizing 'the surviving landscape as an historical source wherever possible', it is curious that there is a not a single plan to show what any of these looked like. Overall, this is a useful textbook but which has not given enough thought to the needs of its likely readership in terms of comprehensive coverage or supporting illustrations.

STEPHEN RIPPON
University of Exeter

DAVID NOY (ed.), *Winslow Manor Court Books,* I, *1327–1377*; II, *1432–1460* (Buckinghamshire Record Soc., 35 and 36, 2011). xxix + 787pp, 2 illus. £50.

These two volumes from the Buckinghamshire Record Society are a valuable addition to the canon of published manorial court records. As court books, rather than the more common court rolls, they represent a different stage in the manorial administrative process and provide somewhat different, though no less valuable, information.

These volumes are part of the abbey of St Alban's court books, which are known but have been used relatively little by historians. This volume makes the source much more accessible to all types of historians. In addition to the excellent transcription and translation of the source, Dr Noy has provided a short glossary of Latin terms, which anyone consulting such records will find useful. He has also compiled four comprehensive indexes. The index of persons highlights one of the minor features of the volumes, the wide range and rather exotic nature of the female names in fourteenth- and fifteenth-century Winslow and its sub-manors, Granborough and Little Horwood. While the male names are standard for the time, the female names include more exotic ones such as Anabilias (or Amabilias), Athelina, Felice, Florence, Lovata and Scholastica. The index of places within the manor has been carefully cross-referenced and will be a great help to anyone using the volume. It is a pity that a map showing at least the principal places was not included in the volume, but perhaps the editor assumed that most people using this work would be familiar with the locality.

These court books are less detailed than the court rolls from which they were drawn and it is clear that there was careful editing of the original. However, since there are only a few extent rolls for this manor, historians should be very grateful that the books were compiled. Unsurprisingly, the books have retained details of land transactions as these would be of

most interest to the ecclesiastical landlords; there are frequent references though the volumes to the need to search past rolls for evidence to prove a tenant's (or the lord's) case. Such items are the majority of business for the whole of the nearly 80 years that are recorded in the books.

The inclusion of certain types of court business changes over time. In the first few years the names of bakers and brewers who broke the assize of bread and ale are given sometimes separately. In later years only the amounts of fines are recorded with no names given. The fourteenth-century volume also contains a number of fines paid for boys being 'put to study'; in one case, Geoffrey the son of Geoffrey Milcent was given a licence to go to clerical school, but on the condition that he did not take holy orders. Licences to marry were also commonly recorded for both men and women. What is missing from the first period of the books are disputes between neighbours, petty crime and debt cases. These are included, however, in the later volume; at the court on 2 June 1348 for Granborough nearly all the recorded items are either pleas of debt or trespass or withholding rent. The latter period also sees the regular inclusion of transcripts of wills in the books. Petty crime is seldom recorded for either period.

Reading through these volumes, one is struck afresh by the changes wrought by the visitation of plague in the mid-fourteenth century and not just the numbers of dead, although these are startling enough. On one manor where usually only one or two deaths were recorded per session of the court, the year from October 1348 to October 1349 saw the recording of over 150 deaths with a further 30 recorded in 1361. New types of entry appear regularly in the books after the plague's arrival. Fugitives from the manor are named, often the same names for many years; and often with their current whereabouts recorded. Tenants are ordered to repair waste on their holdings, and there are accusations of hunting without warrant or refusing to use the lord's mill, as well as cases concerning people taking on new holdings without permission. These are all issues that did not appear in earlier part of the book, and reflect the social and economic disorder that followed the devastation of the plague. The naming of fugitives from the manor continues until the end of the early book in 1377.

The introduction to the volumes contains information about the origins of the manor (including a full transcript of the 1279 Hundred Roll entry), a short essay on the organization of the manor and its free and villein tenants and a longer piece on the business of the court. These volumes will be seized upon by local historians, but will also be of considerable use to historians more widely.

MARILYN LIVINGSTONE
Carucate Research Partnership

SANDRA RABAN (trans. and ed.), *The accounts of Godfrey of Crowland, Abbot of Peterborough, 1299–1321* (Northamptonshire Record Soc., 45, 2011). xlix + 742 pp. 7 figs., 3 tabs., 1 map. £20. Available from the Chapter Clerk, 12 Minster Precincts, Peterborough, PE1 1XS.

The Northamptonshire Record Society enjoys the good fortune of support from the Anthony Mellows Memorial Trust for the publication of volumes of records from Peterborough Abbey. This has given us a series of high quality editions of documents from the monastery's archives, of which this bulky collection of manorial accounts is the second to be edited by Sandra Raban.

The abbot of Peterborough's estate in the early years of the fourteenth century consisted of 26 manors, which were mainly in the Soke of Peterborough or in Northamptonshire, with a few outliers stretched across Leicestershire, Lincolnshire, Nottinghamshire and Rutland. In common with other large estates, both ecclesiastical and lay, the abbot's administrators produced enrolled versions of the annual accounts for all of the manors. These fair copies are very legible, and were clearly objects of pride for their compilers, but unlike the original accounts for individual manors, they lack the informative notes by the auditors and subsequent alterations. This volume contains all of the enrolled documents for three accounting years, 1300–01, 1307–08 and 1309–10. In addition there are accounts for two manors that take us into the years of the Great Famine.

These important sources have been used by historians, notably by Edmund King to delineate the administrative structure of the Peterborough estate, with its cash income, sown acreage, crops and labour supply. His calculations of numbers of animals were much expanded in a book on pastoral husbandry by Kathy Biddick. Others have dipped into this rich resource for information about particular themes, for example in this reviewer's pursuit of references to gardening. Now that the records are readily available in English translation, we can expect that much more use will be made of them. Those interested in building history will find a mass of detailed descriptions of work on the fabric of the manors. Historians of technology can read much about the construction of mills and carts. There has been extensive investigation of landscape and settlements in Northamptonshire, and the accounts

contain relevant data about the use of land and the topography of villages. Useful references to rents and tolls reveal something about the market towns of Peterborough, Kettering and Oundle. The court revenues of manors are presented in sufficient detail to depict the main features of cases coming before the manorial courts, including marriage fines and entry fines. There are also brief accounts for the revenues from the private hundreds controlled by the abbey. The neglected subject of the seigneurial baking monopoly could be explored through the references to ovens, such as that of Great Easton which produced an annual 20s. The delight of these documents is their capacity to bring to light unexpected information, which would not be easily found elsewhere – who would suppose, for example, that a brief reference to plots of land at Tinwell would show that in 1307–8 the vills of both Tinwell and Ingthorpe had religious fraternities? The surprising inclusion of the lord's personal expenditure in the accounts of the private hundreds means that we know the cost of the abbot's boots.

We must be grateful for the skill and stamina of the editor in completing a volume of 700 pages, which is provided with an introduction, map, glossary and index. Translation of the many technical terms always poses problems, and Dr Raban has overcome them by consulting with specialists. This reviewer's only complaint is that the Latin word *bercaria*, shown in a lengthy publication in a well-known journal in 1995 to mean a sheepcote or sheephouse, is translated here as sheepfold and equated with *ovile*, that is an open pen made of hurdles. The account for Scotter for 1307–8 makes it plain that the *bercaria* was a substantial building with stone walls and a tiled roof, which cost almost £16.

CHRISTOPHER DYER
University of Leicester

MARK BAILEY and STEPHEN RIGBY (eds), *Town and countryside in the age of the Black Death: essays in honour of John Hatcher* (Brepols Publishers, 2012). xiv + 472 pp., 58 figs., 34 tabs., 3 maps. £110.

Recent years have been marked by the retirement of a number of senior scholars of medieval economic and social history, which, in turn, has resulted in the publication of some remarkable *Festschriften* celebrating their careers and scholarly contributions. These have included volumes for Munro (2007), Dyer (2010), Britnell (2011) and Hatcher (2012), the last of which is the subject of this review. As with the other volumes, Hatcher's *Festschrift*, edited by Mark Bailey and Stephen Rigby, is an admirable collection of scholarly contributions offered by colleagues and former PhD students of John Hatcher to various *status quaestionis* related to medieval economic and social history. The volume consists of 12 contributions occupying, collectively, 472 pages and divided into three sections.

Section I of the collection, entitled 'The medieval demographic system', offers three contributions, all related to the question of post-Black Death demography, a subject so dear to Hatcher. Ole Benedictow, following Hatcher's views on the post-Black death era, stresses the unhealthy environment of the late-medieval era, which was responsible for high mortality and depressed fertility levels. In addition, he reminds us of the importance of palaeo-pathological data, yet to be utilized by demographic historians. Richard Smith's article provides an excellent historiographic and theoretical framework for late medieval and early modern demographic trends, deriving from contemporary statistical sources (including Inquisitions Post Mortem, wills, manorial court rolls and monastic accounts). Smith pays a special attention to the troublesome fifteenth century, marked by several major episodes of mortality, and encourages others to pursue this fascinating topic much further. Maryanne Kowaleski's paper focuses on demographic and marital trends of late medieval maritime communities (mainly in the South West and East Anglia). This is an important contribution, highlighting distinctive patterns, marked by comparatively low age of first marriage (in contrast to rural and urban communities), yet with 'normally' small size of families (few children) due to socio-economic circumstances of the post-Black Death era.

Section II, entitled 'Landlords and peasants' (another scholarly topic much cherished by Hatcher) opens with Bruce Campbell's article on post-Black Death crop yields. Campbell takes a strictly exogenous (environmentalist) approach to the topic, showing the profound differences between the miserable climatic conditions of *c.*1348–75, the improved weather conditions of *c.*1376–95 (the 'Chaucerian anomaly', as he calls it), and the (mostly) depressed fifteenth and early sixteenth centuries. In his usual meticulous manner, Campbell backs up his vast database of crop yields by a series of proxy data (such as ice-cores and tree-rings). Campbell's article is followed by Martin Stephenson's study of seigneurial investment strategies in late medieval England. He finds the roots of capitalist investment and carefully planned strategies by landlords in the pre-Black Death era, a period of various ecological and economic calamities. Despite obvious hazards, the lords were ready to take a chance. This view contradicts the widespread notion of 'risk-averse feudal lords'. David Stone takes a macro-history approach, focusing on three Fenland manors

belonging to the bishop of Ely, during the days of the Black Death pandemic. He utilizes local manorial accounts to map the precise path of the pestilence across these manors and shows how its spread affected economic activities on a local level. Also, Stone reminds us about the caveats related to manorial accounts and encourages us to juxtapose statistical sources against narrative accounts. Along the same lines, Erin McGibbon-Smith offers a highly detailed analysis of social life in a single Cambridgeshire village (Sutton-in-the-Isle) throughout the fourteenth century. Utilizing local court rolls, whose chronological survival is quite remarkable, McGibbon-Smith focuses particularly on crime patterns in that parish. The author concludes her article with an optimistic statement that 'the prognosis for the future of court roll studies is good'. McGibbon-Smith's study is followed by Phillipp Schofield's article on the regional economy of Cornish estates of the Arundels in the fifteenth century (echoing the subject of Hatcher's PhD thesis and, consequently, of his first monograph [1970]). As Schofield shows, the degree of success or failure varied from manor to manor, depending on the presence/absence of diversified industries (such as cloth production and maritime fishing) and the willingness of local lords and officials to invest in local infrastructure. Finally, John Munro's article offers an altogether new perspective on the late medieval decline and disappearance of manorialism in England. According to Munro (and all evidence he presents throughout the article points to that direction), it was chiefly monetary and political factors (rising real wages and increasing royal interference in wool industry in the second half of the fourteenth century), rather than demographic ones that were responsible for disintegrating English demesne agriculture in the post-Black Death era. As such, it is a major contribution to the *status quaestionis* of late medieval manorialism and agriculture.

Part III, entitled 'Trade and industry' opens with James Davis's engaging essay on marketing food and drink after the Black Death. Using an unusually long series of manorial court rolls from Clare (Suffolk), Davis shows that the rising living standards in the post-Black Death period are reflected in increasing per capita food and drink consumption, widespread professionalization within the food producing industry, as well as a proliferation of food retail shops, pubs and inns. Davis's article is followed by John Lee's contribution on the role of fairs in late medieval England. Here, Lee surveys the fortunes of fairs for various commodities (wool, cloth, livestock, fish, housewares, spices) after the Black Death. Fairs, both large and small, had a remarkable capacity to respond swiftly to the shifting patterns of late medieval trade. In addition, fairs provided social and religious space for late medieval consumers. The final essay, written by Richard Britnell, deals with the late medieval coal industry, a vitally important, yet still understudied topic (and another field in which Hatcher has made a major contribution, in 1993). As Britnell shows, in the fourteenth and fifteenth centuries the bishops of Durham refrained from investing much capital in the development of their coastal coalmines, focusing instead on inland coal resources, leased to local tenants and entrepreneurs. Although an important form of enterprise, it was not until the 1540s that there was a real boom in the coal industry, deriving from a renewed economic prosperity and demographic growth.

Overall, this volume represents an important collection of substantive contributions to themes and debates in late medieval economic and social history. Each article is strongly innovative in its character, opening new and exciting avenues for research for years to come.

PHILIP SLAVIN
McGill University

CRAIG MULDREW, *Food, energy and the creation of industriousness. Work and material culture in agrarian England, 1550–1780* (Cambridge University Press, 2012). xvii + 355 pp., 68 tabs., 3 figs. £65.

Craig Muldrew's work is really two distinct books about the living standards of English agricultural labourers rolled into one. The first is a study of the standard of living of agricultural labourers in England between the sixteenth and late eighteenth centuries, based on the simple, but original, premise that if agricultural productivity increased as much as historians have suggested (not least in the *Review*), then agricultural labourers must have worked harder, necessitating a higher calorific intake than they are accorded in most of the recent literature. The second pursues labourers' living standards by an in-depth reconstruction of their diet and material comfort across the period, through similarly original research into household accounts and probate inventories. The first book sacrifices a sufficiently large number of sacred cows in the standard-of-living debate, notably the axiomatic link between nutrition and height that it is likely to be the target of numerous econometric papers and PhD theses for years to come. The second book tilts at smaller windmills, and provides a valuable, subtle and far-reaching reassessment of the working lives, household economies and fortunes of agrarian labourers, and begins to redress the historiographical neglect of this group and of the materiality of

labour *per se* since the seminal studies of Everett and Snell. These comments are not meant to detract from Muldrew's significant conclusions about the calorific intake of labourers, nor from his assertions that this was the basis for significant productivity increases from the mid-seventeenth century. Instead, they are made in the hope that the value of the second study is not obscured by the likely historiographical fuss about the first.

As suggested, the originality of Muldrew's approach to the standard of living debate is that he rejects interpretations based on anthropomorphic data and those that use a 'basket of consumables' to estimate the value of real wages. In particular, his cautions about generalizations based on Davies and Morton Eden's household budgets from the crisis years of the 1790s are particularly well made. Instead, he focuses on the calorific intake of agrarian workers, by an extensive, imaginative and fascinating reconstruction of typical diets, based on primary source evidence (such as household accounts), and heroic assessments of changes in total food production through the period, to get some sense of the available supply. While he acknowledges that these favour live-in servants on larger estates, and adult labourers rather than their families, he asserts that the average calorific intake was much higher than estimates by Fogel and others. Indeed, he argues that by the mid-eighteenth century adult male labourers were receiving an average of more than 4000 calories per diem, which was generally enough to fuel them through 8 or 10 hours' labour, although as many as 7500 calories might be needed for 10 hours' mowing in harvest. It will doubtless come as a great relief to many members of the BAHS to learn that much of this calorific intake (36 per cent among Robert Loder's servants) came from beer, and that this liquid source of energy has been significantly under-represented in existing specimen diets, perhaps because of labourers' reluctance to admit it to clerical enquirers into the state of the poor.

In this respect, Muldrew's study tends to align with Robert Allen's recent analysis of British industrialization, and its conclusion that the spurs to mechanization in Britain included the comparatively high price of labour, and the low price of coal. However, Muldrew is also careful to note that this optimism is bounded temporally between *c*.1650 and *c*.1780. He notes that in years of dearth in the late sixteenth and early seventeenth centuries, adult male labourers might have been in deficit in terms of their calorific intake balanced against work requirements. They may have come close to this fate again after 1790, too. Similarly, he finds that the material possessions of labourers stagnated in this period, suggesting that most income was devoted to immediate consumption needs. Muldrew is also wary of assuming that just because adult labourers fared better than expected, that this good fortune applied equally to their families. He points out that children in southern England may have been receiving insufficient amounts of milk through most of the period. Similarly, although adults' food was high in calories, the staples of bread and butter, bacon, cheese, sugar and beer, were not particularly nutritious, nor were they affordable in sufficient quantities when accident or illness interrupted wage-earning capacity.

Such estimates are based on a forensic reconstruction of what labourers ate, how they worked, how long they laboured each day, how household economies were formed around adult labour, and how the material furnishings of labouring households slowly became more durable and extensive. This analysis does much to answer questions that have been begged repeatedly since Everett's pioneering research in the 1960s, and in most other studies that purport to be about work – namely, how did labourers work, and how did they live? Since Muldrew is unconstrained by the desire to establish whether or not these labourers became more or less of a 'working class' by the end of his period, he is free to explore their lives, livelihoods and living conditions in unparalleled depth.

As a consequence, the qualitative sections of Chapters 2 to 5 are truly ground-breaking, because they provide a thoroughly researched, carefully assembled and tremendously perceptive account of labouring lives. Here, Muldrew sketches out the seasonal rhythms of rural work, the ways in which diets were patched together, subtle but measurable increases in material prosperity, and consideration of the contributions of by-employments, particularly female earnings and access to agrarian resources. This is a worthy extension of research initiated by Joan Thirsk, and truly national in scope.

This work is likely to receive as much attention as Muldrew's first book, *The economy of obligation*. As indicated, it will probably stir up rather more controversy than his earlier work, and come under fire from the cliometric machine-gunners. *The economy of obligation* forced us to re-think the meaning of credit, by demonstrating that it was an all-pervasive concept in seventeenth-century England, linking social validation to personal credit rating. This book is likely to have a similarly profound effect on how we think about work in early modern England, by requiring us to consider how work was done, about the effects on those who did it, and about the scale of their contribution to processes

we tend to summarize all too easily as the agrarian or industrial revolutions.

H. R. FRENCH
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CARL J. GRIFFIN, *The rural war. Captain Swing and the politics of protest* (Manchester University Press, 2012). xv + 360 pp., 9 illus. £70.

Our understandings of the Swing protests of 1830–31 have been significantly augmented and enriched in recent years and the interpretative framework established by Hobsbawm and Rudé's seminal *Captain Swing* in 1969 has been considerably challenged and revised, although perhaps still not completely eclipsed. Carl Griffin's *The rural war* is the latest and most voluminous contribution to an exhilarating wave of scholarship associated with the likes of Peter Jones, Katrina Navickas and Steve Poole and possibly also the most ambitious. Like others before him, while eager to challenge and escape the paradigm established by Hobsbawm and Rudé, Griffin explicitly and implicitly acknowledges *Captain Swing* as a benchmark. Indeed the declared ambition of *The rural war* is to supersede *Captain Swing* as the standard work on the disturbances.

As the author himself acknowledges however, in one respect at least, this ambition is unfulfilled. *The rural war* is a study of Swing in what Griffin describes as its 'heartlands', focusing on the southern counties of Kent, Sussex, Surrey and Hampshire, with some references to Berkshire and Dorset. Events in those counties of the South West, East Anglia, the Midlands and the North that were also witness to the disturbances are left aside. Indeed Griffin argues that any attempt at a fresh national study of Swing would inevitably founder on the movement's varied local contexts. This seems a curious contention in an account which examines Swing across an extensive geographic area itself, but leaving this aside *The rural war* is a very impressive study on its own terms and provides yet more fresh perspectives on the last great uncoordinated rising of the rural poor.

Griffin's interpretation is expounded in eleven chapters, themselves organized within the four constituent parts of *The rural war*. Focusing in turn on Swing's context, diffusion, politics and the responses to it, the author develops an interpretation which ultimately presents the protests, in terms of mobilization, as the result of the effective fusion of parish-level grievances and radical politics. This interpretation is not entirely new, but these themes are key to one of Griffin's most impressive achievements which is to reconstruct a mass of individual protest events in detail, particularly those in Swing's area of genesis, and to demonstrate how and by what mechanisms the disturbances ultimately spread beyond East Kent. Earlier significant outbreaks of machine-breaking, notably in parts of Norfolk and Suffolk in 1822 and specifically in mid-Suffolk in late 1829, where mobilizations far larger in scale than those in and around Elham in August 1830 were recorded, notably failed to acquire momentum beyond a relatively confined area. The role that pre-existing combinations and associations within rural communities, as well as newly emergent and sometimes fluid solidarities, played in propelling the protests is well documented by Griffin. Indeed, one of the most striking conclusions of *The rural war* is that without such groups and specifically key actors within them such as the Maidstone radicals Robert Price and John Adams, there would have been no Swing outside the Kentish Weald, in fact no Swing as we understand it.

Of course Swing was not just characterized by machine-breaking, albeit that Griffin demonstrates that instances of such were even more numerous than earlier accounts have allowed. Supported by an impressive command of the extant south-eastern newspaper archive the author is able to highlight the direct link that existed in some locales between covert incendiarism and overt collective protest. The potential complexity of the connections between arson and machine-breaking is not understated, nor local or temporal variations in the tactics of protesters, but Griffin succeeds in reaffirming that, in parts of East Kent and Hampshire in particular, arson was often integral rather than marginal to the movement.

Griffin's treatment of incendiarism builds on his earlier published article on this topic. Previously published material on the aftermath of the protests is also incorporated into *The Rural War*, but much else is new and, in the context of Swing, innovative. Perhaps one of the book's most important contributions is to re-examine the involvement of women in Swing and to highlight the gender politics of the movement. Certainly Griffin demonstrates that women sometimes had a greater involvement or influence than is traditionally understood. More significantly, ideas akin to those pioneered by Anna Clark are very effectively applied within the context of Swing to argue that the movement was strongly informed by the imperiled masculinity of male farm labourers increasingly beholden to the parish vestry and struggling to maintain position and status as family breadwinners. Nonetheless, other arguments within *The rural war*'s treatment of gender politics appear more speculative and less substantiated. The contention that protesters viewed threshing machines as 'proxies

for female bodies' and that machine-breaking could represent a transference of sexual violence seems based largely on a single example of gendered language used toward a machine and a number of broadly concurrent, but unrelated cases of sexual violence against women in the locale in question. Interesting and provocative ideas perhaps, but ones which require slightly more reflection, not least in terms of whether the evidence deployed is sufficient to corroborate the claims made.

Criticisms aside, and although genuinely few they might also encompass proof-reading, *The rural war* is an important and at times original contribution to the resurgent historiography of Swing and deserves to be widely read. Griffin's meticulous research brings us closer than ever to the conditions, relationships and events that underpinned the movement in those parishes of south-eastern England in which it began.

HARVEY OSBORNE
University Campus Suffolk

DOROTHY HARTLEY, *Lost World. England, 1933–1936* (Prospect Books, 2012). 272 pp., 40 illus. £15.

Between 1933 and 1936 the now-defunct national broadsheet *The Daily Sketch* published 150 short articles by Dorothy Hartley under the heading 'In England now'. Over 60 of these have now been reproduced in this volume, together with a number of Hartley's own photographs. They have been selected and introduced by the journalist and photographer Adrian Bailey, who knew Dorothy from the late 1960s until her death in 1985. The book was accompanied by a TV documentary 'The lost world of Dorothy Hartley', which was made by the independent media company Available Light for BBC4 and first screened in November 2012. It was presented by the indomitable Lucy Worsley, who also provides a short foreword to the book.

Dorothy Hartley was born in 1893 and at the age of 10 moved to Nottinghamshire, where her father became rector of the village of Remstone. Later in life she moved back to her mother's ancestral home in Fron, north Wales. Trained at Nottingham Art School, she earned her living as a teacher of art and it was in her spare time that she developed the writing skills for which she is best remembered. A singular figure, she never married, revelled in frugal and sometimes chaotic living, and cultivated a lifelong interest in food, travel, rural living and customs. She toured Britain between 1932 and 1936 by bicycle and car, writing her observations for the *Daily Sketch*, and gathering material that made up several book length publications including *Here's England* (1934), *The countryman's England* (1935) and *Made in England* (1939). She is perhaps best known today for the 1954 book, *Food in England*, which has remained in print ever since and has been cited as an influence by many modern-day celebrity cooks and food writers.

The content of the *Daily Sketch* articles reproduced here very much reflects her passion for regional foods, country recipes, disappearing crafts and rural lifestyles. There are eulogies to mutton, cheeses, bread, watercress, mushrooms, butter, berries, laver (sea weed), haver (oat cake), apples, cherries, clotted cream, shrimps, eels, winkles, wedding cakes, cider and tea, amongst others things. They are often described in a poetic and whimsical manner. Cheshire cheese is 'large and red, like a harvest moon or carrots' (p. 41); Stilton is 'ancestral' and 'belongs to family portraits and gout' (p. 44); mushrooms are 'Nice, white, exciting things' (p. 107); bilberry patches consist of 'foamy long serpents riding against the land!' (p. 120); a toffee apple 'will wink its shining, varnished eye at me and waggle its little stick to diddle me – till I'll be bound to eat it in self-defence!' (p. 166). Her encounters with the landscape and with the workers and inhabitants of the countryside are similarly prosaic. She describes the tent-peg makers of Buckinghamshire beech woods as 'some of the jolliest workers in England' (p. 51) and encourages readers to seek out the coastal marram-grass workers to 'see if you can persuade some friendly old eyes to twinkle and laugh, and some skilful old hands to twist you a hollow-bodied bird, with a waving grass tail' (p. 97).

But, as this last quote shows, whilst the tone is often overtly nostalgic and wistful, Hartley's writing does also recognize the skill and complexity that underpinned rural labour, the regional differences, the hard work and the pride attached to work. There are detailed descriptions of how a field is 'spaced out' for ploughing (p. 263), of the science of sheep grazing, of the detailed and careful work that made up the turnip and potato clamp, of the technical processes involved in the successful cultivation of a hay field. Moreover although Hartley's writings are steeped in old traditions, she is also very aware of the changes taking place in rural life in the 1930s. She notes the disconnection that farm women now had from the work of the land, and although she recognizes that life for 'womankind' was easier and more pleasurable in many ways, she underlines the value of farmers' wives having an interest and understanding in the family business. She outlines a new intolerance towards minority groups such as gypsies, and the inroads that farm machinery was making in the 1930s. The juxtaposition of the old and new is most clearly made in a sketch of a Kentish charcoal burner who lived in a traditional hut dwelling but drives a car, and sits in his hut of a night listening

to the wireless. 'There now, do you see why I keep puzzling', she asks 'whether this is the 12th century or the 20th century in England now' (p. 281).

Hartley's sketches of rural Britain were written in an era when interest in documenting the nation and its people was burgeoning. It took various forms: travel writing, documentary film, social and political commentary. Whilst Hartley avoids any engagement with the social and economic problems facing the countryside in the 1930s, and is certainly not attempting to replicate the work of contemporaries such as A. G. Street, J. B. Priestley and George Orwell, her writing is part of a tradition that attempted to record a world that was irrevocably changing. Some of her themes come across as a bit esoteric today, but many sections – the variety of English cheeses, regional foodstuffs, the value of country markets, and traditional recipes – resonate still and will find favour with a new audience with the publication of this attractive volume.

NICOLA VERDON
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ALEC DOUET, *Breaking New Ground. Agriculture in Norfolk, 1914–72* (Coldbath Books, 2012). viii + 280pp., 25 illus. £25 + £2 p & p. from Coldbath Books, 1 White Hart Street, Aylsham, NR11 6HG.

Alec Douet's account explores the transformation of Norfolk farming from the onset of the 'Great War' up to the eve of Britain's entry into the EEC in 1973. Norfolk was widely regarded as one of the foremost farming counties in England, not only during the agricultural transformation of the late eighteenth and early nineteenth centuries, but was also influential in the agricultural revolution which took place in the second half of the twentieth century. The text is based on a variety of secondary and primary sources complemented by more than fifty interviews with the county's leading agriculturalists.

Divided into three distinct sections dealing with the First World War and the inter-war depression, the impact of the Second World War up to 1947, and the post-war period up to 1972, it provides an informative critique of the changes which have taken place during this crucially important period.

The first section provides an informative insight into how the innate conservatism of farmers was one of the main reasons for the slow pace of change prior to the onset of the Second World War. Of particular merit is its perceptive evaluation of the vitally important role which sugar beet played in transforming Norfolk farming, the continued reliance on horses, as well as exploring why cow keeping as opposed to arable farming was so despised.

In contrast, the impact of the Second World War and its immediate aftermath receives less attention. A more detailed comparative analysis at this point would have revealed that Norfolk was not, as implied, at the forefront of the wartime ploughing-up campaign. The most evaluative section deals with the post-war period, when good use is made of the interviews with the county's leading agriculturalists, although the section relating to Bernard Matthews comes across as something of a eulogy.

In general, it provides a valuable and pertinent study into the stages and mechanisms that were responsible for the transformation from horse power and labour-intensive farming to capital-intensive scientific farming. It is at its best when analysing the local variations which exist within the county, and its evaluation of the mechanisms which ensured that, what was once a undercapitalized debt-ridden agricultural industry, became a business activity, focusing for the most part on a low-cost, medium-output system of production.

The account is not fully in accordance with the title of the book, which suggests that it is providing a new perspective on the agricultural transformation of Norfolk. Another reservation is its rather limited contextual analysis, in particular the way this local study fits with the transformation of agriculture that was taking place both nationally and in other regions of Britain. It also has the tendency to skirt around many of the key debates, with frequent references to quotations from various mixed sources. From an academic point of view, the main weakness is the lack of endnotes or footnotes to reference the sources cited in the text. This can be rather infuriating as some authors have multiple books and articles against their names in the bibliography, and it is not always clear to which particular source Douet is referring.

Some of the comments on the work output of particular machines are not only very optimistic but, in some instances, far-fetched, for example, his claim on p. 133 that the Massey Harris drill was capable of planting eight acres an hour. His claim on p. 224 that the four-wheel-drive Roadless 115 tractor could plough 22 acres per hour is a gross exaggeration. The contents page merits revision, not only in terms of the spelling mistake in the title of one of the chapters, but also because the titles of chapters 11 and 12 are not in accordance with those denoted here. The criticisms are relatively minor, and do not tarnish significantly the value of the text.

Taking into account that it was not written primarily written for an academic audience, it will be of considerable interest, relevance and value to those who have an interest in this region. The book contains a pertinent,

well-selected collection of photographs to illustrate the main developments. It contributes to enhancing our understanding of the more recent development of a county, which historically had played a key role in pioneering the agricultural revolution of the eighteenth and nineteenth centuries.

JOHN MARTIN
De Montfort University

MARGARET DERRY, *Art and science in breeding. Creating better chickens* (University of Toronto Press, 2012). viii + 281pp., 16 illus., 1 tab. $65

The focus of *Art and science in breeding* is North American chicken production over the period *c.*1850–1960. The chicken in this case provides a case study for the application of science within agriculture, and the book might be situated as easily within the history of science and technology as within the history of agriculture. In this way it is aligned with emerging histories of twentieth-century agriculture, such as Abigail Woods's *Rethinking the history of modern agriculture: pig production in mid-20th century Britain* (2012) on the application of innovation within pig farming in the UK. Such an approach is innovative, but it is clear, as more histories of twentieth-century agricultural practice begin to emerge, that it will become more and more essential in order to fully understand topics peculiar to the period, like intensification. Within British agricultural history, there has been little written on the specific subject of modern poultry production, bar Brian Short's essay 'The art and craft of chicken cramming' (1982), which outlined the rise and fall of the 'cramming' business on the Sussex Weald, 1850–1950, and Joanna Bourke's essay 'Women and poultry in Ireland, 1891–1914' (1987). In part, this may be due to the decline in poultry production, identified by Joan Thirsk in her *Alternative agriculture*, but specialization in the industry certainly began to take off from the inter-war period, as Andrew Godley and Bridget Williams have shown with reference to poultry meat production in their 'Democratizing luxury and the contentious "invention of the technological chicken" in Britain' (2009). And, though there were initially marked regional differences and, as Michael Winstanley has suggested, much less vertical integration in the UK compared to North America, this was nonetheless an industry which shared much in terms of innovation across international borders, and as such Derry's book makes a significant contribution to the field.

In the Introduction Derry establishes that her approach draws on the scientific literature around selection and breeding, and that the book focuses on the development of agricultural genetics. To gain a better understanding of the application of the science, or indeed breeders' own developments, Derry also sought out practitioners and found that in many instances the only way to confirm her findings, especially for the period after 1940, was through interviews because there was little documentation available. This in and of itself is worthy of note for historians seeking to undertake work in the post-war period.

The book is then structured thematically. The first chapter establishes the historical background to chicken breeding in North America, from domestication to the mid-nineteenth century. Much of the account here focuses on Britain, in the European context, to set the scene. Here Derry also establishes the field of chicken breeding within the wider context of livestock production, something which she has published on before and knows well, and tackles the establishment of societies and the organization of breeding between 1700 and 1900. The chapter is well illustrated, as are they all, and the captions help illuminate the topic. After this, the remaining chapters focus largely on North America, and address the development of fancy breeds, the growth of agricultural genetics, breeding for eggs, the perception of breeding, the rise of the broiler industry, and finishes with an epilogue on post-1950 trends. Throughout she is interested in the tension that emerged between breeding as 'science' and breeding as 'craft'.

Throughout the modern period there appears to have been a tension, Derry argues, between the supposed aim of improvers to engage in scientific practice, and the tendency of producers to resist scientific innovation, or at least to continue to act on the basis of their own experience without reference to the scientific literature. Derry observes that the literature of the period 1900–50 is frequently opaque as to the precise relationship between science and agriculture at the time. It has therefore frequently been thought that practical breeders worldwide found the studies of academic geneticists of little or no use. By focusing on chicken breeding Derry, however, has been able to throw much greater light on the complexities of the interrelationship between the scientific literature and the livestock industry. She argues that the work of breeders in Europe during the nineteenth century, for example the establishment of breeding standards amongst fancy exhibitors in Britain, established the pattern for the structural relationship between scientific and 'craft' breeding in the later period. Despite the rhetoric and shift in interest to utility over appearance, breeding strategies also stayed the same, and chicken breeders today still use nineteenth-century craft

breeding methods. Much of their activity has simply been rebadged as scientific or as genetics. Yet, there were also changes among these continuities, and also marked differences in outlook driven by emerging and changing commercial interests, and the redefinition of traditional practices hides the actual contributions made by genetics, for example through modern data handling and analysis. Derry charts these extraordinarily obscure and muddy waters with great clarity and thereby makes an important contribution to both the field of agricultural history and to the history of science.

KAREN SAYER
Leeds Trinity University College

Europe and elsewhere

FULGENCE DELLEAUX, *Les censiers et les mutations des campagnes du Hainaut français: la formation originale d'une structure socio-économique (fin XVIIe–début XIXe siècle)* (Presses Universitaires de Namur, Namur, 2012). 230pp., 9 illus., 25 tabs. €21.

In his masterly thesis, *Les Paysans du Nord pendant la Révolution française* (1924), Georges Lefevbvre depicted agrarian conditions throughout the Nord *département*, whilst also drawing a distinction between intensive cultivation around Lille, very productive rotations in other parts of Flanders, cereal production across the southern plateaux where triennial rotations were supreme, and the hilly territory of the Avesnois whose livestock rearing complemented cereals. Since then, various studies of these component areas have appeared, the latest of which is a revised version of the doctoral thesis by Fulgence Delleaux, who teaches modern history at the University of Namur. The spatial framework for this work is 'French Hainaut' that covers the eastern section of the Nord and extends from the valleys of the Scarpe and the Scheldt, through wooded areas to the valley of the Sambre, and eastwards into the hills of Avesnois. In functional terms, French Hainaut largely corresponds with the hinterland of the city of Valenciennes. The 'long eighteenth century' saw the area being wrecked by invasion and warfare, associated with the War of the League of Augsburg (1688–97) and the War of the Spanish Succession (1702–13). In the wake of this repeated devastation, the population of the Hainaut recovered rapidly and more than doubled from the beginning to the end of the eighteenth century. Metal working, textile production and other industries flourished, and coal mining added a new element to the local economy. Many smallholdings were created by this growing industrial workforce. The agricultural economy was also transformed, with many large properties (*censes*) being assembled from the ruins of earlier agrarian structures. These large units were managed by tenants (*censiers*), were equipped with impressive farmhouses and associated buildings, and produced large quantities of cereals for local towns and for more distant markets that were accessible by water transport along the three north-flowing rivers. In addition, livestock was of importance on censes in the hills of Avesnois.

Rather than relying on official reports, Delleaux draws on detailed account books, farm records and legal documents to trace the transition of French Hainaut from wartime disruption to economic success during the greater part of the eighteenth century. Early chapters focus on material and fiscal ruin in the wake of retreating armies, and on the subsequent restructuring of land holding. Many *censiers* expressed great interest in advances in agronomy to enhance their cereal yields, introducing fodder crops into traditional triennial rotations, adopting intensive 'Flemish' methods in immediate proximity to centres of consumption, and improving livestock rearing in Avesnois. Paradoxically, local learned societies expressed little interest in promoting agricultural improvement, unlike the *censiers* who took every opportunity to raise yields, increase production, and enhance profits. Later sections reveal that toward the end of the eighteenth century, their lifestyle improved greatly, their children were well educated, and daughters of *censier* families were considered appropriate marriage partners for the sons of bourgeois households in Valenciennes and other towns of the French Hainaut. By the eve of the Revolution, the *censiers* were recognized as members of an agricultural elite whose economic success ran in parallel with social advancement. Fulgence Delleaux concludes this valuable case study with a selection of transcripts from farm accounts, statistical digests showing increased cereal yields, and a summary of archival sources consulted in Lille, Valenciennes, Paris and elsewhere. An array of black and white photographs of large farm buildings complements the beautiful picture of the Cense d'Hurtebize at Trith, taken from the Album de Croÿ, that is shown on the front cover.

HUGH CLOUT
University College London

JULIE MARFANY, *Land, proto-industry and population in Catalonia, c.1680–1829. An alternative transition to capitalism?* (Ashgate Publishing, 2012). xv + 208 pp., 13 figs., 26 tabs. £65.

Catalonia was one of the few regions of Europe's periphery which experienced industrialization and transformation on a scale similar to the 'core' regions

during the years covered by this excellent book. Marfany uses a wide variety of archival material (especially inventories post-mortem and church registers) to examine the household economies of the inhabitants of Igualada, a town which was not only at the centre of an important wine producing region, but Catalonia's largest woollen cloth manufacturing centre by the 1760s, and the second for spinning and fourth for weaving cotton in 1820. Population increased from 1630 inhabitants in 1717, to 4925 in 1787, and 7731 by 1830. Only one chapter is concerned specifically with agriculture and, following Pierre Vilar, the author argues that important changes occurred through the extension, intensification and specialization of cultivation. The majority of farms were too small to provide families with a living, and a rural proletariat of 'considerable size' had appeared by the late eighteenth century. There was therefore a ready source of labour for proto-industry, first in the woollen and later in the cotton industries. Most households participated in two or three different activities, and very few tenants had more than one plot of vines, suggesting that it was not so much insufficient land that encouraged households to turn to part-time work in proto-industry, but rather the nature of viticulture, an occupation which carried significant risks given the highly volatile nature of harvests.

The author argues that the family unit was central to these 'great transformations'. In Catalonia the use of impartible inheritance and extended families has traditionally been considered as one of the region's strengths relative to other areas of Spain. Inheritance allowed property to be passed down undivided through generations, encouraging younger sons to take their portions and seek their fortunes elsewhere. In Igualada, by contrast, growing local employment opportunities appear to have limited migration, and allowed virtually all to marry, and at a very young age, although households worked increasingly long hours. However, unlike the model of industrious behaviour described by de Vries for north-western Europe, production failed to become more specialized and, with the exception of the elite, the local population did not increase or change substantially their consumption habits. As Allen and Weisdorf have argued for British farm workers at this time, longer work hours in Igualada appear to have been necessary for survival, rather than to increase consumer opportunities.

As with most centres of proto-industry, an important quantity of production was destined to be sold outside of the region, rather than locally. However the results here raise an important question because, if consumption habits were slow to change in a dynamic centre such as Igualada, were Spain's colonial and urban elites sufficiently large to have absorbed the rapidly growing textile production?

Looking outside the immediate region of Igualada might have helped to reinforce or challenge some of the conclusions presented here. In the first instance Barcelona, which was just 60 kilometres from the town, is hardly mentioned although it must have had an important influence both directly and indirectly on living standards. The use of long-run price changes for crops such as wine or wheat, as well as real wages, would also have helped to understand better some of the shifts in living standards and income distribution. That said this is a thought-provoking book that expertly merges archival skills with knowledge of the debates on the early stages of industrialization. The book is also beautifully produced, and short enough not to deter the non-specialist reader. Author and publisher are to be congratulated.

JAMES SIMPSON
Universidad Carlos III de Madrid

MARKUS CERMAN, *Villagers and lords in Eastern Europe, 1300–1800* (Palgrave Macmillan: Basingstoke, 2012). xvii + 155. 18 tabs, 1 map. £16.50.

The historiography of lord-peasant relations in east-central Europe has been transformed over the past 30 years to reveal societies much more dynamic, complex, and contested than hitherto expected. This has partly been because of the emergence of new approaches, notably that of the Potsdam group in Germany, and many more micro-historical studies of communities and regions, a development that also embraces Denmark and especially southern Sweden. It also reflects the wider availability and better sharing of information and ideas since the region's post-1989 political transformation. Historians of western Europe have not always kept up with these developments, frequently relying, insofar as they seriously consider eastern Europe at all, on a very small amount of Anglo- or Francophone (although not necessarily written by British or French historians) literature that was integrated into wider models of European development in the 1970s as part of a model of the 'second serfdom'. The idea of the 'second serfdom' itself dates back to late nineteenth-century German historiography and the institutional preoccupations of the time, but has been falling out of favour among German historians for some time.

Markus Cerman's slim book squarely takes on the idea of a second serfdom. Indeed, he also takes on the notion of 'serf' as a broadly useful category of analysis, pointing out that the real burdens and limitations associated with that status, if it was applied at all, often retained more freedom for manoeuvre

than traditionally acknowledged. Cerman argues that different versions of 'subjecthood' were far more common, and serfdom should be held distinct from this, narrowing the definition of the latter down to a degree that would, indeed, exclude a large number of any of the people, in east to west, to whom it has ever been applied. Indeed, what Cerman also demonstrates clearly that that contemporary definitions of status, in a variety of languages, were rather fluid and of uncertain legal standing themselves. Thus he writes, 'Under no circumstances and for no territory, therefore, can we speak of the whole of the early modern period as an age of a second serfdom'.

As a more realistic alternative to serfdom, Cerman offers a model of 'demesne lordship' a translation of the more usual German term for East Elbian society, *Gutsherrschaft*. This denoted a variably restricted status, linked to the tenure of often substantial farms clustered around the demesne that provided either labour or cash rents to the lordly estate. Cerman also points out the widespread existence of rather secure property rights. This link to tenure, whilst certainly significant in many cases, can also be confusing, because many peasants were in fact subject to the lord's court by dint of residency, not tenure. A crucial aspect of the rise of central states, and associated room for peasants' action, was the emergence of more centralized legal systems that were to some degree autonomous of the power of local lords. The fact that in many parts of eastern (and not just eastern) Europe nearly all jurisdictional power, as well as landlordship, might remain almost entirely vested in one person and sometimes a single curia seems rather significant to this reviewer (unlike the situation in England for example where one might be subject as a tenant to the manorial court of a Crown manor but could use the royal courts for other cases). Thus it is a shame that only one page is devoted to 'courts and the legal system'; and one sentence to the fact that in post-1518 Poland, for example, villagers on noble estates could not appeal to royal courts. Demesne lordship was frequently not limited to tenurial concerns, although with regional variation, and this aspect of what it was like to live under it perhaps deserves more space.

Cerman's primary interest is in the direct economic consequences of lord-peasant relations, and thus the second part of the book is devoted to the rise and characteristics of the demesne economy and demesne lordship. The stress here is on regional variety and the lack of a characteristic 'east Elbian' trajectory. Cerman examines, and succinctly skewers, a range of explanations that have been provided for the expansion of demesne farming and labour rents in parts of the east: whether allegedly as a result of export-driven commercialization, the aftermath of the Thirty Years War, or the alleged weakness of the central state. If anything, his arguments point to continuities from late medieval developments. The book then offers a short but wide-ranging survey of data on farming, yields, incomes, and social structure. While brief this demonstrates clearly the complex mosaic of experience in east Elbia, and provides a rich source for further investigation – albeit at risk of being one thing after another.

Cerman's final hypothesis is that historians' default position in assessing the rural economy of Europe should be to assume similarity, then teasing out local or regional variation from micro-studies, rather than launching into research using *a priori* categories. He is rather more a Bacon than an Aristotle. A problem is that this eminently reasonable argument is hemmed in by the structure of the book. It is entirely about East Elbian Europe, and offers very little comparison with anywhere else (even West Elbian Germany). Given that, it cannot develop very far new analytical categories by which to transcend the old; and when all is said and done, the book can explain little about the fact, clearly set out in its own data, that large parts of eastern Europe developed demesne economies, using labour rents and degrees of un-freedom, quite unlike anything found in most of the post-medieval west. Equally, because the book is devoted to undoing the hypothesis of the second serfdom, its effectiveness as a guide to Eastern Europe peasant society is somewhat diluted. It sets out to be a refutation, not an introduction, and 'demesne' farming and lordship for example are used without explanation for many pages. Nevertheless the breadth of scholarship in a wide range of languages is hugely impressive, and the quality of argument to be commended. Cerman teases out convincingly the complexity of the relationships examined (such that, for example, in some circumstances it was the peasants who preferred and demanded labour rather than cash rents). This book remains a must-have for anyone interested in the rural economy of medieval and early modern Europe.

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University of East Anglia

SOKRATIS D. PETMEZAS, *Economic history of Greek agriculture in the 'long interwar period'* (Alexandria Publications, 2012). 390 pp., 86 tabs., 29 figs., 5 maps. €26 (available from Alexandria Publications, www.alexandria-publ.gr).

Since the early twentieth century, perhaps even earlier, a category of specialist intellectuals (agriculturists, economists, sociologists *et al.*) formed in Greece, who

systematically fostered and promoted the history of Greek economic thought, particularly during the inter-war period, laying special emphasis on the history and evolution of the agricultural sector and rural world. After all, the agricultural sector occupied the greatest part of productive activities and employed more than 60 per cent of the economically active population of the country almost until the beginning of the 1960s.

Socratis Petmezas' work can be placed among this remarkable tradition, which he continues and broadens with his books and various publications. His new book comprises a concise panorama, one could say, of the Greek rural economy from the early twentieth century to the 1970s and is, as always, scientifically interesting and bibliographically exhaustive. Petmezas admits from the very beginning that one of his intentions was to expand both thematically and chronologically the 20-year interwar period, which forms the main thematic axis of the book, in order to include changes and processes which preceded and followed it. His ulterior purpose was to offer a holistic view, a total narration and interpretation of the evolution of the Greek rural economy and society at least from the beginnings of the twentieth century to the first post-war decades.

Consequently, his treatise expands to various fields and levels (economic, demographic, social, and institutional). The guiding force in this extended periodization has been the use of available statistical data and the thorough processing of various quantitative data. The book consists of six parts, while the data included in the almost exhaustive charts and tens of figures are extremely informative and rich. Hence, one of the greatest virtues of the book is the quantification and visualization of narrative based on dozens of charts, maps and diagrams which demonstrate systematic research and the indexing of many sources. A significant part of these sources derives from the official data of the Greek statistical service, as well as from articles and studies published in several Greek agricultural or agronomical journals from the late nineteenth century to the 1960s. Much of this primary evidence, which has remained (and to a great extent still remains) unexploited, requires further elaboration and refining in order to become usable and to contribute to the extraction of safer conclusions.

Therefore, the factual evidence it offers is extremely rich and original and it is accompanied by equally apposite comments and interpretive implications. However, some of them are somewhat precocious and/or untenable, which is logical as well as predictable in such an extensive treatise both in terms of space and time. Moreover, such slips are due to the lack of organized records and, consequently, of relevant monographs. This is because the field of rural history has not yet formed into an autonomous scientific discipline in Greece, despite the predominantly agricultural character of the country, and the growth of agrarian studies since the 1960s.

In brief, one could say that the book is an interesting review of the history of rural economy from the era of economic liberalism and extroversion of the early twentieth century to the inter-war period, which is characterized by intense state interventionism and the preference for self-sufficiency, as in most European countries. From there the book turns to the structural changes of the first post-war decades which led to the change of the production model and the elimination of the agricultural character of rural areas. The basic viewpoint of the writer and the conclusion of the essay is that the Greek inter-war period, as regards the rural society and economy, is institutionally and historically integrated in the post-war years, while the interwar agrarian reform was a missed opportunity, despite individual changes and progress. As he mentions, only during the post-war period, specifically within the brief period of one generation (*c.*1955–85), did the Greek rural areas assimilate the experience of two agrarian revolutions and the passage to the modern, completely capitalist agriculture.

In short, the book undoubtedly possesses significant qualities. Having dealt with an extremely extended and critical period of Greek rural (and not only rural) history, in a unique way it highlights the attempt to modernize this sector during the inter-war period, as well as the attempts to remove impasses bequeathed to the post-war period by the inter-war period. Furthermore, an equally important contribution of the book is the fact that from its pages a Greece of toil and labour, capable of surviving wars, crises and catastrophes, arises.

DIMITRIS PANAGIOTOPOULOS
Agricultural University of Athens

MARCUS POPPLOW (ed.), *Landschaften agrarisch-ökonismischen Wissens. Strategien innovativer Ressourcenntuzung in Zeitschriften und Sozietäten des 18. Jahrhunderts* (Waxmann, Münster, 2010), 392 pp. €34.90.

This edited volume, 'Landscapes of agricultural knowledge: strategies of innovative resource use in journals and societies of the eighteenth century' takes up a theme fairly prominent of late in Germanophone scholarship, and the history of science: how does knowledge spread? Despite the importance of innovation and the 'knowledge economy' in current

studies of economic growth, for a number of years many historians of pre-twentieth-century economies and agriculture have focused on the collection of quantitative data regarding output, prices, tenure, and so forth. Change is identified by shifts in the data and then explained by arguing, sometimes in a rather circular fashion, that the constellation of prices and tenurial structures must have provided the right conditions for innovation to take place. This is important work, and often the best we can do: but frequently the means of achieving change are not considered.

Of course, it is hard to get at where ideas come from, and there is an equivalent danger in putting too much weight on texts read by a small minority of farmers whose real impact is hard to gauge. This collection attempts to approach the problem through the study of institutions set up to promote communication about agricultural innovation, the tools they used, who joined them, and what they promoted. In practice, one still remains distant from evidence of actual application even on the great estates of Europe, never mind more modest holdings. Of course, members of enlightened agricultural societies were only too aware of the limitations of their reach: 'to really put our suggestions into practice, does not stand within our power', as the 'Berner Society' commented in a preface to one of its publications in 1764. Editor Marcus Popplow sidesteps this conundrum by arguing the histories gathered here show an important set of contributions to the development and popularization of a long-term movement towards improvement and the 'scientification' of agriculture. As a causal argument this remains as vague as an inference from price series, but nevertheless it is an important area for study, and a very welcome contribution.

The book consists of 14 chapters, the weight of which are case studies in Germany and Switzerland, but supplemented by chapters on Scotland, Bohemia, Russia, and Sweden. These cases, and their commonalities, help us see developments in each region as part of a much broader European movement during the Enlightenment, especially from the 1750s, with extensive exchange of texts and journals across political and linguistic borders. Indeed, it is a shame there are no contributions on England and France, as historians of those countries erroneously have a tendency to view their own histories in isolation (even from Scotland).

The journals and societies of the 'economic enlightenment', it is argued here, represent a 'specific culture of innovation' that saw knowledge flowing from organized exchanges of best practice among the educated, who in turn would draw farmers into their aspirations for self-improvement (ideally with subsidy from government to facilitate publication, meetings, and experiment). It was a national duty to exploit resources to the maximum. This was not only a matter of best practice with plough, beast (combating animal disease was a particular concern), sylviculture or seed, but also a matter of information: facilitating early efforts at data collection. One such example is in meteorology as described by Cornelia Lüdecke, aiming to put weather science on a firmer empirical basis with the explicit aim of providing forecasts to farmers. Martin Stuber deals more directly with the varied literature and devices used to 'popularize' agronomic recommendations and encourage a culture of debate and experiment, without being able to directly measure reception. For the most part, the studies focus on the membership and interests of society members and contributors to journals: a relatively small circle of pastors, gentleman enthusiasts, and academics. They were, however, by no means marginal to political currents of the time, and in Germany included many of the leading figures in political and economic thought such as Wolff, Zincke, and Dithmar; translation and dissemination of foreign works was also widespread. Much of success in gaining an audience for later champions of innovation such as Albrecht Thaer, seen retrospectively and partly through his own efforts as father of a revolution in German agronomy, can only been seen in the light of the very thorough preparation of the soil in the eighteenth century. England's famous *Annals of Agriculture* appear too as a latecomer to this scene.

That said, rather like the institutions, this volume lacks a strong editorial hand throughout, and largely remains a series of isolated, if complementary case studies. The chapters are rather uneven in length and conception, some clearly produced early in a research career, while others are barely digested books. Yet there are rich pickings and this is a valuable contribution to pulling together the intellectual and agricultural history of eighteenth-century Europe.

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British Agricultural History Society Spring Conference 2012

by Irene Haycock

This year's Spring Conference was held at Sparsholt College in the Winchester countryside, from 2 to 4 April. It was held to be a great success, combining intellectual stimulation from the high quality of the papers with good food and pleasant surroundings.

The conference opened with the 60th anniversary prize essay winner, Dr Johann Custodis, who presented his paper entitled 'Employing the enemy: the contribution of German and Italian Prisoner Of War workers to British agriculture during and after the Second World War', which has subsequently appeared in the *Review*. The paper addressed the question of 'Were POWs a contribution to agricultural productivity and did they contribute to the economy?' Custodis provided revised upward estimates of POW involvement in British agriculture. He argued that rather than economic liability they have hitherto been considered, POWs are a forgotten economic asset and, in particular, that their post-war contribution grew stronger after Italian repatriation when the POW workforce became solely Germanic. The government sought to maximize use of POW labour to help fill the chronic rural labour shortage, arising from mobilization and its slow abandonment. Children, women, students, Irish workers, and 'deferred retirements' were also called upon. POWs provided a mobile substitute for civilian labour and were set to work in the construction sector, building infrastructure in housing, industry and roads, notably Wembley Way for the London Olympic Games in 1948, as well as on the land.

In the evening, following a welcome meal, a round-table discussion was devoted to the subject 'Representing agricultural history in the media', with TV personalities, Peter Ginn (presenter and archaeologist) and Ruth Goodman (presenter and historian), who were part-way through the filming of *Wartime Farm*. Members of the production team from Lion TV, Naomi Benson (director) and David Upshal (executive producer), were also contributors, able to draw from their experience in making the television series *Tales from the Green Valley*, *Victorian Farm*, and *Edwardian Farm*. The session was introduced and chaired by BAHS President, Professor Alun Howkins, an experienced TV hand.

The discussion addressed how to present 'real' history – as opposed to popular history and entertainment – which ultimately shapes the public perception of our discipline. The impressive viewing figures of 4.5 million people who enjoyed watching *Victorian Farm Christmas* in 2009, for example, reflect the recent interest in rural themes and factual programming. Peter Ginn explained how insightful understanding of the past came from both the archaeological record and the experiential record, as demonstrated by Ruth's role, in addition to written sources. Together the team strove for accuracy, which is the emphasis of their productions in looking at rural and social history. They employed reiterative learning for the period, and the layering-up of visual image, sound, the spoken word, and mood, but left the historiography to the academics.

On Tuesday morning James Bowen began the New Researchers session with 'The governance and management of common land in Shropshire from the sixteenth to the nineteenth centuries'. Bowen is investigating common waste as a type of common land, arguing that previous studies of common land and enclosure have largely focused on the open fields and common wastes of the lowland zone and large upland commons of the highland zone, at the expense of an appreciation of the full spectrum of commons. His paper concentrated on the impact of cottagers and encroachment in the manor of Prees, one of four case studies in Shropshire. Bowen highlighted the significance of manorial courts' regulation of the resources of common waste. Diverging interpretations have suggested that manorial regulation either favoured the rural poor, who claimed access on the basis of habitation or custom, or aimed to exclude those

without common right. He proposed a more holistic approach to synthesize these viewpoints. In Prees, manorial documents showed that, despite repeated orders preventing cottage construction and enclosure, such practices were in fact allowed. He concluded that manor courts remained an important form of local administration despite the rise of the parish, that the common wastes of Shropshire provided natural resources well beyond legal common right of pasture and that, where both the institution of manorial courts persisted and large areas of common land remained, there survived a parallel system of informal poor relief utilizing manorial resources.

Sarah Holland (Sheffield Hallam University) gave the second New Researchers paper on 'Contrasting rural communities – theories and places: the landscape of six villages in south Yorkshire in the mid nineteenth century'. Holland's doctoral research investigated the micro-histories of several Yorkshire parishes between 1840 and 1870 in the light of Dennis Mills's model of an open or closed paradigm of rural settlements, which he constructed on the basis of land ownership and predictions of their social and economic structure. Holland concluded from her sample of contrasting landscapes that it was evident that landownership did indeed influence rural settlement patterns, but only to a certain extent and not as the primary driver. She suggested that, in addition to landownership, the role of locational factors, topography, physical and natural determinants, and human agency should be considered in an open-minded approach to best broaden our understanding.

The last New Researcher's paper before coffee, 'Have we seen the historical demise of the farming community?', was presented by Jane Glover (Loughborough University). Glover has conducted a qualitative investigation into the erosion of the farming community by compiling interview data from oral narratives of change over time in the life histories of farming families. She examined the causes and effects of these changes through connections in wider social networks in the community, and in local and national organizations such as the YFC and NFU. She related elements of this change to the lower labour requirements in agriculture, a consequence of modernization and increased industrialization in the post-war period. Findings from her sample revealed that there was a greater sense of isolation amongst farmers than in previous years, resulting from reduced contact with fellow farmers and the wider community through structural change and cattle market closures. The changing composition of the rural population, the buying-up of small farms and the demise of the Milk Marketing Board all contributed to a sense of community dilution. As a result farmers were becoming more reliant on family and their network of friends rather than the community as a whole.

After coffee, the recent conference tradition of hearing a distinguished speaker from continental Europe was continued. Professor Leen van Molle from the University of Leuven, Belgium, gave an explorative working paper entitled 'Women take the stage. Mapping education for rural women in Belgium in the long nineteenth century'. Belgium was one of the first countries to introduce education for rural women before the First World War, as many daughters from farming families were part of a rural exodus. Up till then agricultural science and technology across both Europe and North America had been male-dominated. Van Molle discussed two models of knowledge production and diffusion as a two-track policy. One model provided a professional education for farming women, teaching agricultural science and technology focused on dairying. Both mobile and fixed dairy schools were set-up with travelling advisors, courses on pastoral husbandry, the provision of handbooks on the use of tools, and the rationalization of time-keeping and profit. The second model was of the betterment of rural life, again using mobile and fixed schools to teach agricultural home economics. Women's Institutes were mobilized for this purpose. Knowledge was promulgated through formal networks of lectures, and concomitantly through informal networks comprising both strong and weak ties of kin and friend, neighbours and acquaintances. Van Molle performed a quantitative analysis to map gendered knowledge at the village level through an analysis of farming association reports from 1912–13.

Our annual field trip, which was kindly organized by Gavin Bowie, took us to two contrasting farms in the local vicinity, Chilbolton Down Farm and Hill Farm at Barton Stacey. Perhaps we would we be spared a drenching this year? We were in the drought-stricken South after all. But spots of rain fell on us as we boarded the coach. The farm manager explained that Chilbolton (1800 acres) is a mixed farm enterprise, its varied husbandry offering greater financial security. They practise an unusual eight-year crop rotation, and boast a closed elite pedigree flock and a site of scientific interest sheltering rare plants and birds. Treated to a farm tour via tractor-trailer – and a brief shower of rain – the tour ended inside the walls of a cavernous four-bay grain store. The farm manager's parting words were that 'we could have brought some more rain!' Next stop was a delightful afternoon tea complete with home-produced hedgerow jam at the Boaz Project, Hill

Farm (500 aces). The Project caters for 48 members with special needs (12 per day), aged from 17 to 60. It focuses on sustainability and offers activities such as horticulture, market gardening, animal husbandry, and wood-working. The Project is inter-denominational and employs 3.5 people.

After an enjoyable conference dinner back at Sparsholt, Alun Howkins lead us in a round of singing.

The next morning John Hare (Winchester) presented: 'Seigniorial agriculture in the chalklands of medieval Wessex, c.1200 to c.1500'. Drawing upon evidence from pipe rolls and tithe returns, he compared developments in two manors in the Bishopric of Winchester and two from Winchester Cathedral Priory estate, which formed part of a broader examination of manors and villages in two contrasting landscape regions, the 'chalk and cheese' territory of Wiltshire and Hampshire. From around 1208–9, wheat featured strongly on all the estates, but the cropping of oats prevailed upon the poorer soils. Barley was important and became increasingly so in the late middle ages. Planned expansions were undertaken in sheep and barley production on new demesne lands in the Bishopric by 1283, but it was these estates that saw the greatest contraction in cultivation in the early fourteenth century. Agriculture in the Priory manors was considered to be at an earlier stage with smaller flocks. After the Black Death, rising prosperity fuelled a growing demand for meat, wool and cheese. Flock sizes were massive, and on the Priory estates there was a greater emphasis on pig-keeping. By 1400, leasing out of demesne lands was widespread, although cultivation by the landowners themselves continued later in the Bishopric. By the mid-fifteenth century, lords were leasing out both arable land and, notably, their demesne flocks. This lasted until *c.*1500 and, thereafter, direct management by lords ceased: the end of an era in this region.

The next speaker, Nicola Whyte (University of Exeter), presented an adapted version of a published paper.[1] In the conference paper, 'Tracing household memories in the early modern landscape', she discussed evidence gathered from oral testimonies of female deponents at Westminster equity courts to discover the extent of gendered knowledge of landscape, custom, and rights to local resources. Her results challenge previous views by finding that women were pivotal actors who mediated the terms of customs and right through the informal transmission of knowledge and household memories.

The closing paper of the conference was given by Susannah Wade Martins (Norfolk) on 'Ploughboys or clerks: The battle over rural education'. Supported by English Heritage, her research aimed to fill a gap in the study of rural schools. A volunteer labour force worked on this project and constructed an architectural gazetteer of Norfolk schools by taking both internal and external photographs of schools and consulting over 450 school records. This allowed the portrayal of the changing attitudes to education between 1800 and 1950 as depicted in the actual buildings. Was education for children to achieve their potential, or was it for them to know and be contented in their place in society? Farmers were critical that children were being educated for urban employment, and supported the view that they should be kept in the country districts. The opposing view did not recognize a rural labour shortage, and claimed that children should be educated for town work. Wade Martins traced the development in rural education provision from the Church of England founding societies in the early nineteenth century, the National Schools which aimed for social control, and Dame Schools or private schools which saw education to be for the formation of character. By the 1870s, the religious societies were unable to offer sufficient provision, resulting in the setting up of Board Schools. By 1902, small village school boards could not raise sufficient finance to provide an integrated system and were taken over by the County Councils. Reports were published village-by-village revealing low standards, cramped conditions, and differential in the schooling of boys and girls. By 1929 criticisms were made of the disadvantages suffered in the education of rural children.

Our thanks go to Nicola Verdon for organizing this year's conference.

[1] 'Custodians of memory: women and custom in rural England *c.*1550–1700', *Culture and Social Hist.* 2 (2011), pp. 153–73

THE

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Joan Thirsk 1922–2013

It is with great sadness that the Society announces the death of Dr Joan Thirsk on 3 October 2013 after a short illness.

Joan was unquestionably the leading agricultural and rural historian active in England in the second half of the twentieth century. In her own books, ranging from her study of early modern Lincolnshire, *English peasant farming* (1957) to her history of *Food in early modern England* (2007), she explored a whole range of aspects of English agrarian and rural history. Some aspect of her work covers every century of the last millennium. Nor were her interests limited to agrarian history. She made pioneering contributions to the history of the family in the 1960s. Joan was amongst the first to realize the significance of consumption in her Ford Lectures which appeared as *Economic policy and projects* in 1978. A later interest was the contribution that women had made to the historical profession. She also directed a great deal of her energy towards editing. She made substantial contributions to the *Agrarian History of England and Wales* as contributor, volume editor and latterly general editor. Joan served for eight years as editor of *Agricultural History Review* (1964–72).

Her career was almost entirely spent in two institutions: in the Department of English Local History at Leicester, 1951–65, and then as Reader in Economic History at Oxford and Professorial Fellow of St Hilda's, 1965–83 where she supervised many of the next generation of economic historians.

Joan's contribution to scholarship was recognised by the award of a CBE in 1994, election to the British Academy in 1974 and by a number of honorary degrees. She gave the Ford Lectures in the University of Oxford in 1975.

Joan was twice President of the British Agricultural History Society, in 1983–6 and 1995–8, itself an exceptional honour. With her death the Society loses its last connection with the circle of historians who came together to found the Society and launch the *Agrarian History* in the early 1950s and who may justly be called the founders of our discipline. Joan wrote about these days in the *Review* in volume 50 (2002).

Joan's generosity to fellow historians was considerable and renowned. Many will recall their contacts with her with pleasure.

She is survived by her husband, Jimmy, whom she met during wartime service at Bletchley Park. We offer our sympathy and condolences to him and to her family.

We understand that it was Joan's preference that there should be no funeral. We hope to announce at a later date the details of a commemoration of her life and work to be held in London on Saturday 11 January 2014. Those wishing to be informed about this should register their interest by sending an email to thirskmemorial@bahs.org.uk. The *Review* will publish a full obituary in a future issue.

Forthcoming conferences

The Society's Winter Conference

'Augmented agriculture: tools, fuel and traction in farming:
a conference in honour of Ted Collins'

will be held at Senate House, Malet St, London WC1E 7HU
on Saturday 7 December 2013.

Spring Conference

The Society's Spring Conference will be held at Denman College
near Abingdon on 7–9 April 2014.

Full details will be circulated with Rural History Today in January
and posted on the Society's website, www.bahs.org.uk.

Resource allocation and peasant decision making: Oakington, Cambridgeshire, 1360–99*

by Alexandra Sapoznik

Abstract

The later fourteenth century is often considered a period of rising standards of living, attributed in part to falling grain prices and diminished population pressure in the aftermath of the Black Death. Yet data from Oakington, Cambridgeshire, obtained from unusually complete tithe accounts, suggests that smallholding peasants in this region remained constrained by competing needs of production and consumption, even at the end of the fourteenth century. This article examines resource allocation and decision making on peasant land, and considers the effects of falling grain prices on standards of living in a region dependent on arable husbandry. By modelling a hypothetical peasant holding, this article argues that peasants at Oakington prized stability of yield, flexibility of crop use, and the calorific value of the land for people and, crucially, livestock. This allowed peasants to meet their consumption and contractual needs, but hindered their ability to respond quickly to changing economic circumstances.

The decades after the Black Death are often considered a turning point in the nature and organization of land use and agricultural production.[1] As the population continued to decline, the pressure placed on landed resources eased. In many places falling population levels led to increased access to land per person or household, and an increase in the amount of agricultural output available to peasants. Food production was put to less calorie-intensive purposes, with more land given over to growing grains for brewing to meet the rising demand for ale, and arable converted to grass to raise livestock for meat and dairy produce.[2] As labour became scarce, wages rose, increasing the amount of money to which people had access. The period after the Black Death, and in particular the years after the good harvest of 1375, which brought an end to high grain prices, are thus seen as a period of improving diets and standards of living.[3] This was the period Postan considered the beginning of 'a golden age of English

* I would like to thank Prof. John Hatcher, the anonymous referees and members of the Medieval Economic and Social History seminar at Oxford for comments made on this research. Any errors remaining are mine alone.

[1] B. M. S. Campbell, *English seigniorial agriculture, 1250–1450* (2000).

[2] B. M. S. Campbell and M. Overton, 'A new perspective on medieval and early modern agriculture: Six centuries of Norfolk farming, *c.*1350–*c.*1850', *Past and Present*, 141 (1993); R. Lennard, 'The alleged exhaustion of the soil in medieval England', *Economic J.*, 32 (1922), p. 26; B. M. S. Campbell *et al.*, 'The demesne-farming systems of post-Black Death England: A classification', *AgHR* 44 (1996), p. 132.

[3] J. Hatcher, 'England in the aftermath of the Black Death', *Past and Present* 144 (1994), pp. 21–4; D. Stone, *Decision-making in medieval agriculture* (2005), p. 143; D. Farmer, 'Prices and wages, 1350–1500', in E. Miller (ed.), *The agrarian history of England and Wales,* III, *1348–1500* (1991), pp. 483–90. B. M. S. Campbell,

peasantry'. Although some historians have argued that this is an exaggeration, the idea of an 'era of cheap and plentiful food' remains central to the assumed overall increase in standards of living at the end of the fourteenth century.[4]

Many years of research into the well-documented demesnes of medieval England have shown the sensitivity of landlords to the balance of prices and wages, and their ability to alter dramatically the intensity of demesne land use to fit the prevailing economic circumstances.[5] Recent research has suggested that peasant agriculture can be understood in similar terms, arguing that peasants also adjusted the level and type of production on their land in response to commercial opportunities in a similar manner to their lords, choosing which crops to produce and in what quantities based on potential sales prices.[6]

Dodds's important study of the Durham tithes has demonstrated that in some parishes peasants altered cropping patterns as well as total output in reaction to market indicators, demonstrating the flexibility of peasant agriculture in the later Middle Ages. Yet as Dodds acknowledges, these peasants were operating in a region in which relatively large holdings prevailed and where ample grassland and low population pressure meant that peasants there were not as constrained in their choices as the smallholding peasants further south.[7]

This article seeks to examine the resource allocation and decision-making processes of peasants who lived in a region where the population remained high even after the Black Death, where holdings remained small, and where access to grass was very limited. These peasants had to use the same small parcels of land to grow food for the family, fodder for livestock, and grain to sell in order to acquire the money needed to meet tenurial obligations of rent and maintenance. These competing resource needs were perhaps of particular significance for peasant producers who relied upon the consumption and sale of arable crops for their livelihoods, and for whom the falling grain prices of the late fourteenth century necessitated the sale of more produce to acquire the same amount of money than had hitherto been the case. The question of how, and indeed if, peasants were able to marshal the resources necessary to effect dynamic change under these circumstances has been left largely unanswered.

The records from the Crowland Abbey manor of Oakington, Cambridgeshire, provide a remarkable opportunity to gain insight into the resource allocation, cropping strategies and decision-making processes which informed peasant agriculture. Much is known of the manorial organization of Crowland Abbey, the cultivation of its demesnes, and its manor

Note 3 *continued*
'Matching supply to demand: crop production and disposal by English demesnes in the century of the Black Death', *JEcH* 57 (1997), pp. 385, 838; Campbell, *English seigniorial agriculture*, pp. 430–32.

[4] M. Postan, *The medieval economy and society: An economic history of Britain in the Middle Ages* (1972), p. 142; C. Dyer, 'Did the peasants really starve in medieval England?', in M. Carlin and J. T. Rosenthal (eds), *Food and eating in medieval Europe* (1998), p. 70.

[5] For example Campbell, 'Matching supply to demand'; id., *English seigniorial agriculture*; David Stone, 'Medieval farm management and technological mentalities: Hinderclay before the Black Death', *EcHR* 54 (2001), pp. 612–38; P. F. Brandon, 'Cereal yields on the Sussex estates of Battle Abbey during the later Middle Ages', *EcHR* 25 (1972), pp. 403–20.

[6] B. Dodds, 'Demesne and tithe: Peasant agriculture in the late middle ages', *AgHR*, 56 (2008), pp. 123–41; M. Bailey, *Medieval Suffolk: An economic and social history, 1200–1500* (2007), p. 78; Stone, *Decision-making*, p. 270.

[7] B. Dodds, *Peasants and production in the medieval North-East: The evidence from tithes, 1270–1536* (2007), pp. 45, 94, 160.

court at Oakington, but the records have not been explored fully in the context of peasant agriculture.[8] The most informative records are the series of reeves' accounts that survive from 1360 to 1399, which include an unusually complete series of tithe receipts, and a concurrent series of manor court rolls, which include information about peasant transactions in land and goods. Combined, these documents can be used to model the output of a peasant holding over time based on peasant cropping patterns and local price data, providing a glimpse into the agricultural strategies of the peasantry.

This article seeks to contribute to our current understanding of medieval peasant agriculture by examining a manor operating under entirely different conditions to those described by Dodds. It will demonstrate that the conditions under which peasants at Oakington were living led them to allocate their resources in ways which were well suited to household consumption and contractual needs, but which did not respond with flexibility to market indicators. Instead, it will be suggested that peasants at Oakington prized stability of yield, flexibility of crop use, and the calorific value of the land for both people and livestock. This article will argue that peasants at Oakington were constrained by competing resources needs, which remained acute even after the Black Death. In this, it agrees with Dodds's suggestion that peasants in highly arable, highly populated regions would have found the changing economic conditions of the later fourteenth century particularly challenging.[9] This article provides quantitative evidence to demonstrate the extent to which peasant producers were disadvantaged by falling grain prices. To this end, the arable output from a hypothetical peasant holding has been modelled, demonstrating the use to which tithe accounts can be put. Once this model has been constructed, discussion will turn to consideration of how and why peasants at Oakington allocated their arable resources in the ways they did. The analysis will question the extent to which peasants at Oakington experienced a significant improvement in standards of living after the Black Death.

I

Oakington was one of three Cambridgeshire manors of the Lincolnshire-based Crowland Abbey. These three manors were separated by little more than six miles, with Dry Drayton furthest to the west, the fenland Cottenham furthest to the east, and fen-edge Oakington almost equidistant from both.[10] Oakington's landscape is flat, with no woodland or navigable waterways. Importantly, the soils around Oakington do not support lush growth of native grasses, and this lack of adequate grass supply acted as an impediment to the development of a large pastoral sector.[11] The regional scarcity of grassland at Oakington meant that peas

[8] F. M. Page, *The estates of Crowland Abbey: A study in manorial organisation* (1934); S. Raban, *The estates of Thorney and Crowland: A study in medieval monastic land tenure* (1977); M. Wretts-Smith, 'Organization of farming at Croyland Abbey, 1257–1321', *J. of Economic and Business Hist.*, 4 (1932), pp. 168–92; C. Briggs, *Credit and the village society* (2009).

[9] Dodds, *Peasants*, p. 95, 160.

[10] Page, *Crowland*, foldout map.

[11] 'Oakington', *Victoria County History, Cambridgeshire,* IX, p. 192; H. E. Hallam, 'Eastern England' in H. E. Hallam (ed.), *The Agrarian History of England and Wales,* II, *1042–1350* (1988), p. 337; C. Hodge, 'Topographical Map of Cambridge, Sheet 188', and id., *Soils of the district around Cambridge* (1966), pp. 31, 53, 56, 71, 84–6.

were an especially important fodder crop in the medieval period, and this is highlighted by the prices for which the demesne sold unthreshed peas, pea straw and pea chaff.[12] Lack of grassland meant that peasants at Oakington remained predominantly reliant upon cereal husbandry throughout the later Middle Ages. The arable was divided into three 'partially regulated' open fields in which field rotations could be altered. The peasants often cultivated peas on the fallow.[13]

In the latter half of the fourteenth century, Crowland's manor at Oakington was conservatively administered. The demesne was still cultivated directly and labour services were still owed from Crowland's largely unfree peasantry.[14] Yet Oakington also lay four miles from Cambridge, a leading market for brewing grains, and a potential market for wage labour. The extent to which this proximity to Cambridge affected peasant agriculture will be addressed below.

In order to determine how and why peasants used their land in the way they did, it is necessary first to consider the agricultural resources to which they had access. To do this, the output from a hypothetical peasant holding has been modelled. Both Dyer and Kitsikopoulos have modelled hypothetical peasant holdings to demonstrate the difficulties peasants faced in balancing income and expenditure in the late thirteenth century.[15] However, this study differs from previous studies in two important ways. First, it is based on local prices and time series data of peasant output calculated from peasant tithe receipts. Second, it aims to create a series of values, both monetary and calorific, in order to demonstrate annual and medium-term fluctuations in the value of peasant arable output.[16]

This assessment will first calculate the total calorific and monetary values of a hypothetical holding, demonstrating the maximum level of calorie consumption and sale possible on this hypothetical holding. This is not the say that peasants ate or sold all of what they grew. A consumption pattern in which all of a holding's produce was eaten, leaving the peasant family entirely reliant upon wage labour to acquire the money needed to pay for rent and maintenance, would have been a highly implausible use of resources in late fourteenth-century Oakington. A small demesne, lack of industry, and a dearth of wealthy peasants would have made employment from wage labour difficult to find. Indeed, there is little evidence to suggest that wage work became easier to find at Oakington after the Black Death than before. Threshing fell from 3½*d*. for three quarters of grain in 1360 to 3*d*. by the end of the century, well below the national decennial averages for the period.[17] Similarly, a consumption pattern

[12] Cambridge University Library, Queen's College (hereafter CUL Q), Box 6, roll 6, m. 8 (reeves' accounts); A. Sapoznik, 'Peasant agriculture at Oakington, Cambridgeshire, *c*.1290–1400' (unpub. Ph.D. thesis, University of Cambridge, 2010), p. 160.

[13] B. M. S. Campbell, 'Commonfield origins: the regional dimension', in T. Rowley (ed.), *The origins of open-field agriculture* (1981), p. 115; A. Sapoznik, 'The productivity of peasant agriculture: Oakington, Cambridgeshire, 1360–1399', *EcHR*, 66 (2013), pp. 526, 228.

[14] Labour services at Oakington are detailed in Page, *Crowland*, pp. 89, 126–28.

[15] C. Dyer, *Standards of living in the later Middle Ages: Social change in England, c.1200–1520* (1989); H. Kitsikopoulos, 'Standards of living and capital formation in pre-Plague England: A peasant budget model', *EcHR* 53 (2000), pp. 237–61.

[16] The importance of local data is noted in M. Bailey, 'Peasant welfare in England, 1290–1348', *EcHR* 51 (1998), p. 245.

[17] CUL Q, Box 6 (reeves' accounts); national averages rose from 6½*d*. to 7.7*d*. for threshing and winnowing three quarters of grain. Farmer's wage rates combine threshing and winnowing (average national rate of 1*d*. per three quarters): Farmer, 'Prices and wages', p. 471.

in which all of the produce was sold and cheaper foods were purchased would not have been advantageous. It will be shown that a very heavy reliance on dredge at Oakington meant that peasants were already producing a relative abundance of the cheapest grain and very little of the higher-priced wheat and maslin. Nevertheless, the initial calculations given here provide an essential set of parameters within which to consider the options open to peasants needing to balance resource allocation between consumption and sale.

The method used here to assess peasant resource allocation relies upon a model of a hypothetical peasant holding, calculated from the tithe receipts recorded in the reeves' accounts. This method makes two important assumptions. First, that the majority of peasants at Oakington held 11 acres of land. Second, that the total amounts of tithed crops recorded in the reeves' accounts reflect the majority of peasant cropping patterns at Oakington.

That the average holding size at Oakington was 11 statute acres (10 customary acres) is demonstrated in the 1344 rental and the court rolls for the period.[18] This situation appears to have remained unchanged over the latter part of the fourteenth century. Despite high mortality, holdings were not left vacant and the court rolls suggest there was little opportunity for the engrossment of holdings seen in other parts of the country after the Black Death.[19] Although a few tenants were able to amass large holdings for short periods of time, these holdings tended to become fragmented.[20] It must be borne in mind, however, that peasants with access to significantly more or less land probably allocated their resources in different ways.

Evidence from the tithe receipts demonstrates that the cropping pattern followed by peasants at Oakington was land-extensive, with a particular emphasis on dredge and black peas.[21] Although wheat and maslin made up a not unimportant proportion of the tithe receipts, dredge and black peas were considerably more prominent, together comprising 85 per cent of peasant produce, requiring 88 per cent of peasant land to achieve the level of output attained.[22] That the aggregate output of many small producers was a preponderance of dredge and peas strongly suggests that the majority of peasants followed this cropping pattern at Oakington.

If, as Dyer has calculated, 12 to 15 acres was the threshold at which a family would have been able to grow all the grain they needed, and that even at 18 acres a peasant family would have had a difficult time creating a surplus, the problem of household sufficiency at Oakington even at the close of the fourteenth century becomes very clear.[23] It seems likely that, given the limited supply of land and the limited pastoral sector, the resource allocation of arable commodities would have been an especially pressing concern.

[18] CUL Q, Box 8 Misc. Roll (1344 Rental). Briggs's work refers to customary acres, as they were recorded in the Oakington documents: Briggs, *Credit*. Preference here has been given to statute acres: F. Seebohm, *Customary acres and their historical importance, being a series of unfinished essays* (1914), Map Figure 1, facing p. 100. The difference between customary and statute acres can help explain some discrepancies in calculating the acreage of the manor over time.

[19] CUL Q, Box 3, roll 4, mm. 15–17; Box 4, roll 12, mm. 8, 9 (court rolls).

[20] CUL Q, Box 4 roll 9, m. 1,7; roll 8 m. 13 (court rolls); Box 6 roll 6, m. 36 (reeves' accounts); Box 8 Misc. Roll (rental); Box 4 roll 8, m. 17 (court rolls).

[21] CUL Q, Box 2 Misc. Roll (account roll); Box 6 rolls 3–6 (reeves' accounts); Box 5 roll 6; Box 7 roll 1 (bailiffs' accounts).

[22] The method used to convert the tithe receipts to acreage under each crop is discussed below, p. 0000.

[23] C. Dyer, *An age of transition? Economy and society in England in the later Middle Ages* (2005), p. 175; Kitsikopoulos, 'Standards'.

TABLE 1. Crops as a percentage of the tithe receipt and of peasant land, 1360–99

	Wheat	*Maslin*	*Dredge*	*Oats*	*White peas*	*Black peas*
Per cent tithe receipt	7	6	67	2	1	18
Per cent of land used	6	5	55	1	1	33

Source: CUL Q, Box 2 Misc. Roll, Box 6 rolls 3–6; Box 5 roll 6.
Note: A rounding error causes the tithe receipts and amount of land to add up to 101%.

Although tithe data for the years before and after the period discussed in this article is scanty, it should be noted that the cropping pattern displayed here is not particular to the 50 years after the Black Death and appears to have evolved over the high-pressure years of the early fourteenth century. The tithe receipts from the late thirteenth century are often incomplete, but the years 1275/6, 1291/2 and 1297/8 indicate that on average wheat and rye made up 24 per cent of the tithe receipt, dredge and its constituent crops 50 per cent, and peas 26 per cent. But over the 1310s and 1320s the proportion of wheat and maslin in the tithe receipts decreased from 20 per cent in 1318/9 to 7 per cent in 1321/2. The omission of black peas from the tithe accounts for 1411/2, a year in which so little peasant output was recorded that it seems tithe collection methods had changed by this time, makes direct comparison impossible. Nonetheless, the account indicates a continued emphasis on dredge.[24]

To assess the impact of patterns of production at Oakington, the cash and kilocalorie values of hypothetical peasant lands have been calculated. These calculations assume, for reasons that have been addressed elsewhere, that seeding rates on peasant lands were the same as that on the demesne, and that peasant yields were roughly the same as demesne yields.[25] In order to give a reasonable range between which the output of a peasant holding was likely to fall, an 11-acre holding with a third of the land left fallow and an 11-acre holding which was continuously cropped will both be considered. It has been demonstrated that peasants at Oakington often cultivated the fallows, enabling very high levels of land productivity.[26] Because the amount of land under cultivation almost certainly fluctuated annually, these calculations provide reasonable upper and lower boundaries for production. It is probable, however, that the amount of land actually under cultivation fell somewhere in between. It is not likely that the fallow was entirely cropped in a given year.[27]

To calculate the level of output of a hypothetical peasant holding, the problem presented by the unknown quantity of peasant land under each crop has been solved by taking the receipt of the tithe of each grain, and multiplying it by 10 to give the actual amount of grain produced on peasant land. This figure has then been divided by the demesne yield accounted for each crop that year to determine the possible acreage of that crop under peasant land. The

[24] CUL Q, Box 1 roll 5, rolls 14, 17; Box 5 roll 5; Box 8 roll 4; Box 7 roll 5.

[25] Sapoznik, 'Productivity', pp. 531–33.

[26] Ibid.

[27] This is unlike parts of eastern Norfolk, where fallow was sometimes almost completely eliminated, at least on the demesnes: B. M. S. Campbell, 'The regional uniqueness of English field systems? Some evidence from eastern Norfolk', *AgHR* 29 (1981), esp. p. 21; Brandon also found less extensive fallowing practiced on some of the Sussex demesnes of Battle Abbey, 'Cereal yields'.

TABLE 2. Calculation of possible peasant acreage under each crop, 1363/4

	Wheat	*Maslin*	*Dredge*	*White peas*	*Black peas*	*Oats*	*Total acreage*
Tithe recorded/demesne yield = peasant acreage under each crop	20	25	314	11	153	0	523
Percentage of total acreage	4	5	60	2	29	0	100
Acreage, 11-acre holding, no fallow	0.4	0.6	6.6	0.2	3.2	0	11
Acreage, 11-acre holding, ⅓ fallow	0.3	0.4	4.4	0.15	2.12	0	7.37

Source: CUL Q, Box 6 Roll3, Roll 6 m. 3.

acreages of each crop have been added together to give the total amount of peasant land under cultivation that year, and the percentage each crop comprised of the total has been calculated. These percentages have then been multiplied by 11 to determine the amount of land under each crop on the holding. This is demonstrated, for the year 1363/4, in Table 2.

Multiplying these acreages by the demesne yield gives the amount of grain produced from the holding. From this, 10 per cent has been subtracted for tithe, the amount needed for seed, multure at a rate of 1/24 taken only from wheat, maslin and the part of dredge allocated for bread, and 10 per cent for wastage.[28] Assuming each person consumed between 1100 and 1500 kilocalories per day averaged over the entire year, the number of people an 11-acre holding could sustain can be determined.[29]

To calculate the monetary value of peasant holdings over time, the same method has been used for grain prices as was used to determine food values of holdings. This calculation uses the sales prices for demesne crops as recorded in the reeves' accounts. Prices for arable products in this region were persistently low, and the reeves' accounts indicate that wheat and maslin fell roughly one third below that indicated by Farmer in his national price data series, while dredge and pea prices, for which the data sets are complete, were very similar to those found nationally.[30] Because of this, gaps in the prices for wheat and maslin are estimated to have been two thirds of Farmer's national prices. Because wheat and maslin accounted for only a relatively small proportion of the grain grown at Oakington, this is not of too much concern. Using Farmer's prices does not alter the trends in the monetary value of the produce from peasant holdings, although it does exaggerate the monetary importance of these crops. The results of these calculations are summarized in Tables 3 to 5.

[28] This follows the methods used by Campbell and Stone: Campbell, *English seigniorial agriculture,* pp. 215, 221–24; D. Stone, 'The consumption of field crops in medieval England', in C. Woolgar, D. Serjeantson, and T. Waldron (eds), *Food in medieval England: Diet and nutrition*, (2006), p. 21; Stone's figures are based on Campbell, *English seigniorial agriculture,* pp. 215, 221–24. For the human food value of peas, D. Landblom and C. Poland, 'Nutritional value' *Research Report*, Dickinson Research Extension Center (1997).

[29] Kitsikopoulos, 'Standards', p. 242.

[30] Farmer, 'Prices and wages', p. 444, 448; CUL Q, Box 6, roll 6; Briggs, *Credit*, p. 186; J. R. Maddicott, 'The English peasantry and demands of the crown, 1294–1341', in T. H. Aston (ed.) *Landlords, peasants and politics* (1987), p. 316; P. J. Bowden, 'Agricultural prices, farm profits and rents, 1500–1640', in J. Thirsk (ed.), *The Agrarian History of England and Wales*, IV, *1500–1640* (1966), pp. 614–15.

TABLE 3. Average total value of output for an 11-acre holding, continuously cropped, 1361–93

	Wheat	*Maslin*	*Dredge*	*White peas*	*Black peas*	*Oats*	*Total*
Output (qr.)	0.62	0.55	6.19	0.05	1.31	0.01	8.72
Kilocalorie value	274300	234400	1805700	2600	731300	2100	3073800
Monetary value	2.55	1.74	18.04	0.14	2.86	0.01	25.34

Source: CUL Q, Box 2 Misc. Roll, Box 6 rolls 3–6; Box 5 roll 6.
Note: Kilocalorie rates from Stone, 'Consumption', p. 21, but altered in the following way: given the high rate of dredge production at Oakington, it is unlikely that half of all dredge produced was consumed as ale. Even if three quarters of dredge were malted each year, just under 40% of dredge would have been brewed, leaving the rest for bread and pottage, here calculated as 50% bread and 10% pottage, leaving an extraction rate of 0.62, compared with Stone's rate of 0.56 based on 50% ale, 40% bread and 10% pottage. Stone's figures are based on Campbell, *English seigniorial agriculture,* pp. 215, 221–24. Prices based on demesne sales prices and Oakington price structure.

TABLE 4. Average total value of output for an 11-acre holding, one-third fallow, 1361–93

	Wheat	*Maslin*	*Dredge*	*White peas*	*Black peas*	*Oats*	*Total*
Output (qr.)	0.92	0.82	9.24	0.07	1.95	0.01	13.01
Kilocalorie value	409500	349800	2695000	3900	1091400	3100	4587800
Monetary value	3.80	2.60	26.92	0.21	4.27	0.02	37.32

Source: as Table 3.

The total kilocalorie and monetary value of a peasant holding over time are demonstrated in Figures 1 and 2 below. As they demonstrate, over the later fourteenth century, both the total calorific outputs and monetary value of holdings tended to fall, although the number of calories produced for human consumption remained relatively stable and the monetary value of the produce fell more sharply than the calorific value.

Just as high levels of production could offset the effects of falling prices, as in 1389/90 and 1392/3, so too did low levels of production mute the potential benefits of high grain prices, as in 1370/1, the year following the national harvest failure of 1369. The negative effect of falling grain prices after 1375 on potential peasant income at Oakington is also clear. Calculating for several different cropping patterns indicates that the output of peasant holdings at Oakington was less valuable in monetary terms than could have been otherwise. If the amount of land under each crop had been evenly distributed, peasant output would have been worth 30 per cent more. Had a third of peasant land been put under peas, as it was, but the rest of the land spread evenly with the remaining crops, peasant output would have been worth 22 per cent more.

Of course, there were institutional and environmental constraints that inhibited such dramatically different cropping strategies. The very heavy emphasis on spring crops – a regional phenomenon – suggests an aversion to winter sowing, either because the soils were not suited to extensive wheat and maslin cultivation or because of the harsh winter weather

FIGURE 1. Monetary and kilocalorie values of an 11-acre peasant holding with no fallow, 1361–93

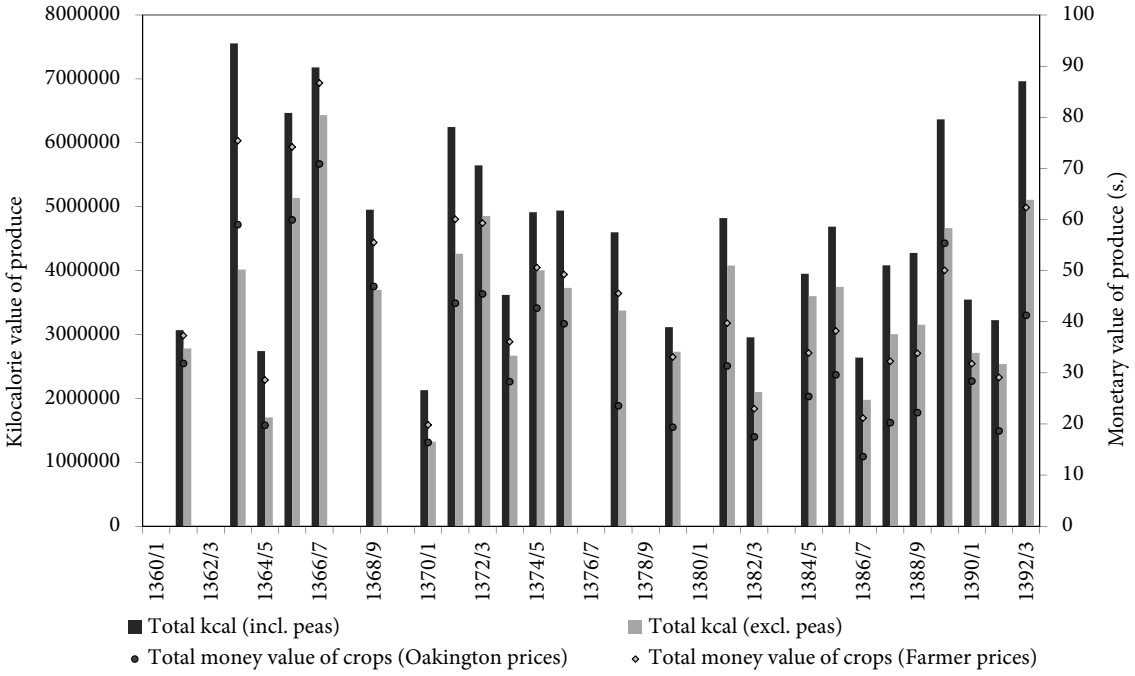
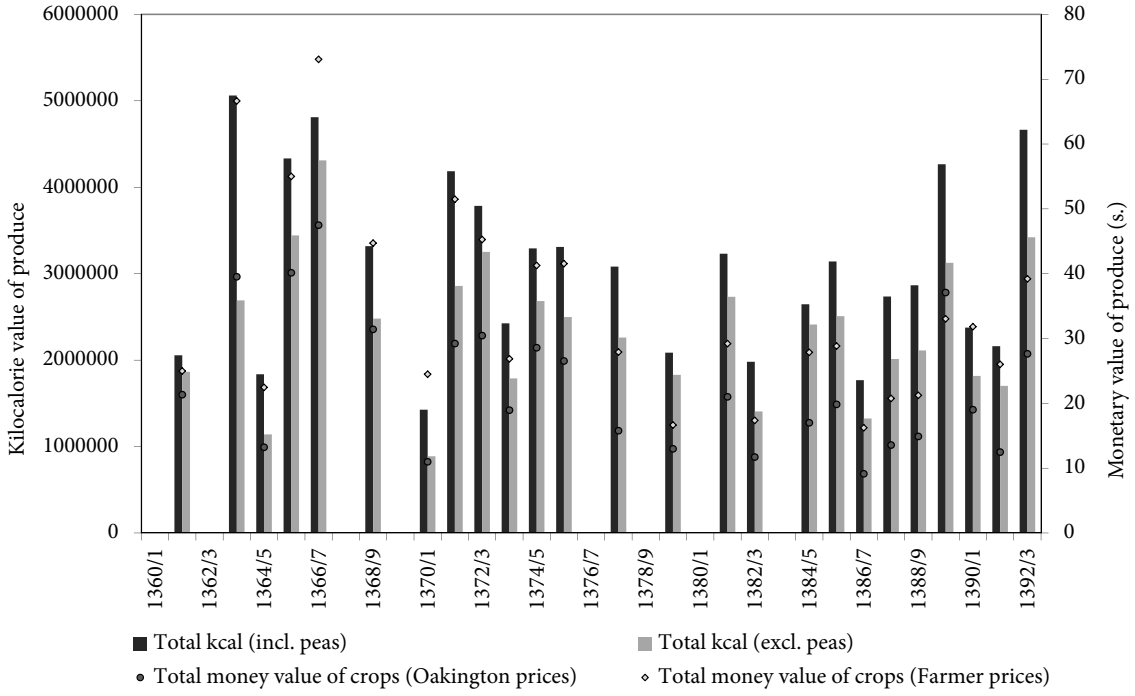


FIGURE 2. Monetary and kilocalorie values of an 11-acre peasant holding with one third fallow, 1361–93



in a flood-prone region.[31] Furthermore, the field system, although not a strictly controlled Midlands system, did involve some level of communal cooperation. This would have made extensive changes for individual producers extremely difficult, if not impossible.

The land-extensive cropping pattern followed by peasants at Oakington relied very heavily on low-yielding crops of dredge and especially black peas. Despite the preference for lower-yielding crops, peasant productivity was very high because this allowed for extensive cultivation of the fallows. The key to this cropping pattern was the preference for crops that were less soil-exhaustive than wheat and maslin: hence nitrogen-fixing peas and less nutrient-hungry dredge.

Yet producing dredge primarily for sale would not have been particularly beneficial for peasants at Oakington, because the price differences between crops was not advantageous. The price of dredge was lower than wheat, maslin, and white peas, and only very marginally (less than 3*d*. per quarter) more than pure oats. It will be shown below that, taking various consumption patterns into account, selling dredge was the least valuable pattern of consumption in monetary terms. Yet the reliance on dredge, which allowed more land to be used more often, would have meant that more grain was left over after consumption than would have otherwise been possible.[32] Resource allocation on peasant land at Oakington seems to have been driven by more complex factors than reliance on the potential sales of dredge.

II

The cropping pattern at Oakington was heavily dependent upon large-scale dredge production in a period of nationally rising demand for ale. In this, the pull of Cambridge cannot be ignored, for it was the marketing centre of a region specializing in malting grains.[33] Yet, surprisingly, there is very little evidence of large-scale trade in dredge between Cambridge and either the Oakington demesne or peasants.[34] This is in sharp contrast to the neighbouring Ramsey estates, which routinely sent grain from the demesne to Cambridge as a specific labour obligation.[35] That the Oakington demesne was not geared towards marketing grain

[31] For example, Campbell, *English Seigniorial Agriculture*, pp. 244; 266–7, 288, 294; Stone, *Decision-making*, p. 48; R. H. Britnell, 'Eastern England', in Miller (ed.), *Agrarian History* III, *1350–1500*, p. 62.

[32] Very high levels of arable output may further explain the apparent 'credit-worthiness' of peasants with the holding size modelled here, a group Briggs found to have been able to secure credit successfully in the decades before the Black Death: C. Briggs, 'Credit and the peasant household economy in England before the Black Death: Evidence from a Cambridgeshire manor', in C. Beattie *et al.* (eds.), *The medieval household in Christian Europe, c.850–c.1550: Managing power, wealth, and the body* (2003), p. 246.

[33] See for example N. S. B. Gras, *The evolution of the English corn market from the twelfth to the eighteenth century* (1915).

[34] That Crowland Abbey's demesnes were among the least commercialized in the country is noted in Campbell, 'Matching', p. 849. For an exceptional, and, Briggs notes, puzzling, contract regarding 20 quarters of dredge for malting in 1337 see Briggs, *Credit*, p. 47. The difficulty tracing evidence for rural trade is noted in C. Dyer, 'The consumer and the market in the later Middle Ages', *EcHR* 42 (1989), p. 323. There are no surviving records of contracts from Oakington to Cambridge for malt in the late fourteenth century, although this was a known malt-producing region: J. Lee, *Cambridge and its economic region* (2005), esp. p. 104.

[35] Gras, *Evolution*, p. 21.

TABLE 5. Values of grain sales by consumption, Oakington price structure, mean 1361–93

	1100kcal/person/day			*1500kcal/person/day*		
	Selling wheat and maslin	*Eating some of each grain*	*Eating all wheat and maslin*	*Selling wheat and maslin*	*Eating some of each grain*	*Eating all wheat and maslin*
11-acre, no fallow	20*s.* 2*d.*	22*s.* 2*d.*	19*s.* 2*d.*	14*s.* 11*d.*	16*s.* 8*d.*	13*s.* 11*d.*
11-acre, ⅓ fallow	8*s.* 0*d.*	9*s.* 3*d.*	7*s.* 3*d.*	2*s.* 8*d.*	4*s.* 4*d.*	2*s.* 0*d.*

Source: as Table 4.
Note: as Table 4.

TABLE 6. Values of grain sales by consumption, Farmer prices, mean 1361–93

	1100kcal/person/day			*1500kcal/person/day*		
	Selling wheat and maslin	*Eating some of each grain*	*Eating all wheat and maslin*	*Selling wheat and maslin*	*Eating some of each grain*	*Eating all wheat and maslin*
11-acre, no fallow	27*s.* 8*d.*	29*s.* 0*d.*	22*s.* 2*d.*	21*s.* 7*d.*	22*s.* 0*d.*	13*s.* 11*d.*
11-acre, ⅓ fallow	12*s.* 1*d.*	12*s.* 4*d.*	10*s.* 3*d.*	6*s.* 0*d.*	6*s.* 2*d.*	4*s.* 2*d.*

Source: as Table 4.
Note: as Table 4. Prices from Farmer, 'Prices and wages', *Agrarian History* III, p. 444.

in Cambridge does not mean that peasants did not sell dredge there or anywhere else: it is very likely that Oakington's peasants would have sold their dredge surplus.[36] Briggs's assessment of Crowland's Cambridgeshire manors demonstrates the importance of credit transactions there, implying a highly monetized economy.[37] Nevertheless, although the commercial opportunities provided by proximity to such an important town within the grain trade should not be overlooked, there is little evidence to suggest that this was the *primary* reason for the cropping pattern followed there.[38] A relationship between the tithe receipts and prices (including those of malt) cannot be demonstrated using the methods outlined by Dodds or Stone, by simple correlation, single or multiple regression analysis, even allowing for varying time lags of one to three years.[39] It seems likely, therefore, that peasant cropping patterns were driven by more complex factors, including environmental and institutional constraints, as described above, but also subsistence and monetary needs internal to the household.

[36] Briggs also suggests peasants sold surplus malt after consumption needs had been met: Briggs, *Credit*, p. 50.

[37] Briggs, *Credit*; Briggs, 'Household'.

[38] Cambridge may have acted in a similar manner to Colchester, which was not the main purchaser of agricultural surplus, despite being the only substantial grain market within its economic region: R. Britnell, *Growth and decline in Colchester, 1300–1525* (1986), pp. 41–6.

[39] Using methods outlined by Stone, *Decision-making*, pp. 52–3; Dodds, *Peasants*, pp. 145–7.

To understand the relationship between patterns of consumption and the monetary values of holdings, three hypothetical strategies regarding the grain-based portion of the peasant diet have been calculated. The first is a peasant household in which all of the wheat and maslin produced by the holding are sold and the household's calorie intake from grain comes from dredge. The second is a peasant household in which some of each grain is consumed and the excess is sold, and finally, a peasant household in which all of the wheat and maslin is eaten, the kilocalorie shortfall is made up in dredge, and the excess dredge is sold.[40] These calculations consider only a small peasant household of four people.[41] Had the household been larger, less money would have been made from sales of grains, and so the calculations below represent the maximum sales value of the crops. Tables 5 and 6 show the amount of money to be made from sales of grain using three consumption patterns and two levels of consumption depending on the price of each crop.

Including rent, which was 5*s.* 6½*d.* for an 11-acre holding, it can be seen that at the higher rate of calorie consumption the 11-acre holder who left one third of the land fallow would have been unable to meet the minimum level of cash needed for his rent. At the lower rate of consumption, rent would have used about half or more of the money made from grain sales, not including other fines and fees such a tax and tallage, which although deceased from the first half of the fourteenth century, were still liable to be paid.[42]

If maintenance – which would have included clothing, upkeep and repair of tools and buildings – were taken into account, even less money would have been left over.[43] In fact, it is likely that the 11-acre holder who left one third of the holding fallow would have been unable to meet these needs and obligations even at the lower rate of grain consumption. Furthermore, at the lower level of grain consumption, a greater proportion of the diet must have been derived from other foods. Chickens provided eggs, and peasant crofts at Oakington were quite large, and could have allowed for a substantial amount of garden produce.[44] But this still leaves the problem of meat and dairy products, the prices of which were falling less sharply over the later fourteenth century than those of arable products.[45]

It has been noted that Oakington lay in a region of inadequate grassland resources. Although the amount of money a peasant holding needed in order to account for all of its

[40] Kitsikopoulos, 'Standards', p. 242. The consumption pattern in which some of the wheat and maslin is consumed assumes 15% of the family's total kilocalorie consumption from grain was derived from wheat and 15% from maslin, while the remaining 70% came from dredge.

[41] Kitsikopoulos' peasant diet is based on a total kilocalorie consumption of 1700kcal per person per day, of which 1143kcal, or 67%, are from grain. Campbell, *et al.* use a model diet in which 2000kcal are consumed per day, of which 1500kcal, or 75%, are from grain. To avoid malnutrition, at most 80% of the total calorie intake can be derived from grain: Kitsikopoulos, 'Standards', p. 242; B. M. S. Campbell *et al.*, *A medieval capital and its grain supply: Agrarian production and distribution in the London region, c.1300* (1993), p. 33.

[42] CUL Q, Box 8 Misc. Roll; Box 6.

[43] A detailed consideration of maintenance requirements is given in Kitsikopoulos, 'Standards', p. 245.

[44] The presence of large gardens is indicated by numerous entries involving messuages, curtilages, and crofts in the court rolls. The majority of stipends in the court rolls record the continued use of pieces of this type of land by those who have relinquished their land: CUL Q, Box 3–4. 'Small tithes' of garden produce were valued £8 9*s.* 4*d.* in 1341: *Nonarum inquisitiones in curia scaccarii temp Edwardi III (1807)*, p. 203; Dyer further notes the regional importance of gardens in East Anglia: C. Dyer, 'Gardens and garden produce' in Woolgar *et al.* (eds), *Food in medieval England*, p. 38.

[45] Farmer, 'Prices and wages', pp. 455–61, 467.

fodder needs cannot be quantified with any certainty, it seems probable that fodder was a more important part of peasant expenditure at Oakington than current models of peasant budgets allow.[46]

This article is primarily concerned with arable output, but of course pastoral husbandry was vital to peasant agriculture, diets, and incomes. The peasant livestock profile at Oakington is difficult to discern, but the court rolls offer some glimpses into this aspect of peasant agriculture. Overall, they do not suggest a highly developed pastoral sector, although some tenants did increase their livestock holdings by the end of the fourteenth century. Wool would have provided the opportunity for some income at Oakington, although declining fleece weights and wool prices were features of the period after 1370.[47] In 1360/1, the reeve recorded that 300 sheep had been kept in the foldcourse that year.[48] This no doubt underestimates the number of sheep owned by peasants at Oakington, given the frequency of the fines imposed for not folding sheep in the lord's fold. Whereas the largest flock mentioned in the court rolls before the Black Death was 32 sheep, all of which were pastured at Dry Drayton and Histon, after the Black Death flock sizes for some tenants increased, and three men appear to have acquired flocks of 100 or more sheep by the late 1390s.[49] These entries stand out as atypical, and the view of peasant livestock provided by the court rolls is one which suggests that most people owned a few sheep and at least one horse, while cattle make more infrequent appearances. In this, John Frost – who forfeited his holding of one messuage and 11 acres in 1395 and had among his diverse goods and chattels four *bacones*, two carthorses, two ewes and two lambs – may have been typical in his livestock holding, despite his fugitive status.[50] Of the 17 heriots noted during this period, seven were for cattle, typically oxen, nine were for horses and one was for sheep. References to pigs are infrequently found in the court rolls, an absence perhaps explained by the lack of woodland, which meant that pigs were sty-fed and so unlikely to be caught damaging corn in the fields.

Evidence from the court rolls suggests that the typical peasant household would have had access to some pastoral products, but it cannot be certain that peasants would have been able to produce the entirety of their dairy requirements from their holdings alone. Writing in the thirteenth century, Walter of Henley considered one cow equal to 15 ewes in terms of milk production.[51] Although historians differ on the amount of milk a cow would have produced and a household would have consumed, when adjusted for a household of four people,

[46] For example, Kitsikopoulos, 'Standards', p. 246; G. Clark, 'The price history of English agriculture, 1209–1914', working paper (University of California, Davis, 2003), p. 56.

[47] M. Stephenson, 'Wool yields in the medieval economy', *EcHR* 41 (1988), 368–91, esp. p. 381.

[48] CUL Q, Box 6, roll 6, m. 1.

[49] John Lamb was fined for pasturing his sheep in Drayton and Histon in 1323 and is listed in the 1344 rental as a five-acre man: CUL Q, Box 3 roll 2, m. 27. In 1397 and 1398 Robert Cust, and John Pappe are each recorded as having 100 sheep outside the lord's fold and John Dette had 200 sheep outside the lord's fold: CUL Q, Box 4 roll 9, mm. 19, 22.

[50] CUL Q, Box 4 roll 9, m. 16. He was taken by the bailiff in the following year and returned to the lord: Box 4 roll 9, m. 17. In 1393/4 John Frost bought a half quarter of maslin from the demesne, one of only two such transactions to appear in the reeves' accounts: Box 6 roll 6, m. 29. *Bacones*, possibly 'bacon', Hallam translates as 'hogs': Hallam, 'Life of the people', p. 826.

[51] D. Oschinsky, 'Husbandry', in D. Oschinsky (ed.), *Walter of Henley and other treatises on estate management and accounting* (1971), p. 333.

estimates fall between one half and the whole dairy product of one cow.[52] Therefore, even on very meagre dairy intake it seems probable that some proportion of peasant households at Oakington would not have produced enough dairy produce to fulfil dietary needs and therefore would have had to purchase these items. The lack of a substantial pastoral sector at Oakington presents itself with more force on comparison with Cottenham, the entries for which appear in the same court rolls. At that manor, the fenland landscape afforded ample grazing on lush grass, and the evidence there indicates a highly active dairy sector.[53]

Wage labour, although apparently scarce at Oakington, must have been an important factor in making up for budgetary or dietary shortfall, but whether wages could be relied upon to make up for a significant deficit is questionable. Factors which caused economic distress – particularly poor harvests and the decreasing values of what peasants were producing – would have affected the entire community of peasant producers, although to varying degrees. In turn this may have glutted the labour market, making it difficult to find wage work when it was needed most. Oakington lay in a poor but heavily populated region, which remained so throughout the late middle ages. In fact, the region around Oakington became relatively poorer over the fifteenth and early sixteenth centuries.[54] This seems consonant with a dependence on arable cultivation at a time when prices were falling, and a region with a pool of excess labour.[55]

The patterns of consumption detailed above suggest a range of different of ways in which grain could be consumed or sold. Many other patterns could have prevailed, and surely each household managed its resources differently. Evidence for individual peasant household consumption at Oakington is, however, frustratingly scant. Retirement contracts provide a potentially useful source of information regarding peasant diets in medieval England. In keeping with a general decline in contracts of this kind, no retirement agreements of which part of the maintenance was comprised of grain were contracted after the Black Death at Oakington. Four such contracts were recorded before the Black Death, between 1307 and 1329.[56]

These four contracts do not indicate a consistent pattern of consumption. Wheat was mentioned in all four contracts, comprising between one fifth and one half of the grain stipulated. Maslin was stipulated in two of the contracts, comprising one seventh and one fifth

[52] Bailey, *Suffolk*, pp. 81–6; Dyer, *Standards*, p. 114; Kitsikopoulos, 'Standards', p. 242. E. Phelps Brown and S. Hopkins, 'Seven centuries of the prices of consumables compared with builders' wage-rates', *Economica*, 23 (1956), p. 182; Farmer, 'Prices and wages', p. 775; R. Trow-Smith, *A history of British livestock husbandry to 1700* (2006), pp. 119–20.

[53] J. Ravensdale, *Liable to floods: Village landscape on the edge of the fens, A.D. 450–1850* (1974), pp. 58–69; Page, *Crowland*, pp. 26–27; Wretts-Smith, 'Organization', p. 190. In 1333/4 flooding of the pasture at Oakington meant that sheep from there were pastured in the marshes at Cottenham: CUL Q, Box 3 roll 3, m. 23; peasants also pastured their sheep on the marshes at Cottenham without license, as in 1345/6: CUL Q, Box 3 roll 4, m. 14. Cottenham cheese was well known in England until at least the nineteenth century: Ravensdale, *Liable*, p. 59; J. C. Loudon, *An encyclopedia of agriculture* (seventh edn, 1871), pp. 892, 1047.

[54] J. Lee, 'Tracing regional and local changes in population and wealth during the later middle ages using taxation records: Cambridgeshire, 1334–1563', *Local Population Studies*, 69 (2002), esp. p. 36.

[55] This may also add to Briggs's explanation for why the size of money debts at the three Cambridgeshire manors was smaller after the Black Death than before: Briggs, *Credit*, p. 59.

[56] R. M. Smith, 'The manorial court and the elderly tenant in late medieval England' in M. Pelling and R. M. Smith (eds), *Life, death and the elderly: Historical perspectives* (1991), p. 49; CUL Q, Box 3 roll 2, m. 25; Roll 3, mm. 6, 9, 10.

of the grain recorded. Dredge and its constituent crops comprised between one fifth and one third of grain in three contracts but was not mentioned in the fourth. Peas were stipulated in all four contracts, comprising between 20 and 40 per cent of grain recorded. These contracts provide detail on an individual level, which does not appear to mirror the consumption patterns suggested by the tithes. Yet these contracts were made in the high-pressure years of the early fourteenth century, a period when demand for land at Oakington was very high.[57] It is possible that these contracts demonstrate something of the desired diet of the elderly people who relinquished their land, and the amount which those taking land were willing to pay in order to enter the holding.[58] In this, the high proportion of wheat is instructive. This was a period in which those selling land to retire were at a distinct advantage. How the grain components of retirement contracts would have changed over the period covered in this study remains uncertain. It may be speculated that the peas in these retirement contracts were eaten as pottage, but evidence from the account rolls suggests that after the Black Death it is unlikely that black peas were consumed in this way.

Another possible source of information regarding peasant diets is the grain-based portion of payments to the manorial *famuli*. At Oakington, wheat and dredge were paid at constant rates of 2 qr 5 b between 1362/3 and 1380/1 and 2 qr 4 b from 1381/2 to 1390/9 and the rest of the payments were made in maslin.[59] Maslin amounted 81 per cent of the total grain paid to *famuli*, rising from 80 per cent before 1380/1 to 83 per cent thereafter. This rise in maslin corresponds to a slight increase in maslin grown on the demesne, and stands in marked contrast to the declining popularity of rye nationally. That the proportion of wheat in the *famuli* payments decreased slightly, while that of less palatable rye increased, might suggest that the expectations of the manor's full-time labourers had not risen over the period.[60] It should be noted that the quality of grain had improved on comparison with the early fourteenth century, when oats and peas were part of the *famuli* payments, but this improvement did not continue thereafter.[61] The high level of maslin in the payments may suggest that this was a sought-after crop at Oakington, suggesting that the grain-based portion of the peasant diet at Oakington remained relatively unimproved over the period under consideration.

Consideration of all aspects of peasant consumption patterns, including amounts consumed, kilocalorie extraction rates, and prices, indicate that a combination of factors determined the extent to which peasant diets could be changed in order to maximize the amount of money produced from a holding. It seems unlikely that dredge was purely a cash crop, as this would have meant almost complete reliance upon markets for the majority of peasant diets at Oakington. Yet the court rolls do not offer evidence of the economic and social dislocation this would have caused in years of extremely high prices and low production.[62] Examination of the court rolls for data indicative of deterioration in peasant conditions, such as land transactions, heriots, instances of theft, and cases of debts, reveals little to suggest that peasants found

[57] See for example F. M. Page, 'Customary poor-law of three Cambridgeshire manors', *Cambridge Historical J.*, 3 (1930), pp. 125–33.

[58] Dyer, 'Did the peasants really starve?', pp. 56–7; Smith, 'Elderly'.

[59] CUL Q, Box 6 roll 6.

[60] For prominence of rye in famuli payments, see R. Britnell, 'Eastern England', *Agrarian History,* III, pp. 65–67.

[61] CUL Q, Box 5 roll 5; Box 8 roll 4.

[62] CUL Q, Box 3–4; Sapoznik, 'Peasant agriculture', pp. 156–65.

themselves in financial or subsistence crisis at Oakington.[63] Furthermore, had dredge been grown primarily in response to market indicators, as dredge prices fell, the amount of dredge in the tithe would have increased to make up for the loss in value; again, this relationship cannot be demonstrated.[64]

Calculation of values of arable produce, combined with assessment of consumption strategies, the lack of evidence for a highly commercialized arable sector in the court rolls, and the absence of a quantifiable relationship between prices and the tithe receipt, suggests that peasant production at Oakington was not primarily market-oriented, despite reliance upon a sought-after arable commodity. The Oakington evidence points to the conclusion that other factors, such as stability of yield and flexibility of use, were more important than the cash value of different crops in determining peasant cropping strategies.

III

Herein lies the tension at the heart of peasant resource allocation and decision making. The need to use the same produce for consumption and sale meant that peasants had to find an effective way of balancing these competing needs, all of which were crucial to the sustenance of the household and holding. The evidence from Oakington suggests that peasants met resource needs by giving large portions of their land over to crops that were less soil exhaustive, allowing them to maximize the output possible from small holdings.

In this, the advantage of dredge lay in its flexibility of use and stability of yield. Dredge could be consumed in a number of ways and with varying calorie extraction rates, as pottage, bread, ale, and even fodder. It could be sold raw or as malt, which was a value-added commodity. The straw of its constituent crops, barley and oats, was more palatable to livestock, particularly sheep, than that of wheat or rye.[65] Furthermore, the stability of the yields of mixed crops, especially dredge, is well known, and dredge was by far the most stable-yielding crop at Oakington.[66] It is likely that it was extensive dredge cultivation that allowed peasants at Oakington to avoid aggregate harvest failure in the first quarter of the fourteenth century, as well as economic dislocation during the very poor harvest year of 1369.[67]

Likewise, black peas had multiple uses. They were an important fodder crop, particularly for the most prevalent animals at Oakington, horses, pigs and sheep. Their extensive cultivation was also a vital component of soil maintenance, fixing atmospheric nitrogen, choking weeds and providing a green manure. In years of poor harvests, they could be used for human consumption, although the rapidity with which the Abbey stopped giving peas to the poor of

[63] CUL Q, Box 3–4.

[64] Regression analysis of the tithe receipts shows no significant response to price as a predictive variable: CUL Q, Box 2 Misc. Roll, Box 6 rolls 3–6; Box 5 roll 6; Box 7 roll 1; Sapoznik, 'Peasant agriculture', pp. 52–4.

[65] C. Weder, *Drought options: Supplementing straw and chaff to beef cows* (Alberta Agriculture, Food and Rural Development, 2001); R. Butler, Stubbles: their use by sheep (Farm note 188, Government of Western Australia Department of Agriculture and Food, 2006), p. 4.; S. Barnhart, 'Short-term and supplemental forages', *Cows and Plows*, IBC07–9 (Ames, Iowa, 2007).

[66] J. Pretty, 'Sustainable agriculture in the Middle Ages: The English manor', *AgHR* 38 (1990), p. 5; Sapoznik, 'Productivity'.

[67] This has been noted elsewhere in East Anglia: H. E. Hallam, 'The climate of eastern England', *AgHR* 32 (1984), pp. 124–32.

the parish in the decades after the Black Death suggests that this was not a popular food crop, even among this group.[68]

The impact of the falling price of grain at the end of fourteenth century was two-fold, for although peasants were able to purchase more food for less money, it also meant that they received less money for what they produced. When combined with low wages and the continuance of a system of landholding in which smallholding prevailed, gains in peasant standards of living would have been held back by continuing pressure on arable resources. Tenants no longer needed to compete with a large landless population for wage labour, but low and stable wages on the Oakington demesne are indicative of a labour pool that continued to meet or surpass demand.

Cambridgeshire was a county of fertile soils, high arable production, and, consequently, of low prices.[69] Yet although the monetary value of the produce from peasant holdings decreased, the food value remained stable. While the grain component of the peasant diet may have remained stable or even improved, it is unclear as to whether their consumption of meat and dairy followed a similar pattern. It has been suggested above that peasants at Oakington probably remained at least partially reliant upon purchases of pastoral products, whose prices did not decline as sharply has had the prices of their own produce. The more stable local price of dredge, the primary arable product at Oakington, may have helped peasants absorb this cost. Yet it is highly unlikely that dredge was grown *primarily* for sale. Rather, it is suggested here that it was the flexibility in the ways in which dredge could be consumed and sold, rather than large-scale production expressly for market, which made dredge such an attractive crop for peasants on smallholdings.[70]

IV

This article set out to understand peasant production strategies in the light of the resources available to smallholding tenants. Its analysis has revealed a pronounced continuity of cropping patterns at Oakington and demonstrated that the elsewhere extraordinary transformation of the English economy over the period studied had surprisingly little impact on peasants there.

This is not to say that there was no increase in standards of living at Oakington in the aftermath of the Black Death. Insofar as comparison can be made between living standards before and after the Black Death, it must certainly be noted that over the later fourteenth century the land market slowed. While very few tenants at Oakington were in a position to engross their holdings, in a sense peasant holdings were larger because they were less fragmented by subtenancies. It is likely that the average peasant household was producing more after the Black Death than before, and this access to more grain for consumption and sale must have had a significant positive impact on standards of living, even as prices for arable

[68] For more on this see Sapoznik, 'Productivity', p. 536.

[69] Bowden, 'Agricultural prices', pp. 614–15.

[70] A point also raised regarding barley in late medieval Wiltshire: J. Hare, 'Lord, tenant and the market: Some tithe data evidence for the Wessex region' in B. Dodds and R. H. Britnell (eds), *Agriculture and rural society after the Black Death: Common themes and regional variations* (2008), p. 140.

products were falling. The apparent decline in black pea consumption by peasants may be seen as a consequence of this increased access to more palatable crops.

Similarly, the landless population at Oakington was likely to benefit from the declining population pressure after the Black Death. Fewer new family names appear in the land transactions recorded in the court rolls after the Black Death than before, and they make up a smaller proportion of the total number of people involved in land transactions. Nonetheless there are numerous examples of the previously landless children of landed families taking land after the Black Death.[71] It may be inferred from this that these people, too, would have seen their standards of living increase. However, this study throws doubt on the extent to which peasant standards of living continued to increase after this initial rise due to consolidation of, or entry into, an 11-acre holding.

Of course, Oakington represents a very small portion of the peasantry that comprised three quarters of the population of medieval England. Clearly some peasants were able to respond to changing economic circumstances in dynamic ways, as has been demonstrated by Dodds's study of the Durham tithes. Elsewhere, Dodds has argued that peasants in some Kent parishes grew higher priced grains in order to sell them to purchase greater quantities of lower-priced grains, again demonstrating that peasants organized their arable production around market opportunities.[72] In a similar vein, Bailey has proposed that barley was grown as a cash crop on peasant land in parts of Suffolk.[73] The less regulated field systems and more varied landscapes of these places probably afforded peasants more opportunities for agricultural flexibility than those at Oakington.

At Oakington, the open-field system, lack of grassland, and continued population pressure combined to create an environment particularly unsuited to adaptation to changing markets and demand for pastoral products. The large number of village by-laws regulating livestock in open-field regions in the decades after the Black Death have been used by Dyer to suggest that cereal-dependent systems continued to prevail in some places even at the close of the fourteenth century.[74] The constraints placed on peasants whose systems of production were geared towards cereal husbandry in the decades before the Black Death have long been known.[75] Cornwall's assessment of peasant agriculture in medieval Buckinghamshire demonstrated how detrimental to peasant income the lack of a developed pastoral sector could be, arguing that in such regions 10 to 15 acres was the minimum holding size necessary to meet subsistence needs.[76] This provides an interesting parallel to late-fourteenth century Oakington, particularly on consideration of the acute strain on income as grain prices fell after 1375.

[71] From 1290–1348, 65 separate family names were involved in land transactions, of which 32 were names not found in the *Hundred Rolls*, 1327 lay subsidy list, or any of the Crowland documents. From 1349–1400, there were 41 separate family names involved in land transactions, or which only 16 were names previously unassociated with Oakington: CUL Q, Boxes 3 and 4; *Rotuli hundredorum temp. Hen. III & Edw. I*, II (1818) pp. 407–08; R. Glasscock (ed.), *The lay subsidy of 1334* (1975), p. 25; CUL Q, Box 4 roll 12, m. 8; Box 3 Roll 4, m. 17; Box 3 Roll 5, mm. 1–4; names compared with Box 8, 1344 Rental.

[72] Dodds, 'Demesne and tithe'.

[73] Bailey, *Medieval Suffolk*, p. 77.

[74] Dyer, *Standards*, p. 144.

[75] For example Dyer, *Standards*, p. 131.

[76] J. Cornwall, 'Medieval peasant farmers', *Records of Buckinghamshire* 20 (1975), pp. 71–4. Cornwall takes into account fewer animals than either Dyer or Kitsikopoulos, and his conclusions regarding peasant budgets are consequently less optimistic: Dyer, *Standards*, p. 114; Kitsikopoulos, 'Standards', p. 239.

Yet despite the constraints under which peasants were producing at Oakington, they created a system of land use that allowed for very high levels of output. This should not necessarily be viewed as a less innovative response to the problems posed by a difficult social, economic, and physical environment than price-responsive market production. This analysis has demonstrated the complexity of peasant agriculture and the complicated, and often highly localized, factors driving resource allocation and decision making on peasant lands.

Peasants at Oakington could well have been representative of a section of the English population who, constrained by competing needs of production and consumption, and unable to change their conditions of tenure, found themselves little or no better off at the end of the fourteenth century than they had been at the beginning of the period. For these people, the dramatic alterations to the national economy of late medieval England brought very little change to their own smaller, local economies. Further research, using local data within the framework utilized here, would show how far the experience of Oakington is reflective of peasant agriculture in the late medieval period.

The conduct of the coastal metropolitan corn trade during the later seventeenth century: an analysis of the evidence of the Exchequer port books

by Stephen Hipkin

Abstract

The later seventeenth century witnessed a marked increase in the proportion of London's expanding coastal corn imports handled by large shippers. However, while heavy concentrations of trade in few hands at ports supplying the capital alert us to the possibility that leading merchants may have been able to rig local markets, they are not in themselves reliable indicators of oligopsonistic market relations since it is impossible to determine the status of corn shippers from the entries in the London coastal port books covering the post-Civil War period. It seems likely that the period saw the growth of a class of substantial provincial corn merchants and of a breed of agents who organized and oversaw corn exports belonging to producers or other middlemen. Local port book evidence reveals some striking variations in the conduct of the corn trade along the coast of north-east Kent, particularly in respect of the roles played by shipmasters.

Historians are now well informed about how agricultural producers responded to the commercial opportunities brought about by the growth in the English population dependent on the market during the sixteenth and seventeenth centuries. But as Hoyle has recently reminded us, much less is known of 'the systems of retailing and transportation which conveyed market signals into the countryside and conveyed foodstuffs from the countryside to the town and metropolis'.[1] Sadly, comparatively little can be done to dispel our ignorance of the scale and conduct of overland trade in early modern England, since it attracted neither the central government regulation nor the state taxation that would have generated records permitting its quantitative analysis. However, principally as a by-product of the crown's desire to minimize evasions of customs duties on overseas trade, much of Tudor and Stuart England's coastal commerce was, in theory at least, regulated and recorded. As Fisher's article on the London food market during the pre-Civil War period demonstrated almost 80 years ago, the Exchequer port books that survive for many ports from 1565, albeit often in very broken series, provide opportunities to measure trends not only in the volume of coastal trade but also in the numbers recorded as responsible to different extents for its conduct.[2]

[1] R. W. Hoyle, 'Estate management, tenurial change and capitalist farming in sixteenth-century England', *Il Mercato della terra secc. XIII–XVIII* (2003), p. 355.

[2] T. S. Willan, *The English coasting trade, 1600–1750* (sec. edn 1967), pp. 1–10; N. J. Williams, 'The London port books', *Trans. London and Middlesex Arch. Soc.*, 18

Yet in 1985, when Chartres reviewed work on the extent to which the coastal metropolitan corn trade was 'concentrated in few hands' at its provincial end during the later seventeenth century, he found only Burley's examination of trade from the Essex port of Maldon in 1664, 1676 and 1700, and Coleman's exploration of trade from the Kent ports of Milton and Faversham in 1662–3 and 1699–1700, and from Sandwich in 1665–6 and 1699–1700. Unsurprisingly, Chartres called for 'massive work on port books' to provide a fuller picture.[3] What follows provides the overdue response to that call. It is also intended as the companion piece to a recent article examining the growth of the coastal metropolitan corn trade in the later seventeenth century.[4] That article showed that by the time of the Glorious Revolution the trade was twice the size that historians relying on the work of Gras had assumed it to be and that it comprised two distinct strands of roughly equal size: one providing food and drink for the London population, the other (the trade in fodder crops) fuelling the overland trade of the capital. It also demonstrated that, thanks largely to the agency of southern English mariners commanding large coasters, London's demand for fodder crops after the mid–1670s drew most of the coast stretching from as far as Berwick in the North East to Whitehaven in the North West into the orbit of the metropolitan corn market.

In his contribution to volume five of the *Agrarian History of England and Wales* Chartres reported the findings of Burley and Coleman as indicating 'a fiercely competitive market in the selling of cereals in the Kentish ports of Faversham and Sandwich, and in the Essex port of Maldon' during the later seventeenth century. Milton, he thought, 'provides a case of oligopoly, but it was by comparison a relatively small shipping port'; the balance of the available evidence pointed to 'a competitive pattern of factorage, with farmers able to benefit most clearly from this competition in the largest or "quickest" markets'.[5]

However, by the time he came to write his study of London's food consumption and internal trade (published in 1986), Chartres had evidently had second thoughts. Now he argued that 'Coleman's study of Kent and Burley's of Essex both point clearly to [the] fact' that while London's 'supplying merchant shippers in the grain trade were both small and numerous, at their home ports they were often oligopolists'. Dennis Baker's 'massive study of the Kentish marketing system up to 1760' he further suggested, while presenting 'no data for exact comparison … implies a similar if less extreme degree of concentration' of market power. Exports from Kent, Baker was said to have shown, 'were characterized by unequal exchange'. 'Smaller farmers', Chartres now concluded, 'dealt with millers and hoyman-factors on terms of inequality, and the net effect may have been to redistribute wealth towards mercantile capital'. Moreover, while provincial merchants had the upper hand in their dealings with smaller farmers, Chartres argued that evidence for the corn trade at Wiggins Quay in 1678–80

Note 2 *continued*
(1955), pp. 21–23; id., *The maritime trade of the East Anglian ports, 1550–1590* (1988), pp. 18–20. F. J. Fisher, 'The London food market, 1540–1640', repr. in E. M. Carus-Wilson (ed.), *Essays in economic history* (3 vols, 1954), I, pp. 135–51.

[3] J. A. Chartres, 'The marketing of agricultural produce', in J. Thirsk (ed.), *The agrarian history of England and Wales,* V, *1640–1750* (2 vols, 1985), ii, p. 476.

[4] S. Hipkin, 'The coastal metropolitan corn trade in later seventeenth-century England', *EcHR* 65 (2012), pp. 220–55.

[5] Chartres used the term 'factor' to describe 'pure commission agents or merchants acting on their own account'. Chartres, 'Marketing' pp. 475–7.

demonstrated that London cornfactors held the whip hand in their dealings with provincial merchants. 'The hierarchy of the corn trade thus represented an inverted pyramid, and tended to shift a substantial proportion of the gains from increased agricultural productivity towards urban merchant capital, above all in London'.[6]

Chartres's 1986 verdict has become the orthodoxy.[7] Yet, as we shall see, none of the evidence he cited as corroborating it lends unequivocal support to his overarching conclusion. This is not to say that later seventeenth-century port book evidence does not point to the *possibility* of oligopsonistic market relations at a number of provincial ports supplying corn to the capital. The analysis set out below in Appendix 1 does, I want to suggest, furnish a reasonable guide to locations along the English coastline where, at various times in the later seventeenth century, leading shippers in the export trade may have been able to rig local corn markets. However, in interpreting these data it is important to bear in mind the ambiguities in post-Civil War port book entries, as well as the implications of the fact that 'customs ports' were defined by Exchequer commission as lengths of coastline rather than topographical ports, a point developed in Appendix 2. As will be demonstrated in the case of Milton, other evidence can show that apparently strong indications in port books of the local market power of leading shippers may be entirely misleading.

Section I of this article highlights the ambiguity of entries in later seventeenth-century port books by comparing them with the much fuller entries in the port books for London and the ports of north-east Kent in the pre-Civil War period. Section II extends into the late seventeenth century Fisher's analysis of 'mercantile' participation in the coastal corn commerce from the London end of the trade, disclosing a strikingly different trend in the half-century after 1638 to that which Fisher detected in the preceding half-century. Section III discusses the analysis of the trade from its provincial end that is presented in Appendix 1, while Appendix 2 explores the ways in which statistics derived from port books probably often obscure the proportion of trade conducted by leading shippers in topographical ports because of the way 'customs ports' were defined by the Exchequer.

While the evidence of the later Stuart port books can do no more than alert us to the possibility that the terms of trade within particular customs jurisdictions were manipulated by a handful of leading merchants, it does assuredly tell us a great deal about the numbers of shipmasters who, to varying extents, found employment in the carriage of corn to the capital, about how strong their working associations were with particular shippers, and about how many combined the roles of shipmaster and shipper in the coastal corn export trade. In each of these respects, there are intriguing contrasts in the ways the trade was conducted within the jurisdictions of the customs ports of Milton, Faversham and Sandwich during the late sixteenth and seventeenth centuries. Following a review, in section IV, of long-term changes in the volume of corn exported to London from the ports of north-east Kent, these contrasts are explored in section V of the article. Section VI briefly summarizes the key findings of Dennis Baker's

[6] J. A. Chartres, 'Food consumption and internal trade', in A. L. Beier and R. Finlay (eds), *London, 1500–1700* (1986), pp. 185–6.

[7] Chartres's 1986 article is, for instance, the sole authority cited for Glennie and Whyte's assertion that 'strongly oligopsonistic market relations concentrated power among large-scale buyers at all levels of grain trading'. P. Glennie and I. Whyte, 'Towns in an agrarian economy, 1540–1700', in P. Clark (ed.), *The Cambridge urban history of Britain*, II, *1540–1840* (2000), p. 175.

qualitative examination of the configuration of north-east Kent's coastal metropolitan corn trade in the early eighteenth century and considers how they may profitably inform interpretation of late seventeenth-century port book evidence for Milton and Faversham. Finally, section VII returns to the London end of the coastal trade, comparing data in the records of Wiggins Quay for 1680 with that in the Sandwich coastal port book covering the same year and suggesting an alternative reading of the Wiggins Quay evidence to that advanced by Chartres.

I

The prevailing administrative culture among officials who compiled the late Elizabethan and early Stuart coastal port books for the customs ports of Milton, Faversham and Sandwich led to the production of accounts that are sufficiently detailed to inspire confidence in making judgements about the number and status of corn shippers from what was by far the most important coastal region supplying the capital in the pre-Civil War decades.[8] Port book entries not only indicate when more than one shipper was responsible for a consignment but also name them, and when agents consigned shipments they supply the name of the agent and the name of the owner of the corn for whom he was working. A number of later sixteenth-century port books for Faversham and Milton also specify the occupation and place of residence of each shipper. The handful of extant pre-Civil War London coastal port books are somewhat less informative, in that, occasionally in 1586 and 1638 and more often in 1615, entries signal that cargos were made up of consignments despatched by two or more shippers yet identify only one of the shippers sending corn. Thus, for instance, an entry for 14 February 1615 records that a cargo of malt and wheat in the *Mary* of Faversham was consigned by 'Jo. Wood et alii'.[9] Nevertheless, such entries do at least alert us to cargos assigned by more than one shipper. Agents acting on behalf of owners are also sometimes identified.

Of course, for the great majority of entries in pre-Civil War port books that name only one person as the shipper we cannot be *certain* that customs officials had not left anything out, and that the person named was the sole owner of the whole consignment. Nonetheless, the fact that a significant minority of entries in pre-Civil War Kent and London port books *do* name and distinguish agents and owners, *do* specify cargos consigned by more than one shipper, and *do* name the parties in such cases, suggests, at the very least, that customs officials were concerned to provide these details when they were known.[10] Equally, the fact

[8] S. Hipkin, 'The structure, development and politics of the Kent grain trade, 1552–1647', in Jane Humphries and Steve Hindle (eds), *Feeding the masses* (Economic History Review Supp. 1, 2008), pp. 106–19.

[9] TNA, E 190/18/1, unfol., E 190/7/6, fos 41v, 45, E 190/41/6, fo. 38v. Fisher's suggestions for aggregate numbers of 'merchants' participating in the corn trade must therefore be regarded as minima. A further probable implication of such entries, and of the fact that small and/or short-distance corn shipments authorized by warrant of *transire* rather than certificate generally escaped notice in London port books, is that the proportion of shippers responsible for consigning only modest quantities of corn to the capital during pre-Civil War years was even greater than Fisher's figures suggest. Hipkin, 'Metropolitan corn trade', pp. 224–6.

[10] There is only one conspicuous shortcoming in the pre-Civil War Faversham and Milton accounts: they do not specify the locations along the stretch of coastline falling under the jurisdiction of the customs port from which cargos were despatched to London. Pre-Civil War accounts for the customs port of Sandwich do, however, provide this information.

<table>
<tr><th colspan="2">Source of corn</th><th>Identity of shipper of corn cargo in coastal port book entry</th><th colspan="3">Intermediaries</th><th>At London quayside</th></tr>
<tr><td rowspan="5">Farmer</td><td colspan="2" rowspan="2">is also the shipper in the coastal port book entry</td><td>who pays</td><td>a) shipmaster for freightage</td><td>b) London sales agent</td></tr>
<tr><td>who pays</td><td colspan="2">shipmaster for freightage and factorage at London quayside</td></tr>
<tr><td>pays</td><td>Agent</td><td colspan="4">who organizes freightage and sale of the corn consignment on arrival in London</td></tr>
<tr><td>sells to</td><td>Provincial corn dealer</td><td>who pays</td><td>a) shipmaster for freightage</td><td>b) London sales agent</td></tr>
<tr><td rowspan="11">Farmer/ dealer</td><td rowspan="4">sells to</td><td>London merchant</td><td colspan="4" rowspan="2">who pays shipmaster for freightage</td></tr>
<tr><td>Agent of London merchant</td></tr>
<tr><td rowspan="3">Shipmaster-merchant</td><td>who pays</td><td>a) another mariner for freightage</td><td>b) London sales agent</td></tr>
<tr><td colspan="2">who pays</td><td>London sales agent</td></tr>
<tr><td colspan="4">who sells his own corn in London</td></tr>
<tr><td rowspan="4">pays</td><td rowspan="2">Shipmaster</td><td colspan="4">who transports corn to London and sells it for the farmer on commission</td></tr>
<tr><td colspan="2">who transports corn to London and pays</td><td>London sales agent</td></tr>
<tr><td rowspan="2">Agent employed by or working in partnership with shipmaster</td><td colspan="2" rowspan="2">shipmaster carries corn to London and hands it over to</td><td>factor employed by farmer/provincial dealer to sell it in London</td></tr>
<tr><td>factor employed by shipmaster to sell it in London</td></tr>
<tr><td>sells to London merchant or his agent</td><td>Shipmaster working for London merchant</td><td colspan="4">who transports corn to London</td></tr>
</table>

FIGURE 1. Some possible functions performed by those shipping corn cargos to London

that later seventeenth-century accounts for Kent ports and for London hardly ever offer such information suggests that customs officials were no longer minded to record it. Clearly, while it is reasonable to assume that, unless indicated otherwise, the corn exporters named in pre-Civil War port books for London and the ports of north-east Kent were the owners of the corn they shipped, no such assumption can be made about shippers named in post-Civil War port books.

Thus, even if it is assumed, as it is in what follows, that, after the Restoration, corn cargos were organized solely by those identified in port books as responsible for them, which of course may not always have been the case, there remains the issue of the capacity in which the named shipper was acting. While the William Ovenden recorded in the London port book as the

exporter of 80 qr of wheat, 20 qr of barley and 100 qr of malt unloaded from a Margate ship on 4 March 1681 *may* have owned the grain, he may equally have been a logistics and/or buying or sales agent working for one or more owners, or else the owner of part of the corn he shipped and an agent for the owners of the rest. Equally, his primary occupation might be farmer, merchant trading on his own account, commission agent, or shipmaster.[11] Figure 1 illustrates just some of the possible roles and identities of those named as shippers in port books.

II

Fisher's analysis of numbers of 'merchants' (that is, those named in port books as responsible for organizing shipments) involved to differing degrees in the coastal metropolitan corn trade in 1586, 1615 and 1638 is reproduced in Figure 2, which also shows the results of a similar exercise for four years in the later seventeenth century, 1688 being the last moment for which London coastal port book data covering a 12-month period survive.[12]

Viewing developments exclusively from the London end of the trade, Fisher concluded that the expansion of the coastwise trade during the late sixteenth and early seventeenth centuries was 'not accompanied by the rise of a class of grain merchants' (Figure 3).[13] Indeed, shippers handling 1000 quarters and upwards consigned considerably less grain to the capital in the early seventeenth century than they had in 1586, and their share of the coastal trade fell from 24.2 per cent to 11.5 per cent (Figure 4).[14] The growth of the coastal metropolitan corn trade

[11] TNA, E 190/98/1, unfol.

[12] Fisher, 'London food market', p. 147 n. 59. Fisher's statistics for 1580 must be discounted, since they are based on a highly defective port book. For purposes of Fig. 2 it is assumed that identical names (i.e. Christian name and surname) identify different merchants where they are found referring to shippers exporting to London from different ports. Plainly, this will tend to inflate suggestions for numbers of shippers, though it does not do so dramatically. For instance, the total of 456 identified in Fig. 2 as the number of shippers active in the coastal metropolitan corn trade in 1681 includes 40 names common to shippers from more than one port, and the 846 identified as active in 1688 includes 37 names common to shippers from more than one port. Undoubtedly there were some men who shipped corn to London from more than one outport. In 1681, Sir Edward Allen (Milford Haven and Hull), George Moore (Stockton and Milford Haven), Sir John Moore (Hull, Sandwich and Newcastle), Robert Buckle (Carmarthen, Cardigan, Milford Haven, Chester and Faversham), William Russell (Hull, Milford Haven and Carmarthen) and Anthony Sturt (Lancaster and Ipswich) were all probably the London dealers whose names can be found in a directory of metropolitan merchants published in 1677 and/or amongst the names of merchants exporting corn from London to the continent between 1676 and 1683. Between them, Allen, Buckle, George Moore and Russell exported 20% of the 18,641 qtrs of Welsh oats shipped to the capital in 1681. Samuel Lee, *A collection of the names of the merchants living in and about the city of London* (1677); N. S. B. Gras, *The evolution of the English corn market from the twelfth to the eighteenth century* (1915), pp. 196–7; K. H. Burley, 'The economic development of Essex in the later seventeenth and early eighteenth centuries' (unpublished PhD thesis, University of London, 1957), p. 289, n. 1; TNA, E 190/98/1. In some cases, names identified with shipments from more than one port belonged to peripatetic mariner-merchants commanding ships based in southern English ports, for instance the Brighton master John Woolford who, in 1681, consigned cargos to London from Milford Haven and Carmarthen. Hipkin, 'Metropolitan corn trade', pp. 240–1.

[13] Fisher, 'London food market', p. 147. For evidence of very different views at the provincial end of the trade, see Hipkin, 'Kent grain trade', pp. 119–24.

[14] Fisher, 'London food market', p. 147. To some extent, this decline reflected the failure of a precocious later Elizabethan cohort of Faversham and Milton corn merchants to spawn lasting mercantile dynasties. Hipkin, 'Kent grain trade', pp. 120–2.

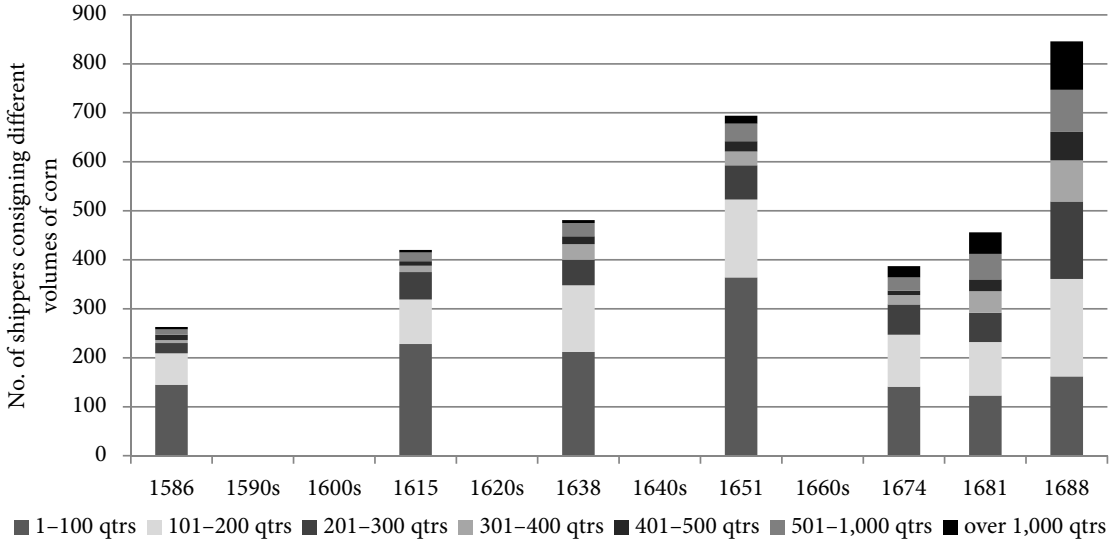


FIGURE 2. Coastal metropolitan corn shippers recorded in London port books, 1586–1688

Sources: Fisher, 'London food market', p. 147, n. 59; TNA, E190/46/1, E190/61/2, E190/98/1, E190/146/1.

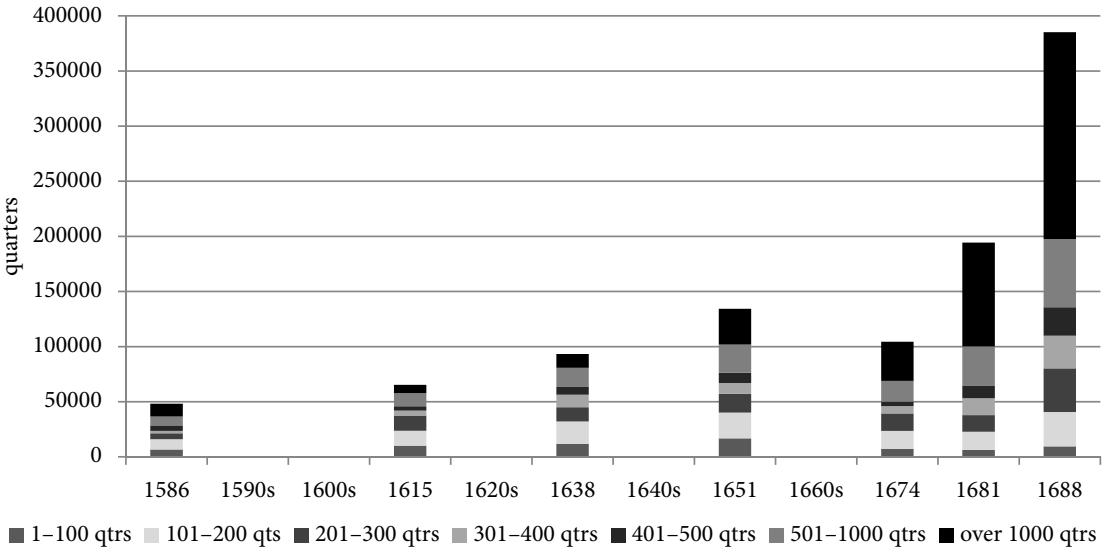


FIGURE 3. Volume of corn consigned to London by shippers of different size, 1586–1688

Sources: As Figure 2.

during the 60 years before the Civil War was 'primarily the work of smaller men'.[15] In Thanet, where the rise of exports to London was particularly marked, these 'smaller men' were often farmers trading with the capital on their own account, and it was probably much the same

[15] Fisher, 'London food market', p. 147.

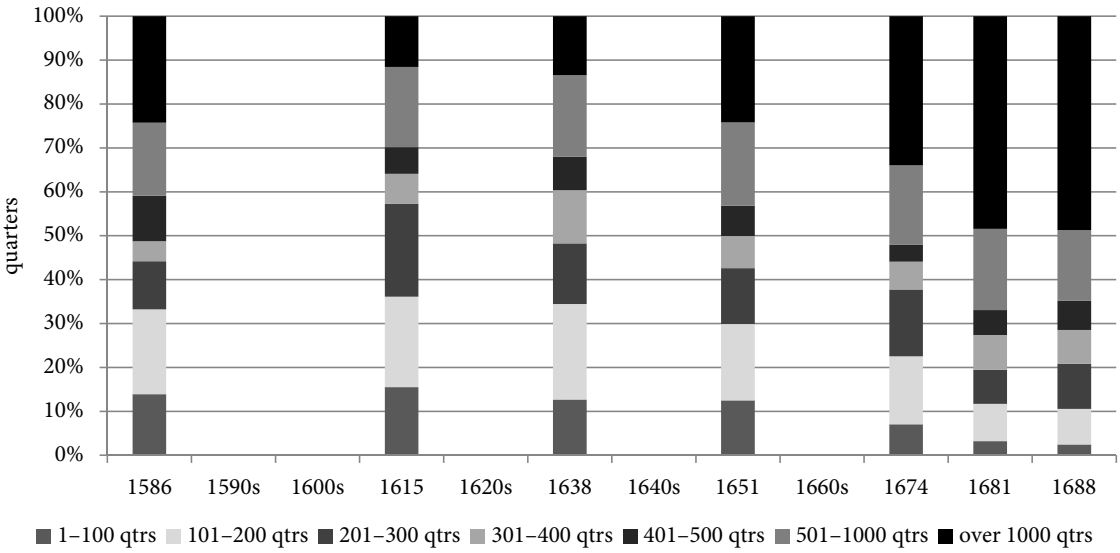


FIGURE 4. Proportion of the coastal metropolitan corn trade conducted by shippers of different size, 1586–1688

Sources: As Figure 2.

story in Norfolk, Essex and Sussex, which by the early seventeenth century were also making significant contributions to London's coastwise corn supply.[16]

As Figure 2 shows, if data for the shortage year of 1651 are any guide, the number of men shipping small quantities of corn to the capital continued to increase until the mid-seventeenth century. Yet the 1651 London port book also discloses the much greater contribution (compared with 1615 and 1638) of substantial grain shippers to the coastal corn supply of the capital (Figure 3). Spearheaded by John Day, who exported 8291 quarters from Faversham, and John Does, who consigned 4424 quarters from Sandwich, a total of 16 shippers (13 from Kent, one from Maldon, one from Yarmouth, and one from Boston) each exported more than 1000 quarters to the metropolis, and together they consigned 24.2 per cent of the coastal metropolitan supply. After 1651, as Figure 3 indicates, the prominence in the coastal metropolitan corn trade of what Fisher was pleased to call 'big men' continued to grow, though to what extent they were exporting their own corn as opposed to organizing shipments on behalf of others in return for a fee is, for reasons already mentioned, impossible to determine.[17] In 1674 they were responsible for conducting one third of the trade, and in 1681 nearly one half of it. During the 1680s when the coastal metropolitan corn trade doubled in size, so did the volume of corn shipped by big men. In 1688, the 99 (of 846) participants in the coastal trade who shipped 1000 quarters or more sent 187,665 quarters of corn to the capital; more, that is, than historians until recently imagined to be the annual volume of the entire coastal metropolitan corn trade during the 1680s.[18]

[16] Hipkin, 'Kent grain trade', pp. 115–16, 122–3, 134.
[17] Fisher, 'London food market', p. 147, n. 59.
[18] Hipkin, 'Metropolitan corn trade', pp. 223–4, 255.

III

If, viewed from the London end of the commerce, the growth of a class of substantial shippers in the coastal corn trade in the 50 years after 1638 is clear enough, how do things look from the perspective of ports supplying the metropolis? Appendix 1 shows the volume of corn exported to the capital from every location along the coast identified in the London port books covering 1651, 1674, 1681, 1688 and the last half of 1695. For each of these years it also shows the number of shippers consigning corn from every recorded place of export, and for each of these places the proportion of coastal metropolitan exports handled by the five largest shippers.

As might be expected, Appendix 1 reveals a great deal of short-term variation not only in the size of the coastwise metropolitan corn trade at particular ports, but also in the number of shippers participating in it. However, where the coastal metropolitan trade was well established by 1651, there was a marked reduction in the number of shippers conducting it by 1688. In the 11 ports that consigned more than 1500 quarters to London in both years, 618 shippers exported 125,629 quarters in 1651, whereas just 349 exported 160,277 quarters in 1688. Nonetheless, even during the late seventeenth century there were many shippers who participated only occasionally in the coastal trade. In 1688, 30 of 53 individuals shipping corn from Faversham, and 44 of 59 exporting from King's Lynn, sent just one consignment to London. Since many of these once-a-year traders were probably farmers exporting their own produce, the pool of merchants buying corn locally for export to the capital or offering their services as agents who would broker its shipment and sale must often have been smaller than figures in Appendix 1 may appear to suggest.

Among those trading more regularly from ports exporting substantial quantities of corn to London during the later seventeenth century, it is usually possible to identify a distinct core of leading shippers. Frequently handling between half and two thirds of metropolitan exports, occasionally more, these leading shippers often included one or two whose local market presence – if they were buying the grain they shipped – must have been keenly felt: men like the shipmaster-cum-shipper Jonah Lambe, who in 1674 accounted for 85 per cent of corn exports from Leigh (Essex), and Walter Long, who in 1688 exported 9036 quarters from Great Yarmouth, 78 per cent of the port's coastwise metropolitan corn trade.[19] Moreover, because 'customs ports' were stretches of coastline which might embrace a number of places from which corn exports were shipped to London, there is good reason to suppose that the figures set out in Appendix 1 may often understate the degree to which in reality the conduct of the coastal metropolitan corn trade was concentrated in the hands of a few shippers in topographical as opposed to 'customs' ports. The probable reality along the coast of north-east Kent is explored in Appendix 2, and it is to case studies drawn from that region that we now turn to examine in greater depth those aspects of the conduct of the coastal trade at its provincial end upon which port book evidence casts direct light. It scarcely needs saying, however, that there may have been many variations in provincial trading cultures beyond those observable by comparing evidence for the customs ports of Milton, Faversham and Sandwich.

IV

The changing size and significance of the contribution of corn exports from Milton, Faversham and Sandwich to the coastal provision of the capital during the late sixteenth and seventeenth centuries are highlighted in Figures 5 and 6. Between the 1580s and the 1650s when the coastal metropolitan corn trade roughly trebled in size, the coast of north-east Kent consistently shipped 50–60 per cent of London's imports. The region still accounted for nearly half of the trade as late as 1674, but although the three ports shipped corn to London in much greater amounts during the 1680s, such was the expansion of the coastal corn trade to London from other regions in the decade before the Glorious Revolution that the proportionate contribution of the Kent ports fell to around one quarter, at which level it remained during the 1690s.

Figures 7–9 show aspects of the evolution of the metropolitan trade from each customs port between 1580 and 1700.[20] Although the great bulk of the capital's corn requirement was furnished by inland producers and conveyed by cart or river barge, it seems clear that early Stuart London normally depended on seaborne imports for part of its corn supply, and that the substantial expansion of the corn trade from Faversham and Sandwich in pre-Civil War decades was driven by metropolitan demand rather than regional surplus. Undoubtedly, demand from the capital stimulated corn production in north-east Kent, particularly in Thanet, and, as noted earlier, many of the farmers who 'increasingly looked to the London market as the hub of their economic universe' chose to trade with the capital on their own account.[21] Thus, the number of corn shippers rose substantially at Faversham and Sandwich. At the same time, the proportion of trade handled by the five largest shippers fell at Faversham to around one third, and at Sandwich to one fifth.

If the first half of the seventeenth century saw a significant expansion in the volume of the coastal metropolitan corn trade from north-east Kent, things were very different in the first two decades following the Restoration. I have argued elsewhere that there is compelling evidence that, by the mid-1670s, and probably by the Restoration, improvements in the supporting commercial and transport infrastructure and in the conduct and productivity of agriculture in the capital's inland provisioning zone meant that it was, other than in the wake of severe harvest failure, more than capable of delivering all the corn intended for human consumption that Londoners required.[22] This of course meant that, to sell in the London market, Kent corn delivered coastwise had to compete successfully with supplies delivered overland, and from other coastal regions. All the available port book evidence – though there is not much of it – suggests that in the late 1660s and early 1670s it was often unable to do so. During this period, the London corn trade from Faversham and Milton was about half the size it had been in the 1630s, and at Sandwich only 16,000 quarters of corn were shipped to

[19] TNA, E 190/61/2, 46/1.

[20] In cases where both owners of grain and agents for its export to London are specified in pre-Civil War port book entries, calculations for Figures 6b, 6c, 7b, 7c, 8b and 8c count the owner rather than the agent as the 'shipper'.

[21] Hipkin, 'Kent grain trade', pp. 106–119; Fisher, 'London food market', p. 145. The most widely accepted estimates suggest London's population rose from 200,000 in 1600 to 400,000 by 1650. J. Boulton, 'London 1540–1700' in Clark (ed.), *Cambridge urban history*, II, p. 316.

[22] Hipkin, 'Metropolitan corn trade', pp. 223, 229–36.

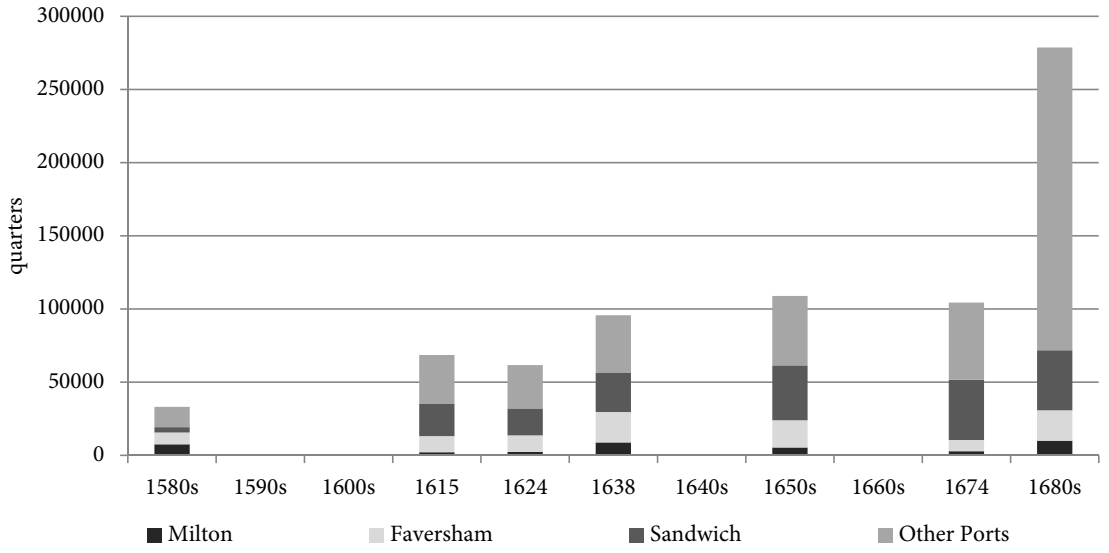


FIGURE 5. Volume of coastal corn exports to London, 1580–1688

Sources: Fisher, 'London food market', pp. 136, 138; Hipkin, 'Kent grain trade' pp. 107–8; TNA, E190/45/4, E190/45/6, E190/46/1, E190/46/2, E190/61/2, E190/63/6, E190/98/1, E190/110/1, E190/122/1, E190/140/3, E190/141/3, E190/146/1.

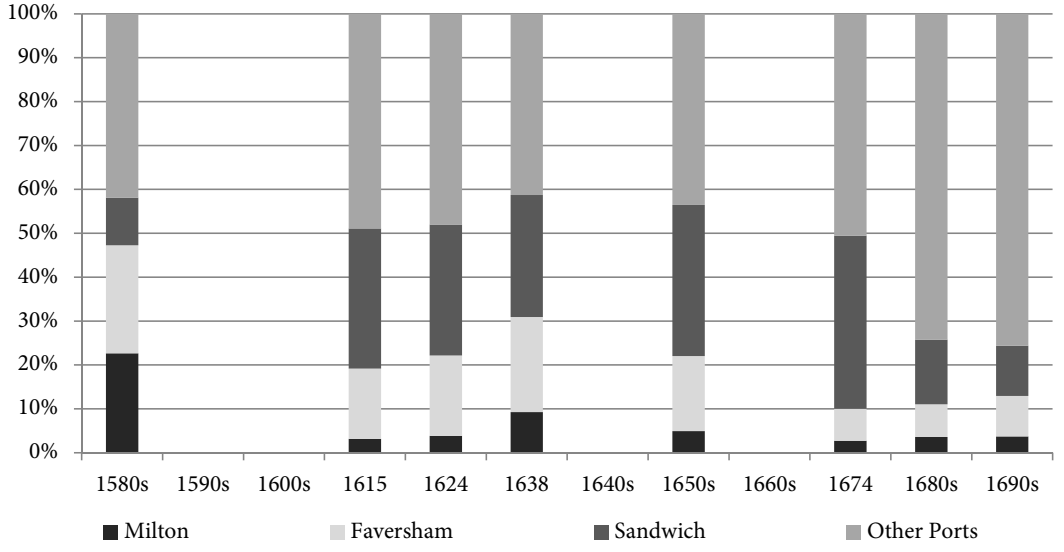
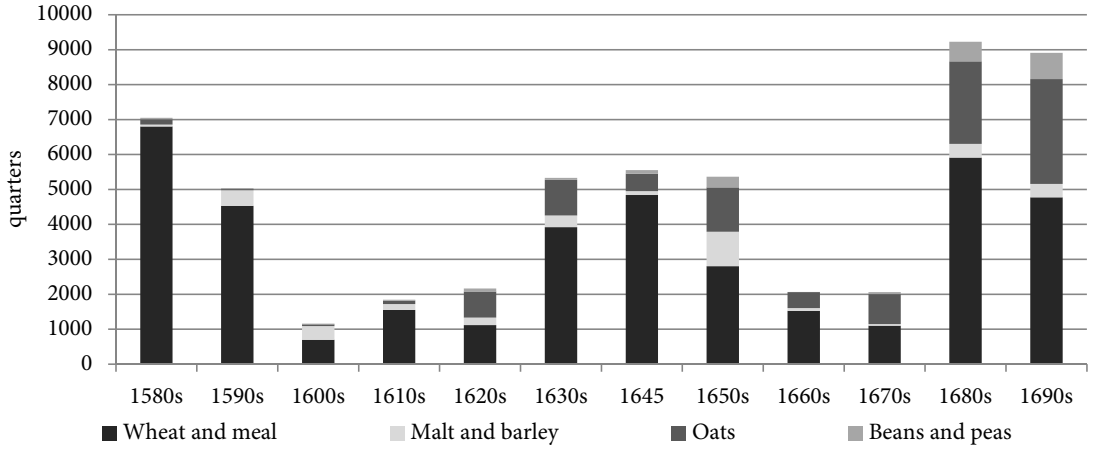
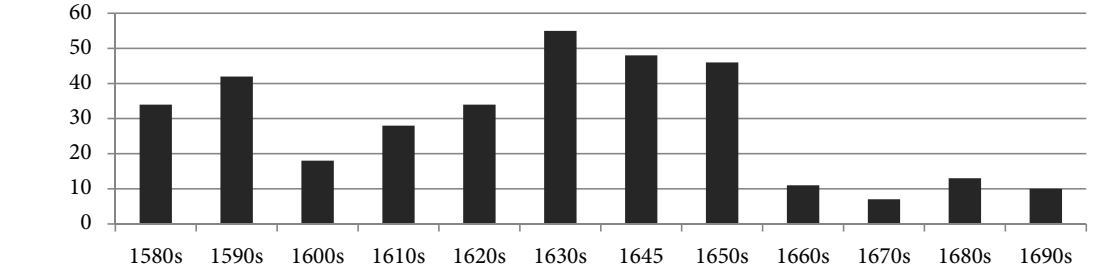


FIGURE 6. Proportionate contribution of Milton, Faversham and Sandwich to coastal corn exports to London

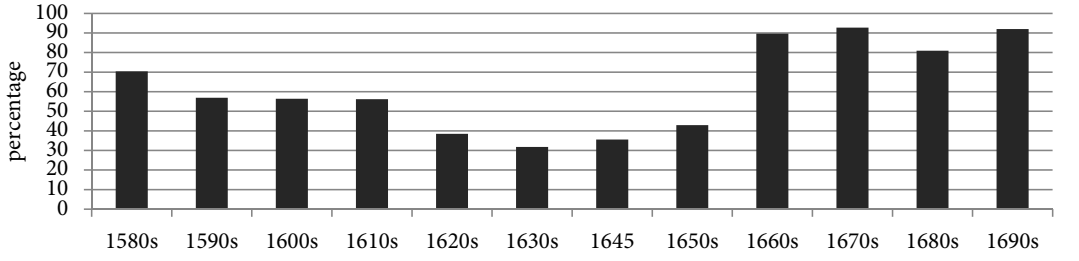
Sources: As Figure 5, and TNA, E190/149/10, E190/151/1, E190/155/2.



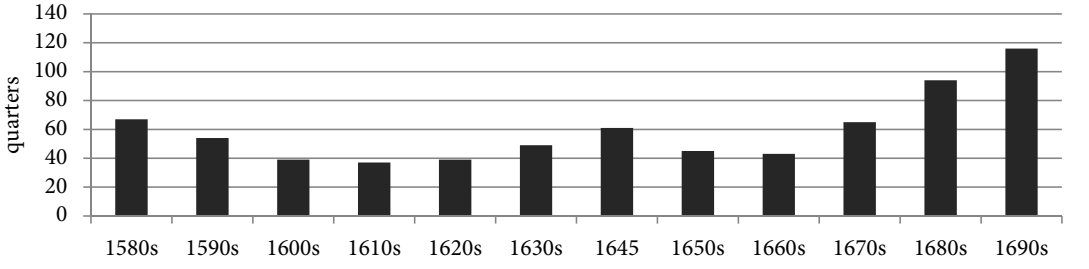
a. Volume of exports to London



b. Average number of corn shippers



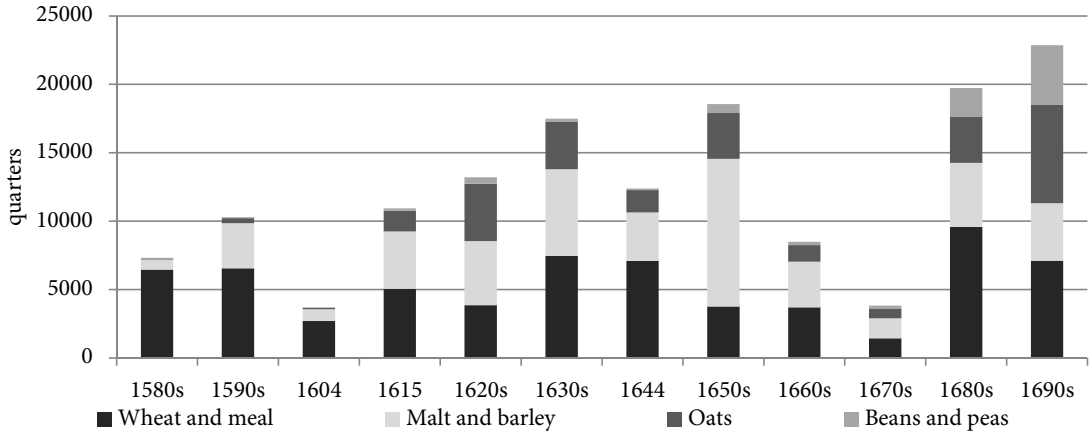
c. Proportion of trade by top five shippers



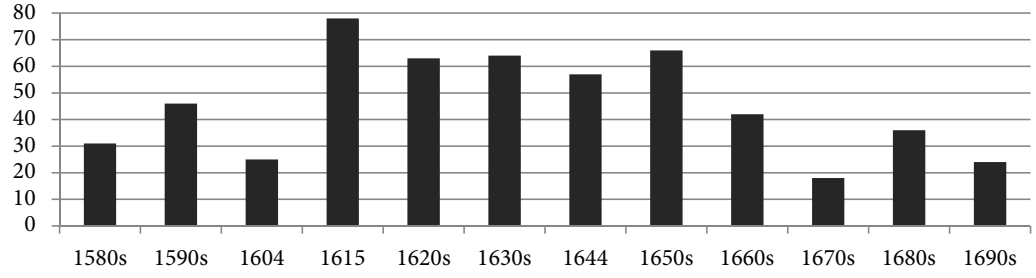
d. Average size of corn shipment

FIGURE 7. The evolution of the coastal metropolitan corn trade of Milton, 1580–1700

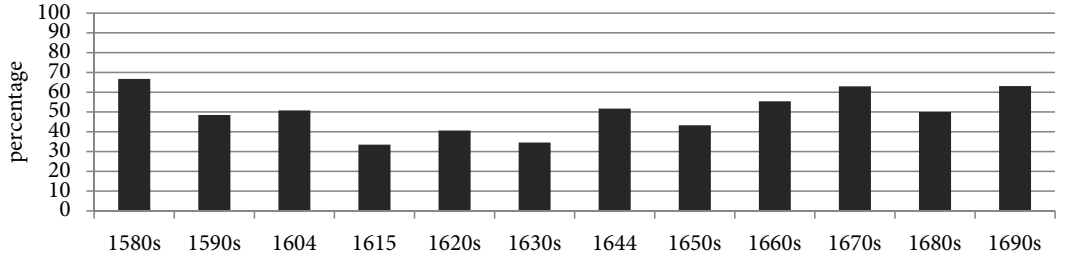
Sources: TNA, E190 (Exchequer Port Books, 1580–1700).



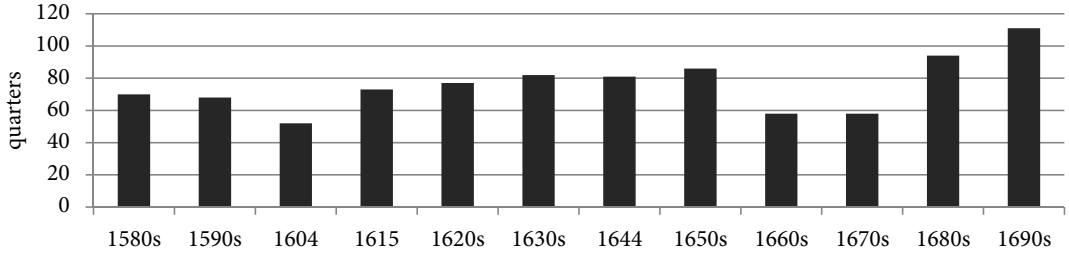
a. Volume of exports to London



b. Average number of corn shippers



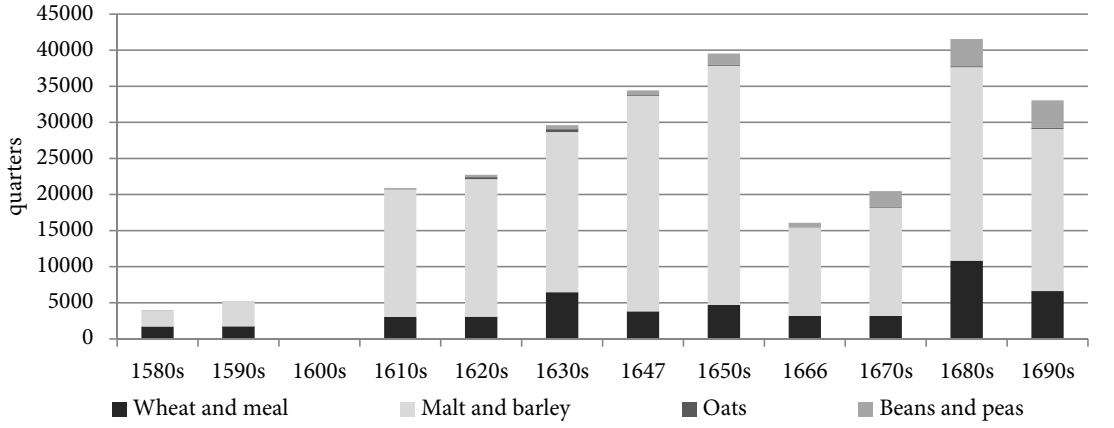
c. Proportion of trade by top five shippers



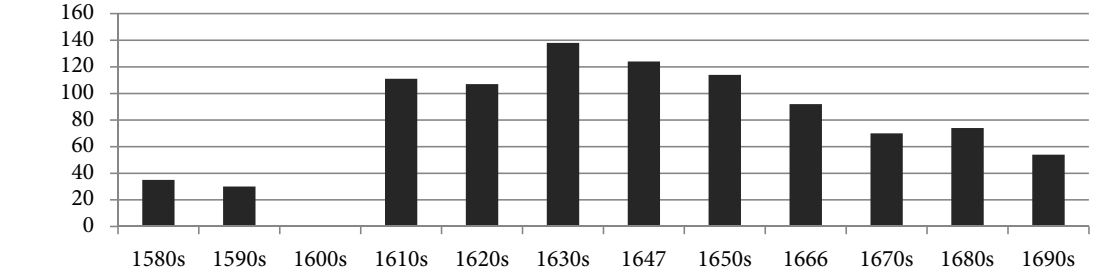
d. Average size of corn shipment

FIGURE 8. The evolution of the coastal metropolitan corn trade of Faversham, 1580–1700

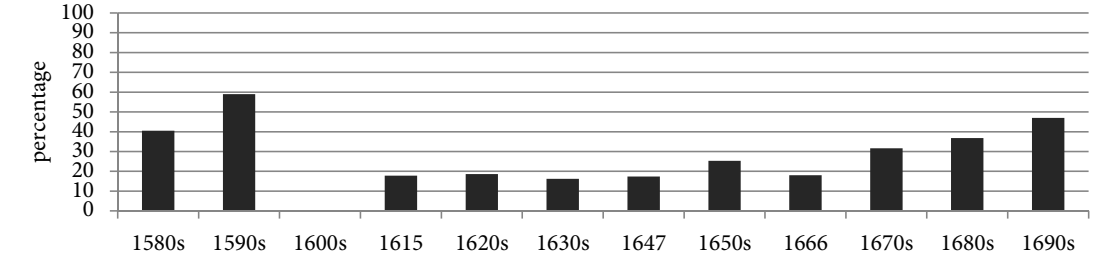
Sources: TNA, E190 (Exchequer Port Books, 1580–1700).



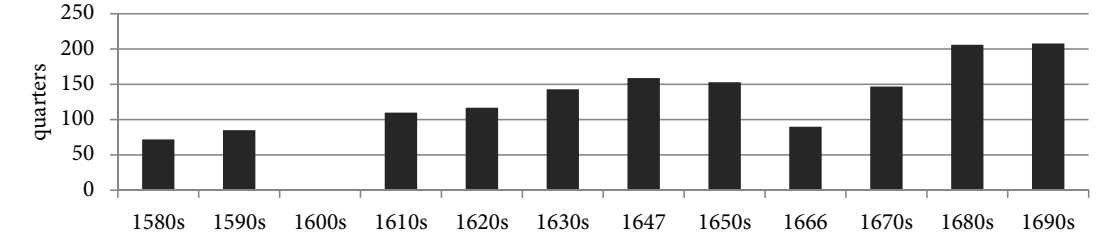
a. Volume of exports to London



b. Average number of corn shippers



c. Proportion of trade by top five shippers



d. Average size of corn shipment

FIGURE 9. The evolution of the coastal metropolitan corn trade of Sandwich, 1580–1700

Sources: TNA, E190 (Exchequer Port Books, 1580–1700).

the capital in 1666, compared with normally more than 30,000 quarters during the 1630s.[23] It may be that the decade following the dearth of 1661–62, when grain prices were consistently low, witnessed a reduction of the acreage given over to corn production in north-east Kent.[24] In August 1668, one correspondent reported from Deal that having 'been at several places in the country, and also in the city of Canterbury', he found 'all complain at the dullness of trade, and the country people much at the great cheapness of corn and number of taxes. Many farmers give the landlords their leases and to[o] many of late and before or by next Michaelmas must break, and talk very boldly'.[25]

Even if they kept faith with corn, by the time the government first experimented with bounties to stimulate overseas grain exports (and enable landowners to pay taxes), many north-east Kent producers may have severed the connections their predecessors had maintained with commission factors in the capital and ceased to regard the London market as the hub of their economic universe. While exceptionally high metropolitan prices following the very poor grain harvest of 1673 did stimulate a revival of grain exports from Sandwich in 1674, the response at Faversham and Milton was muted, and between 1675 and 1678, when the coincidence of corn bounties and war between France and Holland briefly stimulated significant continental demand for the region's corn, coastal metropolitan exports from Faversham and Milton were reduced to a trickle, while those from Sandwich averaged less than 15,000 quarters.[26]

Unless currently accepted estimates of London's population during the late seventeenth century are far too low, there can be little doubt that the inland provisioning zone of the capital was as capable of providing the bread and brewing grains that its population required in the 1680s as it had been in the 1670s, for national harvest yields for the grains consumed by Londoners for the most part ranged from good to abundant throughout the decade.[27] It might therefore be expected that corn supplied from the north-east Kent coast would enjoy no more success in the metropolitan market than it had in earlier post-Restoration years. Clearly then, port book evidence that during the 1680s (and the 1690s) corn was often shipped from Sandwich, Faversham and Milton to London in large quantities requires some explanation.[28]

Much of the explanation may lie in a widening of differences between local and London prices for beer and bread grains to the advantage of Kent farmers, though in the absence of detailed price data for different grains at either end of the trade this is impossible to determine.[29] Part of the explanation, certainly, lies in rapidly increasing demand for the fodder crops (oats and

[23] Ibid., p. 234 (Fig. 8).

[24] For national grain prices see P. J. Bowden, 'Appendix III: statistics', in Thirsk (ed.), *Agrarian history*, V (ii), pp. 828–9; W. G. Hoskins, 'Harvest fluctuations and English economic history, 1620–1759', *AgHR* 16 (1968), p. 29.

[25] TNA, SP 29/241/207.

[26] Hipkin, 'Metropolitan corn trade', pp. 232–6.

[27] Ibid., p. 236; Bowden, 'Appendix III: statistics', p. 829; Hoskins, 'Harvest fluctuations', pp. 29–30.

[28] For instance, the three ports altogether shipped 55,235 quarters in 1681, 83,940 quarters in 1688, 52,937 quarters in 1692, and 81,114 quarters in 1699.

[29] It should be noted, however, that comparison of Bowden's regional decennial grain price averages for the 'home counties and London' and the 'South' (which included Kent) during the later seventeenth century yields no encouragement for the suggestion that price differences shifted to the advantage of Kent producers during the 1680s and 1690s. Indeed Bowden's regional decennial price averages, which are of course very broad measures, suggest changes in price differences that would have discouraged exports of wheat, malt and barley from Kent to London during the late seventeenth century. Bowden, 'Appendix III: statistics', pp. 864–5.

beans) produced in the Weald and in Blean Forest to fuel the growth of overland transport to and from the capital.[30] However, part of the explanation, perhaps not an insignificant part, may lie in changes in the way trade was conducted during the 1680s, for if the potential for profitable trade depended on the difference between London and local prices, the size of the required difference was determined by transport and transaction costs.

Reductions in transport costs were most likely the result principally of efficiencies arising from the deployment of larger vessels in coastal trade, and of competition between coastal carriers. If the number of shipmasters carrying corn cargos from different places along the coast (taking the home port of the ship as indicative of the place of shipment) offers any guide, evidence summarized in Appendix 2 suggests that during the late seventeenth century there was no increase in competition among carriers – though no shortage of it – at Sandwich, Margate or Faversham, limited but probably effective competition at Whitstable and Milton, a shortage of it at Herne and Queenborough, and a distinct lack of it at Crown Quay. Yet even if there was no obvious increase in competition between carriers, freight charges at most places along the coast may have fallen significantly after the 1670s as a result of the deployment of larger ships in the corn trade. Post-Restoration port books do not record the tonnage of ships engaged in coastal commerce, but compared with the 1670s the average corn shipment from the customs port of Faversham was 77 per cent larger during the 1680s and 1690s, at Milton corn cargos were 62 per cent bigger, and at Sandwich they increased by 41 per cent.[31]

The most striking feature of the metropolitan trade at all three customs ports in the closing years of the seventeenth century is that while the average volume of corn exported annually to the capital was higher than in the 1630s, the number of corn shippers recorded by officials had more than halved. Apart from reducing the unit cost of transporting corn, the deployment of more large ships in the coastal trade must have encouraged farmers with insufficient corn for export to fill a large hoy either to sell locally to middlemen or to employ agents to combine their corn with that of others in single consignments big enough to fill such ships.[32] Yet because it is not possible to determine from later seventeenth-century port book entries the interest shippers had in the cargos they exported, the evidence may equally well reflect the rise of a class of powerful corn merchants perhaps able sometimes to dictate the terms of trade in local markets, or the emergence of a class of agents who specialized in putting together composite cargos of corn owned by a number of clients and ensuring that hoys were regularly sent to London loaded at something close to full capacity.[33] In other words, it is quite possible that

[30] Hipkin, 'Metropolitan corn trade', pp. 237–8, 245–6, 253–4. Fodder crop exports rose from 7825 quarters in 1681 to 14,783 quarters in 1688 and to 22,520 quarters in 1699.

[31] Of course, cargos carried to London sometimes combined grain and other commodities, but throughout the period 1580–1700 a very high proportion of shipments from Faversham, Sandwich and Milton consisted solely of grain; high enough, certainly, to make comparison of average corn cargo sizes over time a meaningful exercise.

[32] Hoys, the 'racehorses of the port', were the favoured vessel for deployment in the corn trade. In the early seventeenth century Faversham's corn hoys were 20–30 tons apiece, but by the 1720s some were as large as 60 tons. D. Baker, 'The marketing of corn in the first half of the eighteenth century: north-east Kent', *AgHR* 18 (1970), p. 130.

[33] To judge from the evidence in Port Books, larger hoys carried a wide range of merchandize on their return from London, but were often filled to considerably less than capacity, presumably because the priority among hoymen specializing in the corn trade was a swift return to collect the next grain cargo.

after 1680 many north Kent farmers, who had previously never engaged with (or had even withdrawn from) the London market were drawn into selling in the metropolitan market, perhaps at the initiative of middlemen advertising a service, without their proprietorial interest in the corn exported from the region being registered in port books.[34]

V

Except at ports where corn exports flowed more or less exclusively to the capital, of which there were few outside south-east England, it would be unwise to assume that where Appendix 1 shows leading dealers conducting an extremely high share of the metropolitan trade, they were necessarily more likely than dealers at other ports to have been able to force down prices paid to local corn producers. This is not only because shippers named in port book entries may often have been agents for producers selling in London – which was true at all places exporting to the capital – but also because, even if they had bought the corn they were exporting, the leading shippers in the metropolitan commerce at ports with significant multidirectional coastal corn trades may have faced stiff competition in local markets from other dealers purchasing for export to other destinations. Thus, for instance, since Norfolk ports enjoyed a large corn export trade with north-east England, and a good number of merchants exported exclusively to Newcastle, evidence that over 90 per cent of the London trade from Blakeney and Great Yarmouth in 1688 was conducted by five shippers is a relatively weak indication of possible oligopsony in local corn markets.[35]

At Wisbech, on the other hand, where coastal trade in the 1690s was almost entirely focused on the capital's oats market, leading dealers may have been able to manipulate local prices in 1694, for five of the 15 shippers recorded in the local port book exported only one consignment and 90 per cent of the remaining 25,458 quarters of oats exported to London was shipped by just six dealers.[36] Equally, at Rochester, a coastal corn trade more or less solely directed to London was, by the 1690s, entirely in the hands of six or seven shippers who, if they were not merely agents providing a service for producers selling in London, may have been able to divert a healthy slice of local farmers' profits into their own pockets.[37]

[34] Equally, agents may often have been employed by hoymen and others who, having invested in the provision of larger ships perhaps only to discover that they had no choice but to pass on most of the benefit of lower transport costs in order to make selling in the London market commercially viable for farmers, had every incentive to ensure that matters were so arranged that hoys were efficiently turned round and sent regularly to London fully loaded.

[35] TNA, E 190/441/4, 441/7, 442/7, 443/1, 443/2, 146/1; Willan, *Coasting trade*, pp. 82, 116, 126–32.

[36] TNA, E 190/442/7, 443/1.

[37] TNA, E 190/155/2, 670/15, 671/13, 673/16, 676/12, 677/2, 677/8, 678/6. Irrespective of whether shippers had bought the corn they exported, since port book evidence tells us nothing about the number of buyers or sellers in local markets or the volume of corn that was exchanged in them, it cannot demonstrate oligopsonistic or oligopolistic relations in those markets, it can only indicate places where leading merchants in the coastal trade may have been sufficiently powerful to rig them. Even so, port book evidence will not necessarily indicate all places where this may have been the case. It is possible that some major provincial or indeed London corn merchants were in the habit of devolving the task of organizing the shipment of corn to London to a number of different agents in a single port, with the names of the latter being recorded in port books as the shippers of the consignments they arranged, thus hiding from view major players in the coastal trade.

Like that from Rochester, during the later seventeenth century the coastal corn export trades of the three customs ports of north-east Kent were almost entirely directed to London, and other than between 1675 and 1678 they shipped little if any corn to the continent, so evidence for their metropolitan trades is apt to yield more meaningful indications of the possible power exercised by leading factors than that for ports in regions with multidirectional corn export trades. Analysed in the speculative but probably broadly accurate fashion of the table in Appendix 2, port book evidence indicates that, *if* they were purchasing merchants rather than agents working on commission, during the 1680s and 1690s leading shippers may sometimes have been in a position to rig the corn market in their favour at Margate, Herne, Whitstable, Faversham, Crown Quay, Milton, and Queenborough.

There are some intriguing contrasts in the trading cultures observable at different places along the north-east Kent coast. As Table 1 indicates, whereas the men who skippered hoys carrying corn to London from the customs port of Sandwich in 1585–6, 1591–2 and 1615 were seldom identified as shippers, during the later seventeenth century between one third and two thirds of masters carrying corn to the capital in any year were also noted as corn shippers by customs officials. In 1681, the 13 local hoymen who organized as well as carried corn shipments from Margate and Sandwich were responsible – in their capacity as shippers – for exporting 31 per cent of all the corn sent to London from within the customs jurisdiction of Sandwich. They included Daniel Cousar, Thomas Crockenden, and George Hurst, each of whom shipped more than 1000 quarters over the course of the year. However, as Table 1 also indicates, in 1681 – as in other years – these hoymen went out of their way to avoid skippering voyages carrying corn cargos for which they were also noted in port book entries as the shipper. Instead, the hoymen cooperated extensively with one another, presumably to minimize exposure to financial risk in cases where they owned part of or all the corn they were shipping as well as part of or all the ship or ships they skippered.[38]

There is, however, little evidence at Sandwich or Margate of strong working partnerships

[38] For instance, George Hurst skippered nine voyages from Sandwich to London in 1681, on four of which he carried corn exported in the name of Thomas Crockenden. Crockenden, meanwhile, was master of six voyages to the capital, three times carrying corn exported by Hurst. Hurst also shipped corn in boats skippered by John Hutton and Daniel Cousar. John Hutton made in all nine trips to London, once carrying corn for which he was also identified as exporter in the port book entry, and four times with corn shipped in the name of other local merchant-hoymen, viz., George Hurst, William Hutton, William Jordan and Thomas Crockenden. William Hutton made two trips to London, on one of which he carried corn exported in the name of John Hutton. William Jordan made seven trips to London, three times carrying corn shipped by Daniel Cousar. Cousar was the master of 12 voyages to the capital, once carrying corn shipped in his own name, twice carrying cargos consigned by William Jordan, once carrying a cargo exported by John Wheeler, and once a cargo in the name of George Hurst. John Wheeler made five journeys to the capital, on one of which he carried a cargo shipped by Daniel Cousar: TNA, E 190/98/1. Similar cooperation amongst mariner-merchants is evident at Wells (Norfolk) during the mid-1690s: TNA, E 190/442/7, 443/1.

Coleman's suggestion that such cooperation may have resulted from 'group interest in a number of ships' and 'may also have implied joint ownership' does nothing to explain why Sandwich shipmasters went out of their way to avoid carrying cargos for which they were the shippers; indeed, such group interest/ownership would make shippers' evident aversion to carrying their own cargos in the ships they skippered more difficult to account for. D. C. Coleman, 'The economy of Kent under the later Stuarts' (unpublished PhD thesis, University of London, 1951), p. 132.

TABLE 1. Shipmasters as shippers in the Kent corn export trade to London, 1585–1700

		Volume of corn exported to London	*Number of shipmasters carrying corn consignments*	*Number of shipmasters acting as shippers*	*Number of shipmasters carrying corn cargos shipped in their name*	*Number of shippers*
Sandwich	1585/6	5615	30	1	1	33
	1591/2	5875	38	2	1	26
	1615	21801	30	0	0	115
	1651	47914	61	21	1	134
	1666	16081	31	22	1	92
	1674	41146	36	28	2	96
	1681	35895	25	13	2	57
	1686	40645	35	19	5	82
	1692	29279	24	13	0	53
	1699	34299	30	13	2	58
Faversham	1585/6	11797	43	0	0	49
	1591/2	9533	22	1	0	39
	1615	10806	22	1	0	78
	1651	26245	42	4	0	72
	1663	11859	35	4	0	66
	1671	10161	21	6	6	33
	1674	7615	21	4	3	26
	1681	12371	21	1	1	27
	1686	26002	25	2	2	44
	1692	16696	21	1	1	24
	1699	35820	23	0	0	21
Milton	1585/6	9241	23	3	3	29
	1591/2	5173	23	0	0	27
	1615	2312	21	0	0	39
	1651	7778	20	1	0	63
	1663	3027	9	6	6	15
	1674	2855	10	9	9	9
	1681	6969	14	11	11	14
	1686	13233	14	13	13	15
	1692	6962	9	9	9	9
	1699	10995	9	9	9	9

Sources: TNA, E190/7/6, E190/9/3, E190/18/1, E190/46/1, E190/61/2, E190/98/1, E190/140/3, E190/141/3, E190/661/6, E190/661/8, E190/662/5, E190/662/18, E190/671/1, E190/671/2, E190/671/4, E190/671/7, E190/671/9, E190/671/10, E190/676/1, E190/676/14, E190/677/1, E190/677/5, E190/677/10.

between prominent specialist corn shippers and local shipmasters at any time between 1585 and 1690. Of the seven shippers who consigned five or more cargos to London in 1615 – by which time the metropolitan corn trade from Sandwich had reached a considerable size – only two relied on freightage by a single shipmaster; while the leading three skippers in the corn trade – who made 24, 22 and 19 voyages to London – worked for 18, 18, and 14 different shippers respectively.[39] In 1651, Sandwich's leading corn exporter, John Does, employed six masters to convey the 20 corn cargos (containing 4424 quarters) he sent to London, while of the six other shippers who exported more than 1000 quarters that year, only Phineas Moore relied on a single master to transport all his exports (in six shipments) to the capital. Meanwhile, the eight masters who made a dozen or more voyages carrying corn cargos to the capital in 1651 each worked for at least six shippers.[40]

In 1681, William Ovenden of Margate used seven local shipmasters to transport the 11,533 quarters of corn he exported to London. His most frequent employee, Valentine Hogben, was also the busiest of Thanet's masters, undertaking 16 voyages to the capital carrying corn consigned by Ovenden, but also ten more as carrier for six other local shippers.[41] As in earlier decades, most shipmasters working out of Sandwich or Margate during the 1680s who frequently carried corn to London did not conspicuously work with any particular shipper, and often carried cargos consigned by half a dozen or more over the course of a year, a pattern reflected in exaggerated form in 1686 by the labours of Roger Laming, who undertook 32 trips to London carrying cargos exported by 20 different shippers.[42] It was not until the 1690s that strong partnerships between specialist shippers and specialist shipmasters – including some that were evidently family partnerships – began to emerge with any regularity at Sandwich or Margate.[43]

Things were different along the coast to the west. Other than in the third quarter of the seventeenth century, Faversham shipmasters were rarely noted as shippers in the coastal corn trade. The few who, after 1674, were noted as masters of vessels carrying corn to London were also recorded as responsible for shipping the corn on board. Assuming that this handful of late seventeenth-century mariner-shippers were risk-averse and owned or part-owned the hoys they commanded, it is probable that they were acting as agents for the owners of the corn they were named in port books as responsible for shipping.

While shipmaster-cum-shippers of the kind prominent in the trade of later seventeenth-century Sandwich and Margate are notable by their absence within the customs jurisdiction of Faversham, the strong associations between specialist shippers and specialist shipmasters that were lacking at the Thanet ports until the 1690s can be detected occasionally at Faversham

[39] TNA, E 190/18/1.

[40] TNA, E 190/46/1.

[41] TNA, E 190/98/1.

[42] TNA, E 190/140/3, 141/3.

[43] In 1699, for instance, Roger Laming (by that date transformed from Margate's leading shipmaster to its leading shipper) shipped 34 consignments of corn to London, 22 of them carried by John Pound, who worked for no other shipper that year, while Valentine Hogben who had likewise moved from being shipmaster to shipper, consigned 23 cargos from Margate, 16 of which were carried to London by Clement Hogben. Clement did, however, also carry cargos consigned by four other shippers in 1699. TNA, E 190/676/14, 677/1.

and Milton a full century earlier, though they became a significant feature of the conduct of Faversham's corn trade only after the Civil War.[44]

In 1651, four partnerships between shippers and masters generated nine or more corn shipments from Faversham to London, among them that between the shipper Edward Miles and the skipper of 'The John' of Whitstable, John Barber, whose 17 voyages to London that year carried nothing other than corn exported by Miles.[45] Again, in 1663, four partnerships generated nine or more shipments, and in one case both shipper and master worked exclusively with the other during the year.[46] Strong partnerships are somewhat less evident in the depressed coastal corn trade from Faversham during the 1670s, but in 1681 seven associations between corn shippers and shipmasters yielded ten or more voyages to London. In four of these cases, hoyman and shipper worked exclusively with each other over the year, while 12 of the 13 voyages John Lawrence made to London (almost certainly from Herne) shipped 1670 quarters exported in the name of Robert Knowler.[47] Very strong working associations between shippers and shipmasters are evident in five cases in 1686 where shipmasters commanding ships registered at Faversham undertook at least 15 trips to London carrying corn for the same shipper.[48] By 1692, strong associations between shippers and shipmasters existed not only at Faversham and Herne, but at also Whitstable, where the nine cargos Edward Oliver transported to London carried only and all the corn shipped by Thomas Dunkin that year.

In 1699, when 35,820 quarters of corn were shipped to London from within the jurisdiction of Faversham customs port, 17 shippers worked with the same shipmaster on at least ten occasions, and nine of 21 the shippers worked *exclusively* with one shipmaster, whether as their employer, partner or employee. Together, these nine exclusive shipmaster-shipper associations accounted for 190 of the 379 corn shipments to London over the year.[49] That Edward Oliver carried 26 cargos shipped by Thomas Oliver clearly suggests a family partnership, but it is impossible to determine whether the shipper, shipmaster or neither was the dominant party in the other cases. However, it is not hard to imagine that men like Leonard Meeres and Michael Jones, two of ten shipmasters who skippered between 23 and 26 voyages to London in 1699, might want to employ agents at Faversham to organize future cargos in their absence in order to speed turn-round times. That some shippers were in the employ of shipmasters is perhaps indicated by the fact that Meeres and Jones were both Faversham common councillors in 1699,

[44] In 1591–2, for example, the grain merchant Alexander Oare of Ospringe near Faversham employed the shipmaster Robert Rye on 11 of the 14 occasions over the year when he exported corn to London, TNA, E 190/9/3. At Milton in 1585–6 the Sittingbourne grain merchant Roger Jenkins employed the shipmaster Robert Hamon to carry 31 corn cargos to London, while Thomas Bradbury of Milton employed William Hunt to transport 19 cargos to the capital. TNA, E 190/7/6; Hipkin, 'Kent grain trade', pp. 119–22.

[45] TNA, E 190/46/1.

[46] This partnership, between Richard Sturges (shipper) and John Marks, master of 'The Anne', of Faversham, was responsible for 13 corn cargos to London. TNA, E 190/661/8.

[47] In 1671 three associations between shipper and shipmaster generated nine or more corn cargos, and in 1674 two did. TNA, E 190/662/18, 61/2, 98/1.

[48] Michael Rixon carried 23 cargos consigned by Thomas Everden, John Lawrence undertook 21 trips (probably from Herne) carrying corn shipped by Robert Knowler, and Richard Reynolds made 20 trips carrying corn shipped by John Tall.

[49] TNA, E 190/676/1, 677/10. In addition, while the 26 cargos consigned by Matthew Hoult were carried by two shipmasters, Christopher Castle and John Larriman, they were always transported in a hoy named the 'Christopher and John', which suggests that the two shipmasters co-owned the ship in which all the grain Hoult consigned was exported.

whereas the sole shippers of the cargos Meeres and Jones carried, and the shippers only of those cargos, Henry Marlowe and Stephen Toker, were not.[50]

While a growth in the significance of hoymen in the organization of the metropolitan corn trade from Faversham during the closing decades of the seventeenth century may be disguised by their employment of agents whose names appear as shippers in the pages of local port books, as Table 1 indicates, the increasing prominence of hoymen in the organization of the corn trade within the customs jurisdiction of Milton after 1651 is impossible to miss in the port books covering its trade. By the 1680s with few exceptions, and during the 1690s without exception, corn shippers identified in Milton's port books were hoymen who skippered only voyages carrying corn that they were also recorded as responsible for shipping.[51]

The heavy concentration of Milton's trade in the hands of a few shippers at the end of the seventeenth century was first detected by Coleman.[52] Noting his finding that 93 per cent of metropolitan corn exports recorded in the Milton port books covering the year beginning Christmas 1699 was shipped in the names of just six men, Chartres, as mentioned earlier, concluded that Milton 'provides a case of oligopoly'. Yet while on the surface this statistic may appear to suggest that local consumers and producers were vulnerable to the market manipulations of a handful of corn engrossers, there are very strong grounds for supposing that those recorded as shippers in port books for late seventeenth-century Milton often had not bought the corn they exported.

VI

Baker's examination of the metropolitan corn trade from north-east Kent during the early eighteenth century lacks any quantitative dimension, since, after 1702, coastal port books ceased to record corn exports to London from harbours to the west of the North Foreland, but his analysis of the conduct of the grain trade makes use of a number of revealing farmers' inventories and accounts.[53] Among the latter are accounts for Hogshaw farm at Milstead (near Sittingbourne), which make clear that throughout the first half of the eighteenth century Richard Tylden consigned large quantities of wheat, oats, beans and other products of his farm to London, which were transported and sold for ready cash in London by Milton hoymen who paid Tylden on their return.[54] Unless we are to suppose that farmers following similar practices

[50] Centre for Kentish Studies (hereafter CKS), Fa/AC 4, pt 1. (unfol.). Michael Jones died a wealthy man, leaving an inventory valued at £1,184 in 1715. D. Baker, *Agricultural prices, production and marketing, with special reference to the hop industry: north-east Kent, 1680–1760* (1985), p. 306.

[51] To judge from evidence in London port books, the only other port briefly to witness a similar domination of trade by merchant-hoymen was Leigh (Essex) during the 1670s.

[52] Coleman, 'Economy of Kent', p. 129.

[53] J. H. Andrews, 'Geographical aspects of the maritime trade of Kent and Sussex, 1650–1750' (unpublished PhD thesis, University of London, 1954), p. 34.

[54] As Baker points out, 'A notable aspect of Tylden's commercial policy, repeated on many other farms in the region, was an all-the-year trading programme. Crops were sold according to prevailing market conditions. At the time this was a widely recognized feature of agricultural marketing: "The rich farmers, who are in a capacity as to a fortune, to keep the whole, or the greatest part of their crop the year over, speculate on the markets, thresh out and sell when they like the price"'. Baker, *Agricultural prices*, pp. 301, 303, citing C. Smith, *Essay on the corn trade and the corn laws* (1758), p. 12; Baker, 'Marketing of corn', p. 138.

did not exist in the hinterland of Milton during the 1690s, it must follow that at least some of the corn exported from Milton and Crown Quay (Sittingbourne) had not been bought by those identified as responsible for shipping it, if for no other reason than that the *only* shippers named in Milton port books during the 1690s were the hoymen carrying the cargos. It is likely that the bulk of the late seventeenth-century corn trade from within the customs port of Milton, if not all of it, was conducted by hoymen providing a service for local farmers and dealers selling their corn in the capital, although, given the monopoly over the coastal carriage of corn exercised by one or two shipmasters at Crown Quay and Queenborough, some may have found themselves paying a premium for it.[55]

It is scarcely any less likely that at least some of the top shippers at each of the topographical ports of Faversham, Whitstable, Herne and Margate often did not own the corn they shipped, but were acting in one capacity or another as agents for farmers or middlemen, or else were employees of hoymen who had contracted with farmers or middlemen to deliver their corn to the London market. During the closing decades of the seventeenth century, corn from north-east Kent probably often reached the metropolitan market in much the manner that it did during the second quarter of the eighteenth century, when, as Baker has shown, an 'intensive spirit of competition among the various family firms characterized the Kentish hoy business' and hoymen used 'local inns as information and collection centres' in the effort to attract custom.[56]

During the late 1730s, for example, the Herne hoyman Francis Turner – or his agent – could be found every Wednesday touting for business in Canterbury: in 1738 at The Rose, and in 1739 at the larger Bull's Head Inn. The service he offered was comprehensive. It was necessary for farmers who lived at a distance and wished to send corn to the London market only to bring their corn as far as Canterbury. For a fee, Turner did the rest. Goods for London were frequently stored at Canterbury or Whitstable inns before being taken to the hoys. Corn merchants and farmers who could afford to bide their time would monitor recent London prices, for news of which, until 1717, they had probably relied heavily on shipmasters frequently visiting the capital. After its launch in 1717, farmers had recourse to the *Kentish Post*, which regularly published Bear Quay corn prices. When they judged the time right, the farmers gave instructions for their corn to be shipped immediately to London. During the second quarter of the eighteenth century, and perhaps also during the half century before, hoymen were commissioned by farmers both to transport their corn to London and to sell it there to the highest bidder, but Baker found no evidence that hoymen traded on their own account.[57] Notwithstanding Chartres's claims to the contrary, Baker's study hardly reveals a trade conducted in ways that imply that 'exports from the region were characterized by unequal exchange', the 'net effect' of which 'may have been to redistribute wealth towards mercantile capital'.[58]

[55] Besides transporting goods, the Tappendens, who owned the hoy business operating at Crown Quay during the late seventeenth century, 'were transmitting cash for well-to-do clients' and extending loans-at-interest. Baker, *Agricultural prices,* pp. 313–14.

[56] Ibid., pp. 307–8.

[57] Baker calculated the normal cost of freightage and factorage as for wheat 5–6%, for oats 8%, and for beans 10% of the selling price at Bear Quay. Baker, *Agricultural prices*, pp. 305, 307–9, 311, 316–18; R. B. Westerfield, *Middlemen in English business particularly between 1660 and 1760* (1915), p. 154.

[58] Chartres, 'Food consumption', p. 185.

Of course, while eighteenth-century farmers may not have suffered at the hands of hoymen, those with few reserves – like their forbears in the pre-Civil War period – doubtless often had to surrender much of their margin to those at the provincial end of the coastal grain trade who could afford to play a long game, not least professional middlemen of the sort prominent in the coastal metropolitan trade of the Kent ports in the Elizabethan and early Stuart period.[59] However, since large farmers with access to ample storage facilities and accustomed to speculation were just as likely as any professional middleman to take advantage of small tenant farmers as rent day approached, it is far from clear that the 'net effect' of their vulnerability was a redistribution of wealth from producers to merchants on any greater scale than the redistribution of wealth from poor to rich farmers that it also brought about.

On the other hand, there is every reason to suppose that the 'net effect' on the wealth of arable farmers in north-east Kent of the absence of a coastal metropolitan outlet for their corn after 1680 would have been decidedly negative. There are also grounds for supposing that had it not been for developments in the transport and commercial infrastructure of the coastal trade as a result of the investment and enterprise of middlemen, the metropolitan market could not often have been served with competitively priced grain from the region.

VII

For all the reasons discussed above, the 'strongly oligopsonistic market relations' that, it has recently been asserted, 'concentrated power among large-scale buyers at all levels of grain trading' cannot be read from evidence indicating that, at quite a number of ports, much of the late seventeenth-century coastal metropolitan corn trade was handled by only a few shippers.[60] What then, finally, of the London end of the trade?

The only quantitative evidence so far unearthed bearing on the marketing of coastal corn imports reaching the capital in the post-Restoration period is that for Wiggins Quay during the late 1670s and early 1680s, which Chartres first examined in an article published in 1980. He argued that records of lighterage fees charged on each quarter of corn landed at the wharf show that in 1678–9 and 1679–80 'the top six corn factors buying through Wiggins Key' controlled 'respectively 77.7 and 84.2 per cent of the traffic at the quay', whereas 'the top six shippers, the typical merchant-hoymen' who were delivering the corn 'conducted little more than a quarter of the traffic'. This, he suggested, indicates that 'without exhibiting total control, the corn factors possessed great power in the market, and were clearly the dominant partners in the trade'.[61] Hoymen, keen to turn round rapidly, needed to dispose of their cargos quickly, 'but', Chartres argued, 'the hoymen in this relationship became effectively the clients of the factors, and the economies in shipping cannot have entirely compensated for the losses through the market power of the greater dealers to whom

[59] Hipkin, 'Kent grain trade', pp. 119–24. Baker's account of the coastal metropolitan corn trade scarcely mentions corn merchants, but it seems reasonable to assume that during the early eighteenth century they contracted with hoymen on much the same terms as local farmers who were selling in the London market.

[60] Glennie and Whyte, 'Towns in an agrarian economy', p. 175.

[61] J. Chartres, 'Trade and shipping in the port of London: Wiggins Key in the later seventeenth century', *J. Transport Hist.*, 3rd ser. 1 (1980), pp. 36, 45; id., 'Food consumption', p. 186.

they sold'.[62] This interpretation rests entirely on the assumption that the factors taking delivery of the sacks of corn off the ships had bought it from the shipmasters who had carried it from its port of origin. It is, however, at least as likely that the London factors receiving the corn at Wiggins Quay were agents working on commission, their task being to sell the corn on behalf of its provincial owners for the best price they could get, probably at Bear Quay, which by the beginning of the 1680s was the chief corn market in the capital.[63]

As Chartres pointed out, Wiggins Quay was one of 19 'Free Keys' of the city, and, though clearly important, handled only 41,000 quarters of coastal corn imports in the year commencing Michaelmas 1678.[64] This probably represented between one fifth and at most one third of corn imports that year (in 1674 London imported 104,000 qr of corn, and in 1681 194,000 qr).[65] Thus, even if the nature of the exchange between shipmaster and London factor was what Chartres assumed it was, there remains the question of whether the great majority of London's coastal corn imports that were unloaded at other quays were also purchased overwhelmingly by a handful of dominant factors.

Chartres analysed the Wiggins Quay material in isolation from port book evidence, and so was able to identify the home ports of fewer than half the vessels whose corn cargos were unloaded wholly or in part at Wiggins Quay. He knew that ships trading from Hull, Spalding, Wisbech, Lynn, Yarmouth, and from within the customs port of Sandwich, used the quay, but not what proportion of the corn consignments unloaded at Wiggins Quay were from each of these ports, nor what proportion of the corn export trade of any provincial port was unloaded at the quay.[66] It is, however, possible to compare entries in the Sandwich coastal port book for 1680 with records of lighterage payments at Wiggins Quay that year. Close comparison reveals that 71.2 per cent of the 32,807 qr of corn for which lighterage fees were recorded at Wiggins Quay in 1680 was unloaded from ships sailing from within the customs jurisdiction of Sandwich. However, the 23,352 qr unloaded at Wiggins Quay represents only 63.6 per cent of the 36,697 qr of corn exported to all London quays from the port of Sandwich in 1680. Comparison also makes it clear that in some instances less than the entire corn cargo of a Sandwich ship was moved by lighter to Wiggins Quay.[67] Presumably in such cases the rest of the cargo was brought ashore by lighters working at other quays, which – given that ships were often moored in midstream – would have been as easy as not to do and, one would imagine, happened all the time.

Plainly then, shipmasters commanding corn hoys from within the customs jurisdiction of Sandwich had recourse to other corn factors besides those at Wiggins Quay, which must call into question the extent to which those at Wiggins Quay were the 'dominant partners' in their dealings with those shipping corn from Sandwich. Nevertheless, it is also clear that the vast bulk of the corn from north-east Kent that came ashore at Wiggins Quay was transferred to just a handful of London corn factors; only a dozen of them received Kent grain in 1680

[62] Chartres, 'Food consumption', p. 186.

[63] P. V. McGrath, 'The marketing of food, fodder and livestock in the London area in the seventeenth century, with some reference to the sources of supply' (unpublished MA thesis, University of London, 1948), pp. 136–7.

[64] Chartres, 'Wiggins Key', p. 30; id., 'Marketing', p. 477.

[65] Hipkin, 'Metropolitan corn trade', p. 255.

[66] Chartres, 'Wiggins Key', pp. 38–9.

[67] TNA, C 113/14 pt II, E 190/665/14.

(ships from Kent customs ports other than Sandwich did not use Wiggins Quay that year), and five factors (John Smith, Edward Day, William Brandon, Matthew Stokes and Henry Noble) handled 88 per cent of it. This may be evidence of their 'great power' in the market, but it is also precisely what one would discover if those organizing the coastal grain trade in Sandwich relied on the services of a small band of trusted commission agents living in London to sell their corn in the capital, as was certainly often the case during the early seventeenth century.[68]

Furthermore, the corn factors of Wiggins Quay were not always bigger players in the coastal corn trade than shippers at its provincial end. As we have seen, with very few exceptions, it was not the hoymen of Sandwich and Margate who were the shippers of the corn they carried. In 1680 William Ovenden shipped 7080 quarters of corn from Margate to London, 2375 quarters of which was brought ashore at Wiggins Quay off ships skippered by Zachary Boreman (five times), John Laming (five times) and Richard Stevens (seven times). So the question that arises is this. Were the three masters of the hoys the men on whom Ovenden relied to sell the corn on its arrival in the capital, or did Ovenden entrust that task to the six corn factors of Wiggins Quay to whom the corn was transferred off the ships?

Unfortunately, while it is possible to frame the right question, the currently available evidence is not good enough to permit it to be answered.[69] The rapid turn round of vessels that Chartres doubtless correctly identified as crucial to the economics of coastal shipping could be achieved more certainly and probably more efficiently by retaining commission agents in London who would – if necessary working cooperatively – take delivery of cargos as soon as they arrived, than by relying on sales negotiated on arrival, and of course would eliminate the risk that prices might have to be discounted in the process. There was also an established tradition of Kent corn dealers employing commission agents resident in London to conduct the metropolitan end of the trade for them.

On the other hand, it may be that London corn factors were no longer willing to deal with provincial merchants on such terms and that broader market forces during the late seventeenth century gave them the power to insist on the point. Equally plausible is the implicit suggestion in Chartres's interpretation of the Wiggins Quay evidence, that the hoymen were the men also relied upon by the owners of the corn they carried to sell it at the London end of the coastal corn trade. During the early 1570s John Crux, a Preston farmer, employed the Faversham hoyman Robert Rye to carry his wheat to London and sell it for him in the capital.[70]

[68] See for example TNA, C 2/JasI/03/29, *Offley v Owre, Salley and others* (1624). The defendants (grain producers in the Faversham hinterland) explained that for 'divers years' they had converted the barley they grew, and that which they purchased locally, into malt which they 'send up and transport to the city of London, and do there sell the same for the better furnishing of the market of the said city by such factors and agents … as are always resident in London and do there receive the said malt from such as these defendants do send the same by … And the said malt so received do have and used to sell at such prices as such malt there is usually sold for and to such persons as they think fit, sometimes for ready money and at other times do give time for payment thereof. And when the said money is received by them, the said agents or factors so respectively employed by these defendants as aforesaid do, with all the convenient speed they can, send down the said monies to such of these defendants for whom the said malt was sold'. The factor's commission on such sales was 'two pence in every twenty shillings'. See also McGrath, 'Marketing of food', p. 122.

[69] Clues to the answer may of course await discovery in records of commercial litigation in the central courts.

[70] TNA, E 122/171/13.

Rye also worked for the prominent Faversham merchant Richard Philpot, who entrusted him with delivering a sample of his wheat 'to one Blewe, a baker of London dwelling in the Old Exchange', in 1592, when Rye was 89 years old, 'or thereabouts'![71] During pre-Civil War decades such arrangements may have been as common as those between producers or provincial merchants on the one hand and resident London factors on the other. Furthermore, as noted earlier, during the second quarter of the eighteenth century Kent hoymen 'accepted commissions from farmers to sell at Bear Quay', while after 1750, when the corn exchange was erected at Mark Lane (by which time corn was mostly being sold by sample), Kent hoymen were specifically allocated eight of the 72 stands from which they (or perhaps in many cases their London agents) marketed their clients' corn. That said, there are no indications in Baker's work that eighteenth-century Kent hoymen were ever at the mercy of a small group of powerful corn factors when they were selling at Bear Quay. Indeed, once they had obtained stands at Mark Lane, Kent hoymen enjoyed a privileged position in the market, which doubtless worked to the benefit of the Kent farmers who commissioned the hoymen to transport and sell their grain in the capital.[72]

VIII

By the 1680s nearly half of the coastal metropolitan corn trade was concentrated in the hands of shippers exporting upwards of 1000 quarters per annum. It seems likely that this was mainly the result of two late seventeenth-century developments. First, the growth of a class of substantial merchants who bought corn in the provinces, exported it in their own name and arranged for its sale in the capital. Second, the emergence of a breed of agents who made at least part of their living organizing and overseeing corn exports belonging to producers or other middlemen, and who, over time, probably increasingly worked in partnership with, employed, or were employed by the masters and/or owners of ships that carried corn cargos to London.

While research on records of commercial litigation might clarify our understanding of the modus operandi of agents and partnerships in the coastal corn trade, it is unlikely to do much to resolve the crucial question entries in later Stuart port books do not answer: what proportion of exports was shipped by owners of corn and what by agents employed by its owners or by owners of the ships in which it was conveyed to London? On this issue we appear destined to remain mainly in the dark. For this among other reasons explored in this article, high concentrations of corn exports in the hands of leading shippers cannot be accepted as proof of oligopsony in local markets. Nonetheless, particularly at ports where the coastal corn trade was overwhelmingly directed to London, such concentrations do signal the *possibility* that leading merchants may have been able to rig the market.

That the Exchequer port books do not provide the detailed evidence required to convict safely those guilty of manipulating grain prices in the hinterland of coastal ports should not lead us to underestimate their unique value as a source. There is no evidence for overland

[71] CKS, Fa/JQe 10.

[72] Baker, *Agricultural prices*, pp. 317–20; Westerfield, *Middlemen,* p. 154.

commerce that would enable us to identify systematically the major provincial participants in the corn trade during the later seventeenth century. Nor is it possible, for the overland trade, to investigate systematically the activities of those who undertook the transport of corn and the regularity of their associations with those who arranged its transit. Only detailed research on port books for other places analysed in Appendix 1 will show whether the striking diversity of post-Restoration commercial cultures in the ports of north-east Kent was matched in the coastal metropolitan corn trade of other English regions.

Appendix 1

Volume of exports and numbers of shippers conducting the coastal metropolitan corn trade from outports, 1651–95

	1651			*1674*			*1681*			*1688*			*Midsummer–Christmas 1695*		
	Top five shippers (% exports)	*Total no. shippers*	*Total corn exports, in qtrs (=100%)*	*Top five shippers (% exports)*	*Total no. shippers*	*Total corn exports, in qtrs (=100%)*	*Top five shippers (% exports)*	*Total no. shippers*	*Total corn exports, in qtrs (=100%)*	*Top five shippers (% exports)*	*Total no. shippers*	*Total corn exports, in qtrs (=100%)*	*Top five shippers (% exports)*	*Total no. shippers*	*Total corn exports, in qtrs (=100%)*
North East															
Berwick			0	100.0	5	710	63.8	17	16804	23.1	33	18649	100.0	2	280
Blyth			0			0	100.0	2	810	100.0	5	1092			0
Hartlepool			0			0	100.0	3	1127	100.0	4	3344			0
Stockton			0	100.0	5	625	73.6	10	10845	56.7	16	10825	99.8	6	1370
Others			50			52			1007			395			220
Total			**50**			**1387**			**30593**			**34305**			**1870**
Yorkshire															
Bridlington			0			0	98.8	6	2,060	94.4	6	2,125	100.0	2	951
Hull	100.0	4	1234	94.4	7	2894	65.1	42	32679	55.2	47	29337	49.5	42	18278
Others			80			0			0			0			0
Total			**1314**			**2894**			**34739**			**31462**			**19229**
Lincolnshire															
Boston	100.0	4	1256	100.0	3	245	100.0	4	873	72.3	9	2779	56.5	12	4337
Grimsby			0			0	100.0	5	1160	100.0	4	2938			0
Spalding			0	100.0	3	610	100.0	4	1840	68.0	13	5,700			0
Others			0			0			0			180			0
Total			**1256**			**855**			**3873**			**11597**			**4337**
Norfolk and Cambs.															
Blakeney	100.0	1	180			0	100.0	1	550	91.0	9	6298	100.0	4	750

	1651			*1674*			*1681*			*1688*			*Midsummer–Christmas 1695*		
	Top five shippers (% exports)	*Total no. shippers*	*Total corn exports, in qtrs (=100%)*	*Top five shippers (% exports)*	*Total no. shippers*	*Total corn exports, in qtrs (=100%)*	*Top five shippers (% exports)*	*Total no. shippers*	*Total corn exports, in qtrs (=100%)*	*Top five shippers (% exports)*	*Total no. shippers*	*Total corn exports, in qtrs (=100%)*	*Top five shippers (% exports)*	*Total no. shippers*	*Total corn exports, in qtrs (=100%)*
King's Lynn	90.6	7	1698	69.5	15	5015	76.9	12	4323	30.0	59	29885	69.3	15	5555
Wells			0	100.0	4	840	100.0	5	1050	45.2	32	15030	31.6	35	11555
Wisbech	100.0	1	80	72.5	22	11384	86.2	10	5914	75.4	18	15822	77.1	11	14522
Yarmouth	48.1	26	5339	36.9	39	8676	63.3	17	1967	91.5	16	11614	69.2	15	3735
Others			0			400			0			0			470
Total			**7297**			**26315**			**13804**			**78649**			**36587**
Suffolk															
Aldeburgh	92.8	7	222	85.7	11	630	97.3	7	742	67.1	15	2134	82.8	10	2264
Ipswich	57.2	23	2905	58.3	25	2551	51.1	18	1570	61.4	27	3518	78.9	19	11108
Woodbridge	88.2	14	1325	83.7	14	1820	92.8	10	2184	50.1	22	3486	70.9	13	4885
Others			2			150			111			886			415
Total			**4454**			**5151**			**4607**			**10024**			**18672**
Essex															
Colchester	39.0	52	5149	70.1	18	3688	74.9	12	1740	87.4	10	2348	74.5	15	4963
Leigh	37.9	46	4124	100.0	4	2555			0	59.6	25	7262	83.2	10	3145
Maldon	20.6	94	12636	30.4	38	4699	38.5	31	7681	34.6	36	13611	61.5	16	7297
Harwich			0			0			0			0	83.3	8	2258
Others			0			0			0			36			0
Total			**21909**			**10942**			**9421**			**23257**			**17663**
Kent															
Deal			0			0			0	98.4	6	1324			0
Dover	58.6	18	5140	97.3	6	1731	71.6	13	2642	75.9	11	4350	100.0	5	2414

	1651			1674			1681			1688			Midsummer–Christmas 1695		
	Top five shippers (% exports)	*Total no. shippers*	*Total corn exports, in qtrs (=100%)*	*Top five shippers (% exports)*	*Total no. shippers*	*Total corn exports, in qtrs (=100%)*	*Top five shippers (% exports)*	*Total no. shippers*	*Total corn exports, in qtrs (=100%)*	*Top five shippers (% exports)*	*Total no. shippers*	*Total corn exports, in qtrs (=100%)*	*Top five shippers (% exports)*	*Total no. shippers*	*Total corn exports, in qtrs (=100%)*
Faversham	**52.5**	**72**	**26245**	**67.6**	**26**	**7615**	**57.7**	**27**	**12371**	**48.4**	**53**	**25600**	**67.4**	**30**	**13037**
Milton	**32.5**	**63**	**7778**	**87.9**	**9**	**2855**	**76.7**	**14**	**6969**	**77.3**	**12**	**12455**	**94.7**	**6**	**4607**
Rochester	56.6	83	6701	98.0	6	253	100.0	3	1052	92.9	9	3713	95.2	7	5840
Sandwich	**25.2**	**134**	**47914**	**20.3**	**96**	**41146**	**51.1**	**57**	**35895**	**28.4**	**90**	**45885**	**55.5**	**28**	**13155**
Others			40			0			0			0			0
Total			**93818**			**53600**			**58929**			**93327**			**39053**
Sussex															
Arundel			0	100.0	2	160	100.0	4	932	96.0	7	3029	100.0	2	355
Chichester	100.0	2	60	100.0	3	358	78.7	9	1128	57.7	29	10437	84.6	8	1950
Newhaven	98.2	6	759	100.0	1	300	100.0	4	784	71.6	10	1945	100.0	1	210
Rye	82.9	9	671	100.0	5	237	77.0	11	1726	60.7	13	1769	97.7	6	882
Shoreham	100.0	4	630	80.6	9	1595	98.9	6	1819	51.7	20	7065	94.2	6	1545
Pevensey	94.7	7	338			0	100.0	1	200	100.0	5	593	100.0	1	20
Hastings	100.0	3	393			0	100.0	4	464	100.0	2	718			0
Brighton			0			0	100.0	1	190	100.0	4	577			0
Total			**2851**			**2650**			**7243**			**26133**			**4962**
Hampshire															
Portsmouth	96.9	7	1240			0	100.0	4	825	75.1	15	5550	100.0	2	546
Southampton			0			0	97.8	8	1774	45.2	36	12835	100.0	1	80
Cowes			0	100.0	2	42	98.1	7	1339	91.3	6	631	100.0	1	290
Total			**1240**			**42**			**3938**			**19016**			**916**
South West															
Barnstaple			0			0			0	100.0	5	1338			0

	1651			*1674*			*1681*			*1688*			*Midsummer–Christmas 1695*		
	Top five shippers (% exports)	*Total no. shippers*	*Total corn exports, in qtrs (=100%)*	*Top five shippers (% exports)*	*Total no. shippers*	*Total corn exports, in qtrs (=100%)*	*Top five shippers (% exports)*	*Total no. shippers*	*Total corn exports, in qtrs (=100%)*	*Top five shippers (% exports)*	*Total no. shippers*	*Total corn exports, in qtrs (=100%)*	*Top five shippers (% exports)*	*Total no. shippers*	*Total corn exports, in qtrs (=100%)*
Bideford			0			0			0	100.0	1	2684			0
Dartmouth			0			0	100.0	1	301	100.0	1	1276			0
Exeter			0			0	100.0	2	32	81.5	8	1451			0
Falmouth			0			0	100.0	2	802	100.0	1	110			0
Plymouth	100.0	2	13			0	100.0	1	8	100.0	2	1100	100.0	1	5
Poole			0			0	100.0	2	111	96.5	6	2823	100.0	2	576
Others			86			0			23			773			140
Total			**99**			**0**			**1277**			**11555**			**721**
South Wales															
Carmarthen			0			0	74.5	10	7209			0			0
Cardigan			0			0	100.0	3	980	100.0	4	2634			0
Llanelli			0			0	100.0	1	200	53.5	19	10243			0
Milford Haven			0	100.0	1	513	75.6	13	9775	55.0	25	24294	100.0	1	350
Tenby			0			0	100.0	2	922	100.0	5	2010			0
Others			0			0			921			1101			0
Total			**0**			**513**			**20007**			**40282**			**350**
Northwest			0												
Lancaster			0			0	92.8	6	3052	100.0	4	2519			0
Whitehaven			0			0	100.0	3	2511	100.0	5	2502			0
Others			0			0			382			609			0
Total			**0**			**0**			**5945**			**5630**			**0**
Total exports			**134288**			**104349**			**194376**			**385237**			**144360**

Sources: TNA, E190/46/1, E190/61/2, E190/98/1, E190/146/1, E190/155/2.

Appendix 2
The implications of customs ports jurisdictions for the analysis of coastal trade

In the parlance of English customs administration, there were three types of port: headports, members, and creeks. Headports and members were lengths of coast demarcated by Exchequer commission, rather than single places, though they were usually named after the largest place that lay within their bounds. Creeks were places within the jurisdiction of a headport or member where junior customs officers were stationed for the supervision of the coasting trade. Thus, for example, the stretch of coastline that comprised 'Faversham' (which was a member of the headport of Sandwich) embraced the creek of Milton-next-Sittingbourne to the west of Faversham proper, as well as, to its east, Whitstable harbour and Herne bay, which, albeit places of no official standing, were capable of handling significant volumes of trade.

Normally, trade along the entire coastline that fell within the jurisdiction of a headport or member was recorded in the coastal port books issued to customs officials resident at the place that gave the jurisdiction its name. However, some creeks, Milton among them, were issued with their own coastal port books, and the customs officials of Milton in practice also recorded the coastal trade of Rainham, Queenborough and Crown Quay at Sittingbourne. Faversham's coastal port books recorded trade from the eastern part of the Isle of Sheppey as well as that from a mainland coastline stretching some 15 miles east of Conyer, via Faversham, Whitstable, and Herne, to Reculver. It fell to customs officials compiling the port books of the headport of Sandwich to record the trade of the Thanet ports of Margate, Broadstairs, and Ramsgate, of Sandwich itself, and, until 1680, of Deal.[73]

Although port books for Faversham and Milton do not specify the places along the coast from which the exports they recorded were shipped, pre-Civil War coastal port books for the headport of Sandwich (though not those for the later seventeenth century) do. They show that during the 1620s and 1630s – by which time often more than 30,000 quarters of grain was shipped annually to London from along the coastline that fell within the jurisdiction of the customs port of Sandwich – up to one third of exports was shipped from Margate.[74]

Late sixteenth- and seventeenth-century London port books, however, simply record all trade from Thanet as being shipped from 'Sandwich'. On the other hand, until 1686, London coastal port books consistently record the port of registration of ships importing goods from the coastlines covered by the port of Sandwich and the creek of Milton, while those surviving for the period up to 1651, and that covering 1686, note the home port of ships trading from the coastline under the jurisdiction of the customs port of Faversham. Since pre-Civil War Sandwich port books show that overwhelmingly Margate's exports were transported in ships registered at Margate, it is perhaps not unreasonable to suppose that throughout the late sixteenth and seventeenth centuries the place where the ship carrying a consignment of corn from the Kent coast was registered was in most cases the place where the consignment it carried originated, provided of course that the 'home port' of the ship fell within the jurisdiction of the customs port from which the corn was exported. With few exceptions, London-bound

[73] Andrews, 'Geographical aspects', pp. 17–25

[74] Hipkin, 'Kent grain trade', pp. 107–110.

shipments of corn from the creeks and harbours along the north-east Kent coast throughout the period were carried in local ships skippered by local hoymen.

The table that follows shows the effect of reconfiguring London and local port book data for corn shipped from Sandwich, Faversham and Milton for a number of years between 1585 and 1686, including three for which the entire metropolitan coastal trade is analysed in Appendix 1, on the assumption that consignments were exported from the home port of the ship carrying them.[75] Obviously, the results of this exercise are no more than indicative, but the table is strikingly suggestive.

Other than at the minor port of Rainham in 1585/6 and 1591/2, and at Sandwich proper in 1681, 1692 and 1699, the conduct of the coastal corn trade appears to have been less – often much less – concentrated in the hands of leading shippers within customs ports (the 'all origins' rows) than it was at the ports that fell within their jurisdictions. Furthermore, the lower shipper concentration ratios in Sandwich proper compared with the customs port of Sandwich in 1681, 1692 and 1699 are all by-products of the heavy concentration in the hands of leading shippers of the metropolitan corn trade from Margate. In 1681, the industrious William Ovenden exported 11,533 quarters of wheat, malt, barley, oats and beans to London in 71 shipments, 70 of them in Margate ships, while in 1692 and 1699 Roger Laming of Margate shipped respectively 4910 qr and 8320 qr of corn to the capital.[76]

The clear implication of the table is that insofar as the topographical port of origin of corn shipments was not the customs port, London port books (and thus Appendix 1) will tend to misrepresent the proportion of the metropolitan corn trade handled by leading shippers at specific locations along the English and Welsh coast.

[75] London port book data analyzed in the table cover 1585/6, 1591/2, 1615, 1651, 1674, 1681 and 1686. Local port book data analysed are for Faversham and Milton in 1663, Sandwich in 1666, Faversham in 1671, and for all three Kent customs ports in 1692 and 1699.

[76] TNA, E 190/98/1, 671/4, 671/7, 676/14, 677/1.

TABLE A.1. Possible volumes of exports and numbers of shippers and shipmasters conducting the coastal metropolitan corn trade from havens within the customs ports of north-east Kent, 1585/6–1699

Port	*Origin of ship*	*Total metropolitan corn exports*	*Total number of shipmasters*	*Total number of shippers*	*Top two shippers (% exports)*	*Top five shippers (% exports)*
Sandwich						
1585/6	Sandwich	2447	7	17	26.9	48.2
	Margate	1627	10	14	39.9	70.5
	Broadstairs	225	2	4	62.2	100.0
	Ramsgate	420	5	5	73.8	100.0
	Other	896				
	All origins	**5615**	**30**	**33**	**21.7**	**40.1**
1591/2	Sandwich	2730	6	7	74.7	91.9
	Margate	1590	11	10	48.4	79.6
	Broadstairs	461	9	8	50.9	88.9
	Ramsgate	974	10	7	64.7	92.8
	Other	120				
	All origins	**5875**	**38**	**26**	**34.7**	**60.2**
1615	Sandwich	12493	12	53	13.3	24.7
	Margate	8276	12	54	13.5	26.0
	Broadstairs	310	3	6	45.2	90.3
	Ramsgate	722	3	6	65.4	94.5
	All origins	**21801**	**30**	**115**	**7.6**	**15.0**
1651	Sandwich	27115	18	55	24.2	35.9
	Margate	19448	29	68	22.7	35.6
	Broadstairs	487	3	6	57.7	91.0
	Ramsgate	623	6	9	29.7	67.4
	Other	241				
	All origins	**47914**	**61**	**134**	**15.1**	**25.2**
1666	Sandwich	10342	17	49	11.2	25.3
	Margate	5510	12	46	18.6	34.0
	Ramsgate	95	1	1	100.0	100.0
	Deal	134	1	1	100.0	100.0
	All origins	**16081**	**31**	**92**	**7.3**	**18.0**
1674	Sandwich	24388	22	62	15.3	29.8
	Margate	15479	13	43	19.7	40.1
	Deal	1279	1	4	70.3	100.0
	All origins	**41146**	**36**	**96**	**9.9**	**20.3**

Port	*Origin of ship*	*Total metropolitan corn exports*	*Total number of shipmasters*	*Total number of shippers*	*Top two shippers (% exports)*	*Top five shippers (% exports)*
1681	Sandwich	19592	18	46	17.1	37.4
	Margate	16303	7	14	77.2	91.0
	All origins	**35895**	**25**	**57**	**37.6**	**51.1**
1686	Sandwich	26433	25	48	16.0	30.8
	Margate	14168	9	40	37.9	57.9
	Ramsgate	44	1	1	100.0	100.0
	All origins	**40645**	**35**	**82**	**17.5**	**30.6**
1692	Sandwich	18285	15	39	17.3	33.9
	Margate	10694	7	14	76.1	88.2
	Other	300				
	All origins	**29279**	**24**	**53**	**27.8**	**42.6**
1699	Sandwich	18872	13	34	22.4	42.1
	Margate	15427	18	24	72.2	87.1
	All origins	**34299**	**30**	**58**	**32.5**	**48.8**
Faversham						
1585/6	Faversham	9024	27	40	46.4	67.4
	Whitstable	2189	13	12	53.4	86.0
	Others	584				
	All origins	**11797**	43	49	**35.5**	**54.2**
1591/2	Faversham	8933	19	33	31.2	57.1
	Whitstable	530	2	6	54.7	96.2
	Other	70				
	All origins	**9533**	22	39	**29.2**	**53.5**
1615	Faversham	8256	16	50	23.4	43.8
	Whitstable	2550	8	28	25.0	44.3
	All origins	**10806**	**22**	**78**	**18.5**	**33.5**
1651	Faversham	21545	33	46	47.4	61.8
	Whitstable	3882	5	14	47.0	67.3
	Leysdown	718	1	11	32.3	68.0
	Other	100				
	All origins	**26245**	**42**	**72**	**38.9**	**52.5**
1663	**All origins**	**11859**	**35**	**66**	**27.0**	**49.8**
1671	**All origins**	**10161**	**21**	**33**	**28.6**	**56.4**
1674	**All origins**	**7615**	**21**	**26**	**53.2**	**67.6**
1681	**All origins**	**12371**	**21**	**27**	**28.0**	**57.7**

Port	*Origin of ship*	*Total metropolitan corn exports*	*Total number of shipmasters*	*Total number of shippers*	*Top two shippers (% exports)*	*Top five shippers (% exports)*
1686	Faversham	15143	18	26	39.1	70.4
	Whitstable	3536	6	18	46.2	71.9
	Herne	6463	3	3	97.8	100.0
	Other	860				
	All origins	**26002**	**25**	**44**	**27.7**	**55.5**
1692	Faversham	11211	15	14	49.8	82.2
	Whitstable	857	4	5	59.9	100.0
	Herne	4628	3	5	60.7	100.0
	All origins	**16696**	**21**	**24**	**33.5**	**61.7**
1699	Faversham	20871	13	11	46.9	88.3
	Whitstable	5812	6	4	72.3	100.0
	Herne	9137	4	6	70.0	98.0
	All origins	**35820**	**23**	**21**	**27.3**	**56.1**
Milton						
1585/6	Milton	8061	15	18	66.2	87.8
	Rainham	1026	4	10	59.7	79.4
	Other	154				
	All origins	**9241**	**23**	**29**	**58.1**	**80.4**
1591/2	Milton	2041	10	11	46.6	82.8
	Rainham	1355	6	14	28.0	61.3
	Sittingbourne	1485	2	3	97.3	100.0
	Queenborough	80	2	2	100.0	100.0
	Other	212				
	All origins	**5173**	**23**	**27**	**50.8**	**68.2**
1615	Milton	1507	12	26	30.4	47.0
	Queenborough	458	2	10	32.8	70.3
	Other	347				
	All origins	**2312**	**21**	**39**	**22.9**	**39.4**
1651	Milton	5167	14	44	25.3	42.6
	Queenborough	2007	4	15	39.0	68.9
	Other	604				
	All origins	**7778**	20	**63**	**18.5**	**32.5**
1663	**All origins**	**3027**	**9**	**15**	**66.5**	**86.6**

Port	*Origin of ship*	*Total metropolitan corn exports*	*Total number of shipmasters*	*Total number of shippers*	*Top two shippers (% exports)*	*Top five shippers (% exports)*
1674	Milton	1133	3	3	96.0	100.0
	Queenborough	1522	5	4	69.1	100.0
	Other	200				
	All origins	**2855**	10	**9**	**42.0**	**87.9**
1681	Milton	2355	4	3	80.6	100.0
	Queenborough	2882	5	5	72.2	100.0
	Crown Quay	1268	1	1	100.0	100.0
	Other	464				
	All origins	**6969**	14	**14**	**36.7**	**76.7**
1686	Milton	5529	8	9	62.3	95.3
	Queenborough	5079	3	4	71.6	100.0
	Crown Quay	1799	2	1	100.0	100.0
	Other	826				
	All origins	**13233**	14	**15**	**42.3**	**78.0**
1692	Milton	5177	5	5	74.8	100.0
	Queenborough	1683	2	2	100.0	100.0
	Other	102				
	All origins	**6962**	**9**	**9**	**61.7**	**90.1**
1699 Midsummer to Christmas	Milton	5049	6	6	72.6	99.9
	Queenborough	1170	2	2	100.0	100.0
	Conyer	348	1	1	100.0	100.0
	All origins	**6567**	**9**	**9**	**55.9**	**93.5**

Sources: As Table 1 on p. 224.

Early modern rural by-employments: a re-examination of the probate inventory evidence*

by Sebastian A. J. Keibek and Leigh Shaw-Taylor

Abstract

It has generally been presumed that most men in early modern rural England significantly augmented the income from their principal occupation by engaging in one or more subsidiary economic activities. The historical evidence for the prevalence of such by-employments is almost exclusively based on probate inventories. Historians have determined by-employment incidences for regions and time intervals throughout early modern England through straightforward frequency counts of inventories that indicate multiple gainful activities. This article argues that such frequency counts are unreliable. Using early eighteenth-century Cheshire and Lancashire as a test case, we demonstrate that the by-employed were more likely to be probated than those with only one source of income. Using occupational data from parish registers and estimates of contemporary livestock numbers, we assess the degree to which the by-employed are over-represented in the probate record. We conclude that inventories vastly exaggerate by-employment incidence. This conclusion has a currency beyond the temporal and geographic bounds of our test case since the cause of the exaggeration – the probate record's inherent wealth bias – was common to the whole of England, throughout the early modern period. We therefore conclude that by-employments were not nearly as ubiquitous as has been assumed.

Historians of early modern England have often argued that contemporary individuals generated significant income from by-employments, that is, economic activities additional to their principal occupations. Joan Thirsk, for example, contended that about half of the seventeenth-century men employed in agriculture were also engaged in manufacturing.[1] Lamenting the 'evil day when rural industries left the countryside and returned to the towns', Alan Everitt used probate evidence to calculate that 60 per cent of agricultural labourers in the 1560–1640 period were by-employed in manufacturing.[2] Mark Overton *et al.* found for early modern Kent and Cornwall that about half the probate inventories of craftsmen also provided evidence of farming on what they deemed to be a commercial scale, with a further 15 to 20 per cent of inventories indicating involvement in smaller-scale, 'non-commercial farming', leading them

* We are grateful to Dr Sara Horrell, Prof. Richard Hoyle, Prof. Tony Wrigley, and three anonymous referees for their comments on an earlier draft.

[1] J. Thirsk, 'Seventeenth-century agriculture and social change', in her *Rural economy of England: Collected essays* (1984), p. 211.

[2] A. Everitt, 'Farm labourers', in J. Thirsk (ed.), *The agrarian history of England and Wales,* IV, *1500–1640* (1967), pp. 428–9.

to conclude that 'by-employment was the norm'.[3] As will be discussed, many others have come to similar conclusions on the basis of probate evidence.

By-employments have been awarded an important role in several historical theories on the transition from a predominantly agricultural society of semi-autarkic rural households to a modern market economy. Thirsk, for example, argued that 'industrial by-employments heralded the development of a consumer society … [which] included humble peasants, labourers, and servants', a view echoed in De Vries's more recent industrious revolution thesis.[4] By-employments play a central though largely implicit role in proto-industrial theory too.[5] Local stimuli for by-employments have also been perceived as explaining the historical geography of industrialization. Thirsk pleaded for narrowing down the question, 'why did the industrial revolution start in England' to 'why did it start in the pasture farming areas in England?' Her answer was clear: because that type of agriculture 'left men with time for other employments which they could combine with farming'. Aiming to protect their local dual economy, these men were, in Thirsk's view, also the first to experiment with mechanization. More recently, Sidney Pollard has also emphasized the connection between pastoral agriculture, particularly of 'stockbreeding and dairying' with part-time employment in industry.[6] Franklin Mendels contended that proto-industrialization and, therefore, the Industrial Revolution, occurred in England and, more generally, in the 'cold climate countries' of north-west Europe because agriculture here was typified by seasonal labour-demand patterns, stimulating 'a cost-saving amalgam of agriculture and industry through the intercalation of industrial activity into the annual cycle of agriculture'. In the 'wine-producing regions' of southern Europe, seasonal fluctuation in the demand for agricultural labour was much less pronounced, and the need for a dual economy thus much reduced, leading to very late industrialization.[7]

Our interest in by-employments arises from our involvement in the Cambridge Group's 'Occupational Structure of Britain 1379–1911' project. Much progress has now been made in this project in establishing the composition of the eighteenth- and nineteenth-century male labour force.[8] However, the main data for the eighteenth century are parish registers, which describe contemporary men almost exclusively by their principal occupations. Such 'principal occupation only' sources have been criticized from the perspective of by-employments.

[3] M. Overton, J. Whittle, D. Dean, and A. Hahn, *Production and consumption in English households, 1600–1750* (2004), pp. 74, 76.

[4] J. Thirsk, *Economic policy and projects: The development of a consumer society in early modern England* (1988), p. 8; J. De Vries, *The industrious revolution: Consumer behavior and the household economy, 1650 to the present* (2008).

[5] At least in the 'classical' formulations of that theory: F. F. Mendels, 'Proto-industrialization: The first phase of the industrialization process', *JEcH* 32 (1972); P. Kriedte, J. Schlumbohm, and H. Medick, *Industrialization before industrialization: rural industry in the genesis of capitalism* (1981).

[6] J. Thirsk, 'Horn and thorn in Staffordshire: the economy of a pastoral county', in her *Rural economy*, pp. 170, 172–3, 181; S. Pollard, *Marginal Europe: the contribution of marginal lands since the Middle Ages* (1997), pp. 225, 251.

[7] F. F. Mendels, 'Seasons and regions in agriculture and industry during the process of industrialisation', in S. Pollard and L. Hölscher (eds), *Region and Industrialisation : Studies on the role of the region in the economic history of the last two centuries* (1980), pp. 180–1, 197.

[8] See, for example, L. Shaw-Taylor, E. A. Wrigley, R. S. Davies, P. M. Kitson, G. Newton, and A. E. M. Satchell, 'The occupational structure of England, *c*.1710 to *c*.1871, work in progress' (2010), http://www.geog.cam.ac.uk/research/projects/occupations/britain19c/papers/paper3.pdf.

Swain, for example, argued that 'the exceptionally high degree of participation in industry is largely hidden if undue reliance is placed on occupational data' for early modern north-east Lancashire.[9] James Rosenheim put it even stronger, praising Swain for his exposition of 'the futility of reliance on occupational information to assess the structure of the early modern labor force'.[10] Indeed, the single question posed at every seminar and conference at which the project's preliminary results have been presented has been whether early eighteenth-century figures based on counts of principal occupations are not rendered invalid by the contemporary ubiquity of by-employments.

Despite the importance of by-employments in the socio-economic historiography of early modern England, much of the evidence for their prevalence is actually quite weak. Historians who first drew attention to the phenomenon based their argument mostly on contemporary comment; for example, A. P. Wadsworth and Julia De Lacy Mann, and Henry Fishwick, in their analyses of pre-industrial textile manufacturing in Lancashire, built on contemporary observations from William Radcliffe, John Aiken, Frederick Morton Eden, and Samuel Curwen.[11] However, as George Daniels argued nearly a century ago, the evidence of such observations is inconclusive, and more recent economic historians have used them merely peripherally when building a case for the ubiquity of by-employments.[12] Another line of argument has been based on the economic needs and available labour potential of small farmers. Population growth and developments in ownership and tenancy structures led, so the argument goes, to smaller landholdings which were incapable of supporting households by agriculture alone, vulnerable to crop failures and livestock diseases, and unable to fully occupy the household year-round. Thus, additional earnings in industry were both necessary and possible. This argument has been made, for example, for areas within early modern Lancashire by Tupling and Swain.[13] Although intuitively persuasive, this argument does not, on its own, provide evidence of by-employments being widespread. It may well be that many smallholders attained considerable shares of their income from industry, but that is compatible with a world in which there were also many, and perhaps many more men who worked in agriculture alone or as landless manufacturers. Also, combining agriculture and industry may not actually have been feasible as 'the seasonality of farming often coincided with the seasonality of manufacture'.[14] Nor is it

[9] J. T. Swain, *Industry before the Industrial Revolution: north-east Lancashire, c.1500–1640* (1986), p. 207.

[10] J. M. Rosenheim, 'Review of Swain's "Industry before the Industrial Revolution"', *Albion* 20 (1988), pp. 99–100. This sentiment can also be found in other studies of the early modern economy, for example in L. A. Clarkson, *The pre-industrial economy in England, 1500–1750* (1971), p. 77; R. E. Pahl, *Divisions of labour* (1984), p. 47.

[11] A. P. Wadsworth and J. de Lacy Mann, *The cotton trade and industrial Lancashire, 1600–1780* (1931), pp. 317–9; H. Fishwick, *The history of the parish of Rochdale in the county of Lancaster* (1889), p. 58; W. Radcliffe, *Origin of the new system of manufacture, commonly called power loom weaving* (1828), pp. 59–60; F. M. Eden, *The state of the poor: a history of the labouring classes in England, from the conquest to the present period* (1797), p. 296; J. Aiken, *A description of the country from thirty to forty miles round Manchester* (1795), pp. 244, 312; S. Curwen, *Journal and letters of the late Samuel Curwen: An American refugee in England from 1775–1784* (1842), p. 134.

[12] G. W. B. Daniels, *The early English cotton industry: with some unpublished letters of Samuel Crompton* (1920), pp. 135–43.

[13] G. H. Tupling, *The economic history of Rossendale* (1927), pp. 163–8; Swain, *Industry*, pp. 70–2, 98, 147–8.

[14] P. Hudson, 'Industrial organisation and structure', in R. Floud and P. Johnson (eds), *The Cambridge economic history of modern Britain*, I, *Industrialisation, 1700–1860* (2004), p. 30.

obvious that manufacturing incomes would have provided an effective buffer against economic distress in the agricultural sector, since economic crises, then and now, have a tendency to hit all sectors simultaneously.

More direct and much stronger evidence for by-employments has been derived from probate inventories, such as in the analyses by Everitt and Overton *et al.*, mentioned above. The popularity of probate inventories for investigating by-employments is easy to understand. These lists of the moveable goods belonging to the deceased provide valuable indications of economic activities in the form of tools, capital goods, raw materials, finished products and specialized rooms which the deceased possessed. Furthermore, if the decedent was male, his principal occupation is often explicitly stated in the preamble to the inventory itself; if not, it can usually be derived from other probate documents referring to him. Thus inventories allow for the identification of by-employed households. Therefore, they make it possible to quantify by-employment incidence through a straightforward comparison between the number of by-employed and non-by-employed decedents. Many historians of early modern England have exploited this possibility, examples of which are provided in Table 1.

It is the purpose of this article to test such probate-derived figures for robustness. The probate record is a very rich data source but it suffers from a range of problems. This article examines whether one or more of these problems necessitate a re-evaluation of the type of figures presented in Table 1. This examination takes the form of a 'test case' which is itself of limited geographic and temporal scope but the results of which, we argue, have relevance for *all* probate-based calculations of by-employments in early modern England. The focus of the test case is the probate jurisdiction of the episcopal consistory court of Chester for the period 1700–60. The choice for this particular geography and time period was partly informed by our involvement in the Occupational Structure of Britain project, partly by historiographical and practical reasons. Some of the most significant results from the Occupational Structure project so far relate to early eighteenth-century Lancashire, Cheshire, and the West Riding – the future heartland of the Industrial Revolution. It was therefore of obvious interest to us to examine the degree to which the accuracy of the preliminary figures for this region and time period were affected by the prevalence of by-employments. Based on the ready availability and accessibility of well-indexed probate inventories, the geographic extent of the test case was further reduced to the probate jurisdiction of the episcopal consistory court of Chester, that is, Cheshire, and Lancashire south of the Ribble, which contained about 82 per cent of the county's population in 1760.[15] This area (and time period) neatly coincides with what John Stobart has called the 'first industrial region', an area of obvious interest from the perspective of by-employments given the role they are presumed to have played in the transition towards an industrial society.[16] At least for its Lancashire part, this was also an area to which, in the mid-eighteenth century, 'the features of a typical proto-industrial landscape appl[ied] …

[15] To ensure a balanced sample of inventories, electronic indexes to the probate records were required, which were kindly provided to us by the Cheshire Record Office (for Cheshire) and by Prof. Jon Stobart (for Lancashire south of the Ribble). The West Riding probate records are not indexed and poorly accessible and therefore had to be excluded. The population estimate is based on E. A. Wrigley, *The early English censuses* (Records of Social and Economic History, new ser., 46, 2011), Table 4.1, pp. 104–5.

[16] J. Stobart, *The first industrial region: North-west England, c.1700–60* (2004).

TABLE 1. Probate-based assessments of by-employment incidence in the literature

Historian	*Region*	*Period*	*Occupational group*	*Number of inventories*	*By-employment type*	*Incidence (%)*
J. T. Swain	N-E corner Blackburn hundred (Lancashire)	1558–1640	Farmers	138	Weaving	*c.*48[a]
C. Ironfield	Chipping (Blackburn hundred, Lancashire)	1650–1700	Craftsmen	14	Agriculture	79
D. Hey	South Yorkshire	1694–1769	Nailers and cuttlers	43	Agriculture	84
B. A. Holderness	Lindsey in Lincolnshire	1660–1799	Artisans and shopkeepers	173	Agriculture	84
D. Woodward	Lincolnshire, Lancashire, Cheshire	1550–1650	Carpenters	91	Agriculture	88
			Builders	132	Secondary sector	11
J. Stobart	Cheshire	1700–1760	Tailors and shoemakers	27	Pastoral agriculture	63
P. Frost	South Staffordshire	1601–1640	Craftsmen	*c.*50[b]	Agriculture	78
		1681–1720	Craftsmen	*c.*250[b]	Agriculture	55
M. B. Rowlands	West Midlands	1660–1710	Metalworkers	434	Agriculture	56
J. M. Martin	South Warwickshire	1727–1749	Craftsmen and traders[c]	98	Agriculture	51
J. S. Moore	Frampton Cotterell and district (Gloucestershire)	1540–1790	Secondary sector	113	Agriculture	33
			Mining	16	Agriculture	19
			Tertiary sector	25	Agriculture	36
M. Overton, J. Whittle, D. Dean, and A. Hahn	Kent	1600–1740	Commercial farmers	1988[d]	Crafts	18
			Craftsmen	735[d]	Agriculture	47–63[e]
	Cornwall	1600–1740	Commercial farmers	2190[d]	Crafts	13
			Craftsmen	632[d]	Agriculture	47–66[e]
A. Everitt	17 English counties	1540–1640	Farm labourers	*c.*300[f]	Secondary sector	60

Notes:

[a] Determined using several figures provided in the text as no direct figure was given.

[b] The inventory numbers have been estimated here, based on shares of probate inventories belonging to the metal trades per time period, provided on pp. 29 and 38 of the article.

[c] This groups includes an unstated number of labourers, but given that these very rarely left inventories, it has been assumed that this number was negligibly low.

[d] The Overton *et al.* figures are not readily comparable to the others in this table, since the classification of the occupational group to which the inventory belongs was based on the presence or absence of activities in the inventories, not on the stated occupation of the deceased. This means that occupational groups, as used in this table, inevitably overlap. For example, an inventory showing clear evidence of weaving and of commercial farming will be ranked under both occupational categories in the table above, and will be counted as by-employed in both categories.

[e] The lower figure indicates commercial agriculture only, the higher indicates all agricultural activities, including (very) minor ones.

[f] Estimated based on Everitt's statement, on p. 419, that about 8 per cent of the 3,600 inventories he examined were of labourers.

Sources: J. T. Swain, *Industry before the Industrial Revolution: north-east Lancashire,* c.*1500–1640* (1986), pp. 127, 134; C. Ironfield, 'The parish of Chipping during the seventeenth century', *Trans. of the Historic Society of Lancashire and Cheshire* 127 (1978), pp. 37, 41–2; D. G. Hey, 'A dual economy in south Yorkshire', *AgHR* 17 (1969), Tables IV and V, pp. 114–6; B. A. Holderness, 'Rural tradesmen, 1660–1850: A regional study in Lindsey', *Lincolnshire Hist. and Archaeology* 7 (1972), pp. 79 (Table 1), 81; D. Woodward, 'Wage rates and living standards in pre-industrial England', *Past & Present* 91 (1981), pp. 39–42; J. Stobart, 'The economic and social worlds of rural craftsmen-retailers in eighteenth-century Cheshire', *AgHR* 52 (2004), p. 151; P. Frost, 'Yeomen and metalsmiths: Livestock in the dual economy in south Staffordshire, 1560–1720', *AgHR* 29 (1981), pp. 29, 38, 40; M. B. Rowlands, *Masters and men in the West Midland Metalware trades before the industrial revolution* (1975), pp. 42–43; J. M. Martin, 'Village traders and the emergence of a proletariat in south Warwickshire, 1750–1851', *AgHR* 32 (1984), p.184 ; J. S. Moore, *The goods and chattels of our forefathers: Frampton Cotterell and district probate inventories, 1539–1804* (1976), pp. 20–1, 26–7; Overton *et al.*, *Production and consumption*, Tables 4.2 and 4.3, pp. 67–8; Everitt, 'Farm labourers', pp. 419, 428–9.

with remarkable accuracy'.[17] Furthermore, this was a region dominated by pastoral farming, considered so conducive to by-employments by Thirsk and Pollard and which, critically, allowed us to cross-check our probate-based by-employment analyses against independent figures – a procedure of central importance to our results, as will become clear. For this procedure to work, high-quality occupational information was also a prerequisite, which was an additional reason to focus on the early eighteenth century – for which such information has been generated by the Occupational Structure project – rather than on pre-1700 data.

The test case is developed in five steps, each forming a section of this article. In section I, the general suitability of probate inventories for by-employment analyses is evaluated. It concludes that they exhibit a number of problems as an historical data source, but that these problems are either fairly small or can be minimized by using the probate data with suitable care. There is one important exception: the problem of social bias, that is, the over-representation of wealthier estates in the probate record. Disregarding that issue for a moment, section II focuses on the incidence and scale of by-employments in the chosen area and time period as suggested by probate inventories *prima facie*. These results provide a basis for investigating the significance of the social-bias issue, in section III, concluding that it is indeed likely to materially distort inventory-based by-employment calculations. The magnitude of this distortion is assessed in section IV, by bringing in evidence from other historical sources. This, then, allows us to generate an estimate of the incidence of by-employments, corrected for social bias, which is valid for the whole contemporary population rather than 'merely' for the inventoried segment. The repercussions of this correction for probate-based by-employment analyses for other areas in England and different time periods are discussed in a brief concluding section.

Before turning to the actual analyses, however, two final key points regarding the historiography of by-employments need to be made. First, in the literature the term 'by-employment' has been used in two quite distinct ways, though the two uses have often been conflated. In the most common usage, as for example by Everitt, Thirsk and Langton, the term has been used to describe *individual* by-employment, that is, one individual having more than one

[17] Pollard, *Marginal Europe*, p. 228.

significant economic activity.[18] In a second, more recent usage, by Overton *et al.*, the term has been used to refer to *household* by-employment, that is, the presence of multiple economic activities within one household. This more recent definition has a methodological advantage when using probate inventories as a data source, as will be discussed. However, it also has clear disadvantages. Household by-employment either refers to households in which one or more individuals are by-employed, in which case it is simply a scaled up-version of individual by-employment, or entails no more than different individuals within the household having different occupations, in which case it is, in practice, merely an opaque term for women's and children's work. Furthermore, it is the norm in the modern world for different individuals within a household to have different occupations. Thus, the use of the term 'by-employment' to refer to households entails making claims that do not clearly distinguish the early modern period from the present. In contrast, the assertion that *individual* by-employments were prevalent is a claim that *does* make a very clear demarcation between the early modern and later periods. Finally, analysing household by-employment using probate inventories introduces serious problems of its own, particularly because the incidence of the most prominent female employment of the early modern period, spinning, cannot reliably be inferred from them, as will be discussed. In this article, we distinguish household by-employment from individual by-employments and our focus is firmly on the prevalence of the latter, in particular amongst the early modern male population.

The second key point is that if individual by-employment was a major feature of the early modern world but not of the modern world, then it is implicit that, from some point in time, by-employment began to decline until it was of very limited importance indeed. Such a decline is, as discussed above, an important component of proto-industrial theory. Some historians have commented explicitly on the timing of the decline in England. Court, in his study of the Midland industries, very tentatively suggested that by-employment probably began to lose significance in the seventeenth century but really went into major decline in the eighteenth century.[19] Rowlands, in her study of the West Midland metalware trades similarly concluded that 'the trend away from the dual economy was already perceptible by 1720'.[20] Tupling observed an increase in the number of weavers entirely divorced from the land during the 1740s in the woollen industry of south-east Lancashire.[21] Overton *et al.* observed a decline in by-employments in early eighteenth-century Cornwall, but not in Kent.[22] These passing comments aside, it is remarkable, and indeed peculiar, that there is no study, of which we are aware, focussed on the decline of by-employment. Historians of the nineteenth century have never, so far as we know, suggested that individual by-employment was an important feature of the period.[23] This suggests that if such by-employments were ubiquitous in the early modern

[18] J. Langton, 'Prometheus prostrated?', in P. Slack and R. Ward (eds), *The peopling of Britain: The shaping of a human landscape* (2002), pp. 244–46.

[19] W. H. B. Court, *The rise of the Midland industries, 1600–1838* (1938), p. 42.

[20] M. B. Rowlands, *Masters and men in the West Midland metalware trades before the industrial revolution* (1975), p. 43.

[21] Tupling, *Economic history of Rossendale*, p. 190.

[22] Overton *et al.*, *Production and consumption*, p. 76.

[23] Though they have noted the continuing role of urban workers in meeting part of the peak demand for agricultural labour in the harvest season well into the nineteenth century. See for instance W. A. Armstrong, 'Labour I: Rural population growth, systems of employment, and incomes' in G. E. Mingay (ed.), *The agrarian history of England and Wales,* VI, *1750–1850* (1989), pp. 679–80.

period, there is a history of their decline, perhaps beginning in the late seventeenth century and concluding sometime in the second half of the eighteenth century, waiting to be written.

I

As we showed earlier, the probate inventory has, for obvious reasons, been the historian's data source of choice for quantitative analyses of early modern by-employments, and our research is no exception in this respect. Inventories provide indications of economic activities in the listed tools, materials, and rooms. And if, as in the vast majority of inventories, the deceased was male, the inventory itself or other probate documents for the same individual often state his principal occupation. For example, such a 'stated' occupation is known for 87 per cent of the male inventories dating from the 1700 to 1760 held in the Cheshire Record Office.[24]

Overton *et al.* have argued that occupational denominators provided by probate documents are unreliable, as the occupation stated in the inventory 'often differed from that stated by the decedent in his or her will'.[25] However, such differences were only recorded in a handful of cases in the dataset collected for our research, and clear evidence for the reliability of probate-derived occupational descriptors will be provided below.[26] Because many probate inventories both provide a stated occupation and list the goods associated with economic activities, they enable an assessment of both the validity of the principal employment of the deceased and the presence of other gainful activities within his household.

In addition to information on the type of economic activities, inventories also provide insight into the scale of these activities. They usually mention not just the presence of certain goods or objects, but also their quantities. And, because they also provide a valuation of the listed goods, they allow for combining assets of different types into a single monetary figure. For example, an impression of the overall scale of the deceased's farming activities can be obtained by combining the values of all his agricultural assets. Valuations in inventories have also been used extensively to measure the wealth of probated households.[27] Several such inventory-derived wealth measures are employed in this article.

Probate inventories may be detailed and broad sources of historical information, but they are

[24] With only 8 per cent having no stated occupation at all, and 5 per cent being described by status (gentleman, esquire, etc) rather than occupation. This high share of probate documents with a stated occupation is not untypical of the later early modern period; see also Paul Glennie's analysis of the increase of this share over time for Hertfordshire wills: P. Glennie, '*Distinguishing men's trades*': *occupational sources and debates for pre-census England* (1990), fig. 3.2, p. 35.

[25] Overton *et al.*, *Production and consumption*, p. 34.

[26] Craig Muldrew also found only very few such cases in his dataset. See C. Muldrew, *Food, energy and the creation of industriousness: work and material culture in agrarian England, 1550–1780* (2011), p. 166. See also the discussion on this issue in L. Shaw-Taylor, 'The Nature and Scale of the Cottage Economy' (2002), http://www.geog.cam.ac.uk/research/projects/occupations/abstracts/paper15.pdf, pp. 11–12.

[27] See, for example, C. Shammas, 'Constructing a wealth distribution from probate records', *J. Interdisc. Hist.* 9 (1978), pp. 297–307; A. H. Jones, 'Wealth estimates for the New England colonies about 1770', *JEcH* 32 (1972), pp. 98–127; G. L. Main and T. M. Jackson, 'Economic growth and the standard of living in southern New England, 1640–1774', *JEcH* 48 (1988), pp. 27–46. For a discussion on the wealth indications in inventories see T. Arkell, 'Interpreting probate inventories', in T. Arkell, N. Evans, and N. Goose (eds), *When death do us part: Understanding and interpreting the probate records of early modern England* (2000), p. 95; see also Overton *et al.*, *Production and consumption*, pp. 140–2.

far from unproblematic. Some of these problems potentially affect their reliability when used as a basis for assessing by-employments. The first problem is the gendered nature of ownership in early modern England. The male 'head' of a household was the legal owner of all the goods in the household, with the possible – and, for the purpose of detecting economic activities, irrelevant – exception of small heirlooms or pieces of women's apparel, which might have been considered the individual property of his wife. His probate inventory therefore presents material evidence of the significant gainful activities within the household, whether carried out by him, his wife, living-in children, or servants. This means that inventories provide information on the activities of the entire household rather than those of the deceased alone. If a weaver's inventory contains evidence of agricultural activities, it is not clear whether he was himself involved in farming, or whether this was the preserve of other household members such as his wife. In other words, probate inventories provide direct information on *household* by-employment but not on *individual* by-employment. Since the latter is, in essence, a special case of the former, inventories exaggerate the incidence of individual by-employment. Inventory-derived figures, like those presented in this article, should therefore always be considered as *maximum* values for individual by-employment incidence. However, since, as will become clear, one of the main claims of this article is that by-employments were much less prevalent than is presumed in the literature, working with maximum values is not problematic; if anything, we are erring on the side of caution when using probate evidence to support this claim.

A final remark should be made regarding this issue: for some activities, such as spinning, it is fairly certain that they would not have been carried out by the male 'household head' because they were virtually restricted to women. One could therefore simply exclude them from the by-employment incidence count if one is solely interested in individual, male by-employments. Indeed, as discussed below, spinning *is* excluded in this article, albeit for different reasons. However, even activities usually carried out by women could be performed by men, and often were, particularly when they were on a commercial scale. Home brewing and baking may have been typically female activities, but most commercial brewers and bakers were men. It is possible, therefore, that precisely at the point that such 'female' activities became of sufficient scale to qualify as true by-employments, that is, when they generated a significant surplus for sale in the market, they may well have shifted from the female to the male domain. Again, erring on the side of caution, typically female activities have therefore not been excluded from individual by-employment counts in this article.

A second, more general problem with probate inventories is what might be called 'abbreviation', that is, individual items, particularly those of very low value, are not in all cases listed separately. The degree of abbreviation differs between inventories. Most inventories feature headings like 'hustlements' or 'things seen and unseen', covering a collection of small, low-value items. Sometimes, however, the level of abbreviation goes much further, and all items in a room or even an entire house are grouped together under general terms like 'household goods'. In such inventories, potential indications of gainful activities like carpenters' tools or cheese presses are invisible. The solution for this problem is straightforward: only use a specific inventory for the purposes for which it is suitably detailed. It may contain enough detail on livestock to be used for counting cattle, yet be too abbreviated in other goods to serve as a reliable source on non-agricultural pursuits. But even when goods *are* included, their quantities

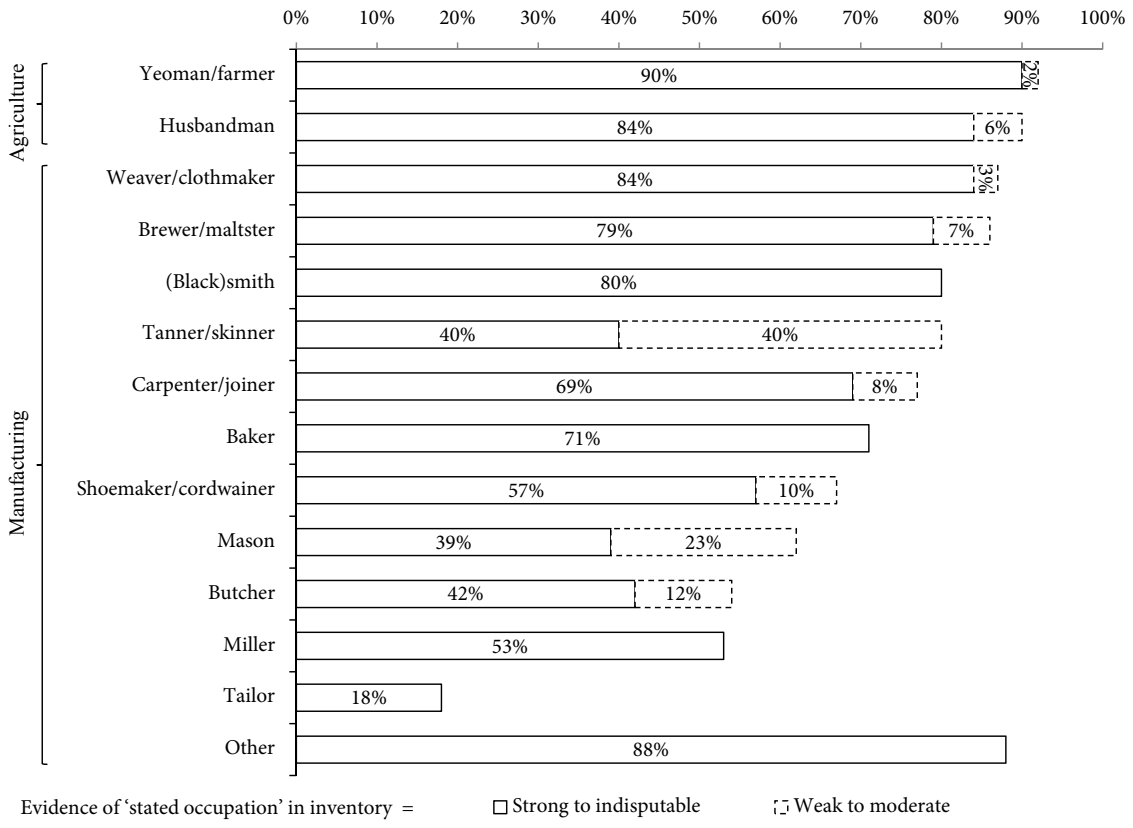


FIGURE 1. Strength of indications for the deceased's principal occupation in the probate inventories of early eighteenth-century men from Cheshire and Lancashire south of the Ribble

Source: Probate inventory dataset.
Note: Only inventories that list goods in sufficient detailed for this analysis were used (531 out of a total of 543 inventories).

may be unclear, for example when an unknown number of cattle are simply abbreviated to an entry reading 'cows' or 'horned beasts'. In such cases, the upper and lower limits of the unit price – derived from the inventories in which quantities *are* clear – can be used to estimate upper and lower bounds for the number of items. This approach is preferable to one in which the inventories with unstated numbers of livestock are simply excluded. The monetary values of livestock in these inventories show that these are typically inventories with large numbers of animals. Excluding them would result in erroneously low average livestock numbers.

A third, related problem is that some occupations leave few traces in probate records. This problem can be illustrated by comparing the decedents' occupational descriptors with indications of gainful activities provided by the goods and rooms listed in the inventory. Figure 1 shows that, for occupations which produced high-value output or which required expensive capital goods, significant quantities of raw materials, or tools of non-trivial value, the comparison is very encouraging. For example, only ten per cent of the inventories used in this research, of those described as a yeoman in the preamble to the inventory or a related probate

document such as a will, did not contain strong to indisputable indications of agricultural activities.[28] For many manufacturing occupations, for example for weavers, tanners and brewers, the figure is similarly low. This is clear evidence for the reliability of the occupational descriptors in these probate documents. It also suggests that such occupations are likely to have left clear traces in inventories for which they were 'merely' by-employments.

But Figure 1 also shows that some occupations did not always leave such clear traces. Nearly half the butchers' inventories used in our research showed no sign of the stated occupation and the same was true for over 80 per cent of tailors' inventories. The low value of the tools used in these occupations means that they often went unmentioned. Furthermore, the lack of any cloth or ready-made clothes being listed in tailors' inventories indicates that they typically worked on commission, so held little or no stock of raw materials or finished goods. Determining by-employment in such 'trace-poor' occupations is problematic. If a farmer's inventory shows no evidence of by-employment, one can be relatively sure that he was not involved in weaving, as that would probably have left clear traces, but it is less certain that he was not by-employed as a tailor.

Fortunately, this problem can be resolved, using the data from Figure 1 on male manufacturing occupations. For example, as only one in five decedents with the 'stated', principal occupation of tailor left clear evidence of tailoring in their inventories, we can assume that, similarly, only for one in five decedents for which tailoring was a by-employment will clear evidence of that activity be found in the inventory. Thus, actual by-employment incidence in tailoring amongst the inventoried population can be estimated as having been five times as high as a simple frequency count within the inventory record would suggest. All incidence figures in this article have been upwardly corrected in this way for 'trace-poor' male occupations. Fortunately, the most common by-employments by far, were farming and weaving, and these were not 'trace poor', so the resulting correction was actually quite small.

This correction methodology relies on information on the share of inventories showing clear signs of their stated, principal occupation. Our sample of inventories gave us access to such information for all significant agricultural and manufacturing activities. There is, however, one 'trace-poor', male occupation for which such information is not available: the labourer. But labouring outside the household as a subsidiary activity for farmers and manufacturers would have been limited to low-skilled work in periods of labour shortage, such as helping out during the harvest. Such labour was occasional, and therefore represented only a limited – although undoubtedly welcome – contribution to household income.[29] In short: 'trace-poor' activities did not constitute a significant problem for analysing the phenomenon that this article focuses on, that is, male, individual by-employment.

The problem would have been significantly more serious had we focused on *household* by-employment. Typically, important female manufacturing activities were 'trace poor'. For them, the principal occupation-based correction methodology discussed above does not

[28] This not only confirms the validity of the occupational descriptor but also dispels possible suspicions about 'yeoman' being used as an indication of status rather than occupation in our inventory sample.

[29] For a discussion on what constitutes a by-employment in the sense in which the term has been used in this article, see the discussion on the 'fifth problem', p. 257.

TABLE 2. Indications for spinning as a function of the level of 'abbreviation' of inventories

Level of detail provided by inventory	*Farmers*		*Labourers*		*Manufacturers*	
	Number of inventories	*Spinning incidence (%)*	*Number of inventories*	*Spinning incidence (%)*	*Number of inventories*	*Spinning incidence (%)*
Low to moderate	43	5	4	0	68	7
High	90	41	19	37	273	27
Very high	4	50	1	N/A	26	50
	137	30	24	29	367	25

Notes: Only inventories that list goods and/or rooms with a sufficient level of detail for this analysis were used (528 out of a total of 543 inventories). Spinning incidence for labourer with very highly detailed inventory left out of table as only one such inventory, so statistically rather meaningless.
Source: Probate inventory dataset.

work, as women's inventories are much scarcer than men's and only rarely mention principal occupations. 'Trace-poor' female manufacturing activities were sometimes geographically concentrated and not particularly relevant for the counties analysed in this article; examples would be straw plaiting and lace making. But the by far most important and widespread of such activities was prominent in the north-west as well: spinning. Jane Whittle has argued that probate inventories allow for the reliable assessment of the prevalence of spinning, at least where this was carried out using a spinning wheel rather than a distaff.[30] However, even spinning wheels were relatively cheap, often valued at merely 6*d*. or less in the early eighteenth century, which meant they could quite easily fall below the surveyors' threshold for a separate inventory listing. Indeed, a comparison of the frequency of indications for spinning between inventories with different levels of abbreviation confirms this. As shown in Table 2, indications of spinning were encountered nearly twice as often in the most detailed inventories as in the average inventory. And there is no guarantee that even in these rare, exceptionally detailed inventories, spinning wheels were *always* recorded. The conclusion, unfortunately, has to be that inventories are not reliable sources for estimating the incidence and economic importance of spinning, with the possible exception of a tiny minority of extremely detailed ones. Given this unreliability of spinning indications and our focus on individual, male by-employment, we have chosen to exclude spinning from all by-employment data presented in this article.

A special form of 'trace poorness' might be feared for agricultural pursuits of a seasonal nature: farming activities might be invisible in the inventory if it was taken in a period of the farming year characterized by a lack of moveable agricultural goods. Such seasonal 'trace poorness' could well have been a problem in arable farming areas, but in the predominantly pastoral farming area under analysis in this article it was not. The bulk of the total value of agricultural goods in the inventories was accounted for by livestock, which was largely non-seasonal. There was therefore very little variation in either the total agricultural values or

[30] J. Whittle, 'Housewives and servants in rural England, 1440–1650: evidence of women's work from probate documents', *Trans. Royal Hist. Soc.* 15 (2005), p. 68; see also Overton *et al.*, *Production and consumption*, p. 36.

in agricultural by-employments indicated by the inventories over the year: the seasonal average value in agricultural goods in farmers' inventories varied between a minimum of £46 (spring) and a maximum of £50 (summer), whilst agricultural by-employment incidence amongst secondary sector inventories varied by a mere five per cent between these same two seasons.

Some inventories suffer from a fourth problem: the goods and rooms listed in them do not provide *any* evidence of economic activities. Such 'non-productive' inventories, as Overton *et al* have called them, are problematic for by-employment analyses, particularly when the principal, stated occupation of the male 'household head' was 'trace poor'.[31] This can best be explained by offering a simple example. John Birtles, a tailor from Henbury, in Prestbury parish, Cheshire, who died in 1746, left an inventory without any indications of gainful activities. His inventory provides room for three alternative interpretations. A first interpretation is that, since tailoring often leaves no evidence in an inventory, it is not surprising that there are no indications of it in this specific inventory. As agricultural activities normally do leave clear indications in inventories, it would seem that the Birtles household was not agriculturally by-employed. A second interpretation, however, is that Birtles (or members of his household) had been active in agriculture, but that this does not show up in the inventory because John Birtles, nearing his death, had been too ill or physically infirm to work, and had sold his livestock and tools to survive economically in this period of little or no income. A third possible interpretation is that John Birtles, or other members of his household, had been active in tailoring and agriculture until Birtles's death, but that all livestock and tools were sold to pay off debts or divided amongst family members in the period between his death and the creation of the inventory. Since it is impossible to determine which of these three interpretations is correct, it is impossible to determine whether this household was agriculturally by-employed or not. But if such 'non-productive' inventories are included in counts of by-employment incidence, the evidence is, implicitly, gauged in terms of the first of the three above interpretations, leading to by-employment incidence potentially being underestimated.

The solution to this problem is simple. For inventories that provide clear confirmation of the stated, principal occupation of the male 'household head' in the goods and rooms listed, the problem of several possible interpretations of the inventory evidence does not exist. The male decedents here were clearly still active at the time of death and their tools had not, apparently, been sold to pay off debts, or divided amongst their descendants between the moment of death and the creation of the inventory. If there is no evidence of other gainful activities in such inventories, the decedent is highly unlikely to have been by-employed. In other words: if the analysis is restricted to this subset of inventories, we are unlikely to underestimate by-employment incidence. There is, obviously, a cost to this solution: the number of usable inventories for by-employment analyses is unavoidably reduced. As Figure 1 shows almost all farmers' inventories and most manufacturers' inventories provide clear indications of the decedent's stated occupation, and can therefore be safely included in the by-employment incidence analyses. But there is a reduction in sample size. There were 139 farmers' inventories that were sufficiently detailed for by-employment analyses, but only 121 of them also provided clear indications of farming; 364 manufacturers' inventories were sufficiently detailed, but only

[31] Overton *et al.*, *Production and consumption*, p. 84.

230 of them had clear enough traces of the decedent's stated occupation to make them unproblematic for by-employment incidence counts. It should be noted here that although limiting the dataset in this way is methodologically appropriate, it actually has a negligible impact on the by-employment incidence counts. Our analyses show that, had inventories without clear indications of the stated, principal occupations been left in the dataset, by-employment incidence would have been underestimated by less than two percentage points for inventoried manufacturers and by less than one percentage point for inventoried farmers.

Age bias represents a potential fifth problem: one might expect the elderly to be over-represented in probate collections. However, it should be noted that, with the patterns of mortality that prevailed in the early eighteenth century, a high proportion of adult male deaths would have been of those who would not be considered elderly. Life expectancy at age 25 was around 32 years in the early eighteenth century in the villages and small towns that comprised the Cambridge Group's reconstitution sample. In other words, the average age of death for those who survived to 25 was around 57. Put differently, of those who survived to 25, just under half survived to the age of 60; just over a third survived to 65 and only around a quarter reached 70.[32] Moreover, a systematic analysis by Overton *et al* found no evidence of age bias amongst the English probate record.[33] But even if age bias *were* significant, this does not necessarily affect probate-based analyses of by-employment. Such a bias towards the later stages in the lifecycle would only affect analyses if the incidence of individual male by-employment in the early modern period varied over the man's lifetime. But there is not much reason to expect that by-employment was more typical of, say, the early than the later stages of life.

A sixth problem lies in the occasional lack of clarity of by-employment indications in inventories. Evidence for manufacturing activities is sometimes open to multiple interpretations. For example, the inventory of Joshua Walker, a butcher from Capesthorne in Cheshire, lists a large number of livestock. Given his principal occupation as a butcher, livestock ownership in itself is not a definitive indication of agricultural activities, as he may merely have had the listed farm animals for fattening, in preparation for slaughter. But, his inventory also listed all kinds of equipment for arable agriculture, such as ploughs and harrows, making agricultural by-employment indisputable. He also owned £6 in hides and skins. This might indicate by-employment as a tanner, but since the deceased was a butcher and the inventory does not contain any references to tanning equipment or bark, it is more likely that he would simply have had hides and skins resulting from killing animals for their meat, and had been about to sell them to a 'proper' tanner for further processing.

And even for unambiguous indications of manufacturing activities, it can sometimes be difficult to gauge whether they really indicate a by-employment. In this article, activities in the household have only been considered true by-employments if their fruits were sufficiently large as to not be wholly consumed within that same household. Activities like baking bread, brewing beer, sewing or washing clothes could be undertaken on such a scale that a substantial surplus was available for sale 'in the market'. But, if small in size and solely intended for

[32] E. A. Wrigley, R. S. Davies, J. E. Oeppen, and R. S. Schofield, *English population history from family reconstitution, 1580–1837* (1997), Table 6.19 (p. 290).

[33] Overton *et al.*, *Production and consumption*, pp. 27–28, 208. American probate studies, however, have found evidence of age bias – see for example G. L. Main, 'The standard of living in southern New England, 1640–1773', *William and Mary Q.* 45 (1988), p. 125.

members of their own household, perhaps combined with some very limited barter trade with neighbouring households, such activities are correctly considered as domestic rather than as by-employments in the full meaning of the term, even though they reduced the need for purchasing the same products or services on the market and therefore constituted economic value. It is, however, not always easy to infer from inventories whether an activity was 'for the market' or 'merely domestic'. The inventory of William Coppock, a tanner from Timperley in Cheshire lists one load of malt, a brewing stoond and a barrel, altogether valued at less than £2; this probably only indicates small-scale brewing for purely domestic use, but it is impossible to be entirely certain about this.

In short, it is not always feasible to decide with certainty whether an inventoried household was by-employed or not. The solution for this problem chosen in our research was to therefore not make such 'binary' verdicts, but to express the strength of the indication on a nine-point sliding scale, ranging from 'none' for no indications whatsoever to 'indisputable' for undeniable indications of by-employment. For example, the inventory of Joshua Walker, discussed above, was interpreted as providing 'indisputable' indications of agricultural by-employment but 'weak' indications of tanning. William Coppock's inventory, also discussed above, was interpreted as providing only 'weak' indications of brewing. This inventory does not contain a loom, but it does list £60 worth of 'made and unmade' linen cloth, which is an exceptionally high figure. It is therefore likely that he was a clothier, putting out the actual weaving to others. Despite the lack of a loom, the likelihood of Coppock being involved in secondary sector activities was therefore judged as 'strong'. Coppock's inventory also contained 4*s*. worth of 'old iron'; since old iron is often listed in blacksmiths' inventories, this potentially indicates blacksmithing activities, but given the lack of a smithy, anvil, bellows or metalworking tools, this indication was interpreted as 'very weak'. Finally, the presence of ploughs, harrows, a winnowing fan, a multitude of smaller agricultural tools, and £4 worth of beans and wheat in this inventory led us to interpret it as providing 'indisputable' indications of arable agriculture. Unless otherwise stated, only indications in the upper half of the scale, ranging from 'fairly strong' to 'indisputable' were considered sufficiently clear evidence of by-employment. The main conclusions of the research were, however, tested for robustness by varying the by-employment 'cut-off point' along the scale.

For agricultural activities, in addition to this qualitative 'strength-of-indication' scale, a firmer, more quantitatively based judgement was made on whether they were likely to have been of a sufficient magnitude to result in a surplus for sale in the market. For example, ownership of a pig or some poultry is a clear sign of involvement in agriculture but, if there are no indications of additional agricultural activities, it signifies a very marginal agricultural activity, probably entirely 'consumed' within the household and thus, in the meaning of the term adopted in this article, not a true by-employment at all. Therefore, employing a cut-off point in the total value of agricultural assets of the inventoried household, agricultural activities were divided into 'marginal' and 'substantial' ones. Only manufacturers' inventories with substantial farming activities – those which listed at least one adult cow or, if no cows were listed, whose combined value in agricultural assets was at least £3, the average value of an adult cow in the probate sample – have been deemed truly agriculturally by-employed. This £3 cut-off point was chosen to be quite low: it equalled merely six per cent of the value of

the agricultural assets of the average farmer's inventory and would only have denoted limited economic value to most manufacturers' households. Using such a low cut-off point ensures that we were, again, erring on the side of caution. Nevertheless, something which represented merely minor economic value to most households may have represented substantial economic value to a very poor one such as that of a labourer, as Jane Humphries has shown.[34]

The above six problems with probate inventories may have proved to be resolvable fairly easily, but that is not the case for the final issue: wealth bias. As Daniel Smith phrased it, 'like other seemingly broad sources in social history, probate records represent the experience of an atypically prosperous segment of the population'.[35] Wealthier estates were much more likely to be inventoried than poorer ones, probably because the trade-off between, on the one hand, the cost of having an inventory made and, on the other hand, the value of such an inventory in case of disputes over the estate, was more positive for wealthy than poor estates. Since the church courts were not allowed to charge a fee if the inventory value was less than £5, they had a financial disincentive for registering and exhibiting inventories for such low-value estates, which probably serves to exacerbate the inherent wealth bias.[36]

Although wealth bias amongst probate inventories has always been widely recognized, the repercussions of this bias for by-employment analyses have generally been tacitly ignored. Overton *et al* have been careful to stress that their figures and conclusions only apply to the inventoried share of the population, but few others have so explicitly made this distinction. However, it is not difficult to see why the probate record's inherent wealth bias is likely to lead to by-employments being more prevalent amongst the inventoried than the non-inventoried. The presence of expensive capital goods or large quantities of raw materials or finished products was usually an important determinant of the overall value of an estate. The most prevalent high-cost capital good in early eighteenth-century Cheshire and Lancashire was cattle. An adult dairy cow typically cost between £2 4*s*. and £3 8*s*., and the average yeoman's inventory in these counties lists seven of them. Combined with other cattle, horses and farm animals, such inventories on average list £34 in livestock alone, representing more than half the total moveable value of the estate. On top of that comes £21 in arable produce and dairy products. Some secondary sector occupations also required expensive capital goods, such as the large copper vessels used by commercial brewers, or the vast stocks of hides and bark of the typical tanner. But most others did not. For example, the combined value of all work-related goods in the average non-by-employed weaver's inventory was a mere £5.

Consequently, individuals with capital-intensive and stock-rich occupations were much more likely to leave an inventory than those with employments that required little capital or stock. This is clear from Table 3, in which the contemporary male occupational structure, derived from the parish registers of 35 Cheshire parishes and chapelries, is compared to the composition of the surviving probate inventory record for these same parishes. As it demonstrates, the chance of a farmer leaving an inventory was three times that of a manufacturer, and about 20

[34] J. Humphries, 'Enclosures, common rights, and women: The proletarianization of families in the late eighteenth and early nineteenth centuries', *JEH* 50 (1990), p. 24.

[35] D. S. Smith, 'Underregistration and bias in probate records: an analysis of data from eighteenth-century Hingham, Massachusetts', *William and Mary Q.* 32 (1975), p. 106.

[36] Arkell, 'The Probate Process', in Arkell *et al.* (eds), *When death do us part*, p. 12.

TABLE 3. Male main occupations in anglican baptism registers and probate inventories; Cheshire, selected parishes, 1690–1730

Male principal occupation		*Parish records (count)*	*Probate inventories (count)*	*Ratio* $\left(\frac{\text{Parish records}}{\text{Probate inventories}}\right)$	*Chance of leaving inventory relative to farmers*
Farmers		2,245	793	2.8	1
Manufacturers	Capital intensive[a]	30	19	1.6	2:1
	Capital extensive[b]	726	54	13.4	1:4
	Other	1,026	123	8.3	1:3
	All	1,782	196	9.1	1:3
Labourers		1,112	c.20	c.56	1:20

Notes: Both parish records and probate inventories taken from the same 29 Cheshire parishes, in the same time period (1690–1730), to ensure comparability. These parishes represent roughly one quarter of the total, contemporary Cheshire population.

[a] Tanners only.

[b] Tailors, shoemakers, and weavers.

[c] All inventories with 'labourer' as stated occupation plus a small share of the inventories with 'husbandman' as stated occupation. The size of this 'husbandman correction' – connected to the occupational ambiguity in the term 'husbandman' – was based on the relatively high share of husbandmen inventories (16%) without strong indications of agricultural activities compared to yeomen (10%). This suggests that roughly 6% of the inventories with a stated occupation of 'husbandman' probably relate to a decedent more properly described as 'labourer'.

Sources: Parish data collected for the 'Occupational Structure of Britain 1379–1911' project; electronic index to Cheshire probate documents, provided by the Cheshire Record Office.

times that of a labourer. Only for very capital-intensive secondary sector occupations, such as tanning, were the chances of leaving an inventory comparable to or better than for farmers.

The fact that there are disproportionate numbers of farmers and tanners in the surviving inventory collections, and, for example, very few labourers, is not in itself a problem, as this can be corrected for by using an occupationally stratified sample of inventories or by working with weighted averages when comparing groups of occupations – provided that occupational data are available to allow the selection of a representative sample for determining the 'weights' per occupation. But Table 3 suggests a much more serious issue. The same reason that farmers or tanners were relatively likely to leave an inventory, namely their occupational requirement for the possession of livestock or expensive stocks of raw materials, would have made artisans who were by-employed in farming, or agriculturalists who also worked as tanners more likely to leave an inventory than their non-by-employed contemporaries. This means that the by-employed are likely to be over-represented in the probate inventory record. This over-representation is exacerbated by a more general connection between wealth and by-employment, as will be shown in section III. It is not possible to rectify by-employment calculations *a priori*, when drawing the sample, for the social bias of the probate record. But we will show in section IV that the calculations themselves provide the means for gauging the effects of this by-employment overstatement *a posteriori*.

One might fear that the inventory evidence would *under*estimate by-employment at the

other end of the wealth spectrum. Perhaps, the (very) poor, to make ends meet in an 'economy of makeshifts', would also have resorted to combining different employments. If they were not probated, this by-employment would be missed in inventory-based analyses. However, such anxiety would seem unnecessary. It is important to note that the very poor were heavily under-represented in the probate record, but not entirely absent from it. It is often assumed that estates below £5 in value did not require probate.[37] This, as Jeff and Nancy Cox have shown, is a misconception.[38] The inventory dataset used in this research, described in more detail below, contained 13 inventories with less than £5 in total value, and 37 with less than £5 in moveable goods and cash. Only one of these inventories, of a labourer from Stockport parish, showed signs of possible by-employments.

II

Our research is based on a sample of 543 probate inventories of male household heads, from the 1700–60 period, proved in the episcopal consistory court of Chester.[39] This was the principal probate court for Cheshire and Lancashire south of the river Ribble. Inventories for individuals from this area who also held property in probate jurisdictions of one or more other consistory courts would have been proved at one of the two prerogative courts, that is, in York or Canterbury. This, however, was a tiny minority, as can be shown by comparing the numbers of wills, another prominent probate document, proved at the consistory and prerogative courts.[40] For 1700–60, the index to Cheshire probate documents at the Cheshire Record Office lists 6745 wills. For the same period, only very small numbers of Cheshire wills are to be found in the indexes of the prerogative probate courts, 45 at York and 228 at Canterbury.[41]

The indexes to Cheshire and Lancashire probate documents were also used to select the inventories for the sample, as they provide information on the (stated) occupation of the decedent, his place of living and the date the inventory was created.[42] This allowed us to

[37] A. L. Erickson, *Women and property in early modern England* (1993), p. 33; M. Overton, 'English probate inventories and the measurement of agricultural change' in A. M. Van der Woude and A. Schuurman (eds), *Probate inventories: a new source for the historical study of wealth, material culture and agricultural development* (1980), p. 209; J. S. Moore, *The goods and chattels of our forefathers: Frampton Cotterell and district probate inventories, 1539–1804* (1976), p. 18; S. Ogilvie, M. Küpker, and J. Maegraith, 'Household debt in seventeenth-century Württemberg: evidence from personal inventories', in *Cambridge Working Papers in Economics* (2011), p. 12.

[38] J. Cox and N. Cox, 'Probate, 1500–1800: a system in transition' in Arkell *et al.* (eds), *When death do us part*, p. 26, n. 65.

[39] We are grateful to Dr Craig Muldrew and Dr Ken Sneath for providing 82 already-transcribed inventories, which were included in this set.

[40] The comparison here is made based on the number of wills rather than inventories because the latter have a low survival rate and are poorly indexed for the prerogative courts, whilst this is not the case for wills, almost all of which have survived and are indexed. Thus, wills provide a much better basis for comparison.

[41] Figures derived from electronic indexes to probate records kindly made available by the Cheshire Record Office and the National Archives, and from the online index to wills at the York prerogative court, accessible at origins.net.

[42] The catalogue for Cheshire inventories was kindly provided by the Cheshire Record Office. An online version of it can be found at http://archivedatabases.cheshire.gov.uk/RecordOfficeWillEPayments/asearch.aspx. We are grateful to Professor Jon Stobart for providing a catalogue of inventories for Lancashire south of the River Ribble.

ensure that the sample contained an appropriate occupational and geographic distribution, and a reasonable temporal spread. Had inventories been picked at random, the resulting sample would have predominantly consisted of yeomen and husbandmen, and contained few manufacturers and, probably, no labourers, as is clear from Table 3.

Probate inventories may contain a significant number of occupational indications of varying strength. To help ensure that none of these occupational indications were missed, the inventories were transcribed and imported into computer software developed by the present authors. This software is capable of splitting up the inventory lines into individual items, which can then be electronically matched with a list of 3700 inventory terms, categorized by type and strength of occupational indication. The program produces a standardized report for each inventory, which was a useful aid in the interpretation of the inventory. Using the automated reports as inputs, each inventory was evaluated individually as to the degree to which its occupational indications corroborated the stated occupation of the deceased and as to the strength of indications for additional gainful activities, that is, by-employments.

Two common manufacturing activities were excluded from the analyses: spinning – for reasons already discussed – and dairying. Dairying could theoretically be argued to be an independent activity, but in practice, the inventories showed, it was inextricably linked to cattle farming within the household. No secondary sector inventories were found that contained dairying equipment (such as butter churns or cheese presses) but no cattle and, vice versa, almost all inventories with clear and substantial evidence of cow keeping also contained clear proof of dairying activity.[43]

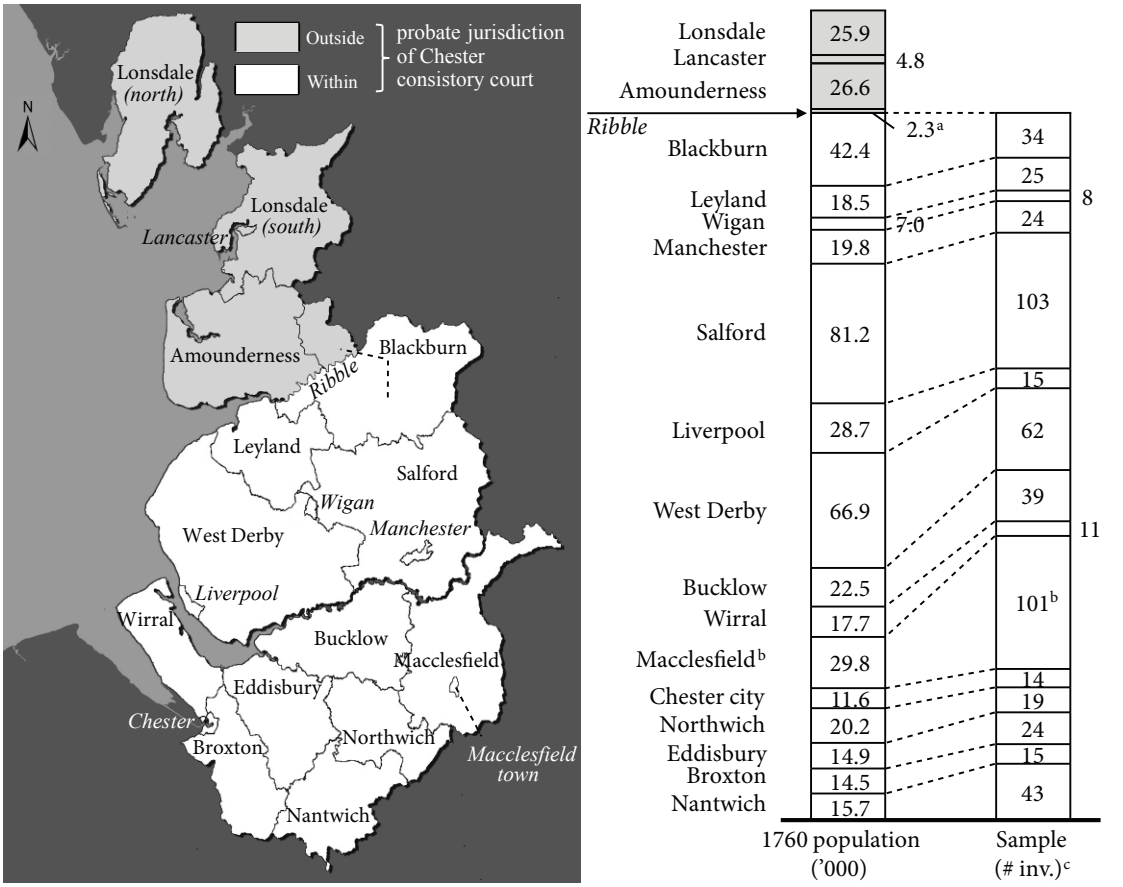
Before turning to the by-employment analysis of the inventory data set, it is necessary to discuss its geographical, occupational, and temporal composition. The probate jurisdiction of the consistory court at Chester comprised Cheshire and that part of Lancashire south of the river Ribble. As Stobart has shown, the region was by no means uniform in its economic activities. Commercial agriculture was present throughout, but particularly so in Cheshire and the west of Lancashire. Textile manufacturers were especially important in the east of Lancashire and the north-east of Cheshire. Mineral-based production was found mainly in the south-west of Lancashire and in central Cheshire. Within these broadly defined zones, many smaller, specialized centres of manufacturing and services existed.[44]

Several historians of early industrialization have addressed the issue of by-employments for small areas within the Chester probate jurisdiction, notably Tupling, Swain, and Ironfield, of whom the latter two have used probate evidence to derive actual incidences. Foster too has touched upon the subject in his work on northern Cheshire.[45] Stobart has analysed agricultural by-employments amongst Cheshire's rural tailors and shoemakers. However, no broad analysis of by-employment incidence, covering a wide occupational spectrum and the entire area, exists. To enable an assessment of the general prevalence of pre-industrial by-employments

[43] Note that this approach, which – for the reasons stated – treats dairying as a direct offshoot of dairy farming rather than as an independent by-employment, differs fundamentally from the one taken by Overton *et al.* and Whittle. See Overton *et al.*, *Production and consumption*, p. 60; Whittle, 'Housewives and servants', p. 69.

[44] Stobart, *First industrial region*, pp. 43–6.

[45] For example in C. F. Foster, *Capital and innovation: how Britain became the first industrial nation. A study of the Warrington, Knutsford, Nortwich and Frodsham area, 1500–1780* (2004), ch. 4.



MAP 1. The geographic composition of the probate sample

Notes: [a] A small part of Blackburn hundred was located north of the Ribble.
[b] Includes Macclesfield Town (6 inventories).
[c] The number of inventories in this map does not add up to the dataset total because for six inventories, the domicile of the deceased could not unambiguously be located within one hundred, being a place name that occurred in more than one hundred.
Sources: Probate inventory dataset; Wrigley, *Early censuses*, pp. 104–5.

rather than their prevalence in potentially highly distinctive and unrepresentative sub-regions, we took care to provide broad coverage of the Chester probate jurisdiction and occupational structure. The dataset's geographic coverage is depicted in Map 1. As will be shown, this broad geographic coverage has a critical additional advantage: it allows for a crosscheck of the by-employment analyses against independent data, and thus for the desired test of robustness of the probate-derived figures. A diocese-wide sample means small sub-samples for specific localities, which hampers any comparisons with existing local historical studies. We will therefore first analyse by-employment incidence for the region as a whole, before 'zooming in' on smaller areas, and attempting a comparison with the local historiography.

We also took care to provide sufficient coverage of major occupations. The selection of inventories was focused on the agricultural and secondary sectors. We did not include tertiary

TABLE 4. The occupational composition of the dataset (number of inventories)

Sector	*Occupation*	*Lancashire*	*Cheshire*	*Combined*
Agriculture	Yeoman	32	41	73
	Husbandman	48	24	72
	All farmers	80	65	145
Manufacturing	(Black)smith	15	27	42
	Baker	6	0	6
	Brewer/maltster	8	6	14
	Butcher	10	16	26
	Carpenter/joiner	26	38	64
	Mason	11	11	22
	Miller	5	9	14
	Shoemaker/cordwainer/glover	12	20	32
	Tailor	17	23	40
	Tanner/skinner	8	12	20
	Weaver/clothmaker	62	23	85
	Other type of artisan	8	0	8
	All manufacturers	188	185	373
Labourers	Labourers	5	20	25
	All	273	270	543

Source: Probate inventory dataset.

sector workers in the dataset – nor did we systematically analyse tertiary sector activities as by-employments – because the sector was small, particularly in rural areas, and the by-employment historiography is almost exclusively concerned with primary and secondary sector activities.[46] Table 4 provides an overview of the occupational composition of the dataset. With the exception of farmers, for which a very large number of probate inventories exists, a significant share of all surviving inventories for the period was utilized, ranging from 30 per cent for tanners and millers to 100 per cent for labourers.

A closer analysis of the farmers' inventories confirms their representativeness in terms of the spread of actual agricultural activities.[47] As is clear from farm surveys of Cheshire and Lancashire from a slightly later date, local agricultural activity was heavily dominated by pastoral farming, but most farms, particularly larger ones, would have been of the mixed type, with a minority of their land under tillage.[48] Indeed, 98 per cent of all the 'productive'

[46] As yet unpublished work, by L. Shaw-Taylor and E. A Wrigley, based on around 500 rural baptism registers recording occupations in the early eighteenth century, suggests that the tertiary sector accounted for about 5% of adult male employment in rural areas.

[47] The occupational descriptor of farmers was of course usually 'yeoman' or 'husbandman' rather than 'farmer'.

[48] See, for example, J. Holt, *General view of the agriculture of the county of Lancaster* (1792), p. 13 and H. Holland, *General view of the agriculture of Cheshire* (1810), p. 125.

inventories of farmers showed clear signs of pastoral farming, and the remaining two per cent contained indications that animal husbandry had formerly taken place at the farm. Seventy-three per cent also gave indisputable indications of arable activity, so a clear majority of farms was indeed of the mixed type.

In terms of temporal coverage, the sample was skewed towards the earlier decades of the 1700–60 period, because probate inventories became progressively rarer in the diocese of Chester after 1740. The sample contained only 71 inventories from 1740–60. It might be feared that the increasingly low share of the population probated after 1740 went hand-in-hand with increasing social bias, with only the wealthiest estates still being probated. Indeed, Greg Clark has recently built on this assumption to 'explain away' the eighteenth-century consumer revolution as a 'statistical artifact' of the probate evidence.[49] However, increasing social bias was not evident in our inventory sample, with average wealth levels being comparable in the pre- and post–1740 subsets of inventories, and the difference in wealth distributions between the two subsets being statistically insignificant.[50] Nor did the pre- and post–1740 inventories differ in the level of detail with which goods and rooms were recorded. We therefore felt justified to treat the 1700–60 dataset as one sample of comparable inventories.

So, what does this dataset tell us about by-employment incidence in the chosen area and time period? As discussed, agricultural households engaging in manufacturing activities have received most attention in the qualitative literature on by-employments. However, a quantitative analysis of farmers' inventories does not appear to justify this attention for the region and period researched here. As Table 5 shows, less than one in six farmer's inventories showed fairly strong to indisputable signs of manufacturing by-employments. This is in line with the low secondary sector by-employment incidence amongst agricultural households found by Overton *et al.* for Cornwall and Kent, included in Table 1 above.

This low figure is not caused by the inventories' lack of detail, leading to by-employment indications being missed. Unlike the case of spinning, discussed above, manufacturing by-employment incidence was not significantly higher amongst the sub-set of particularly detailed inventories: 17 versus 16 per cent. Neither is it caused by 'trace-poor' secondary sector occupations, since their incidences were upwardly corrected, as discussed in section I. Also, by far the most common by-employment amongst farmers was weaving, representing 74 per cent of all manufacturing by-employments, and weaving was not a 'trace-poor' occupation. In other words, the inventories provide little support for the prevalence of manufacturing by-employments amongst agricultural households that is suggested by much of the qualitative literature. Robert Malcolmson contended that in eighteenth-century Lancashire, 'the term "yeoman" often indicated a landholder who divided his time between farming and weaving'.[51] In fact, of the 27 suitable yeoman's inventories from that county, only three (one in nine)

[49] G. Clark, 'The consumer revolution: turning point in human history, or statistical artifact?' (2010), http://www.econ.ucdavis.edu/faculty/gclark/papers/Consumer Revolution.pdf.

[50] The average inventory total of the pre-1740 inventories was £92.62 compared to £90.68 for the 1740–60 inventories. A Student's t-test showed no statistically significant difference in the wealth distributions of the two sub-sets: $t(509) = 0.08$, $p = .94$.

[51] R. W. Malcolmson, *Life and labour in England, 1700–1780* (1981), p. 39.

TABLE 5. Numbers and shares of farmers' inventories by strength of indication for manufacturing by-employment

Occupation		*Strength of indication for manufacturing activities*			*All inventories*
		Strong to indisputable	*(Very) weak*	*None*	
Husbandmen	Number	10	12	36	58
	Share (%)	17	21	62	
Yeomen	Number	9	18	36	63
	Share (%)	14	29	57	
All farmers	Number	19	30	72	121
	Share (%)	16	25	60	

Note: The number of farmers' inventories in this table (121) is lower than the total number of farmers' inventories in the dataset (145) because only those inventories were included which were sufficiently detailed for by-employment incidence counts and for which the principal, stated occupation of the decedent (i.e. agriculture) was clearly confirmed in the livestock, tools and rooms listed in the inventory. See main text for background.
Source: Probate inventory dataset.

showed clear signs of weaving. For husbandmen, the share involved in weaving was slightly higher, but still only one in every six.

Nor can labourers restore the impression of ubiquitous by-employments amongst agricultural households. First, there were simply not enough of them. Even if all labourers in the region were agricultural labourers – which is unlikely, as discussed below – they would have constituted no more than a third of all agricultural households, as the parish records counts in Table 3 showed. Second, the inventory evidence suggests that by-employment was limited for them as well. Determining by-employment from labourers' inventories is difficult. The problem is that the term 'labourer' is ambiguous with regards to occupational activity. Although it is clear that a large majority of labourers in early modern England would have been active in agriculture, this is not true for all of them. The majority of labourers not employed in agriculture would have been active in manufacturing, primarily in the building industry.[52] Therefore, a labourer's inventory with evidence of carpenter's or masonry activities may have been left by a by-employed agricultural labourer, but also by a building labourer with no by-employment at all. Nevertheless, it is possible to obtain a very rough impression of labourers' by-employment, by cross-tabulating the data from labourers' inventories according to the indications of manufacturing and agricultural activities (Figure 2).

Only two small groups of inventories in Figure 2 potentially indicate manufacturing by-employment in the household of an agricultural labourer. First, if an inventory shows signs of both agricultural and manufacturing activities, the household must have been by-employed. Although the 'principal occupation' is still unclear, such an inventory *may* refer to an agricultural household by-employed in manufacturing. Second, if an inventory

[52] O. Saito and L. Shaw-Taylor, 'The sectoral allocation of male labourers: A solution to the problem for England and Wales, 1700–1911', forthcoming.

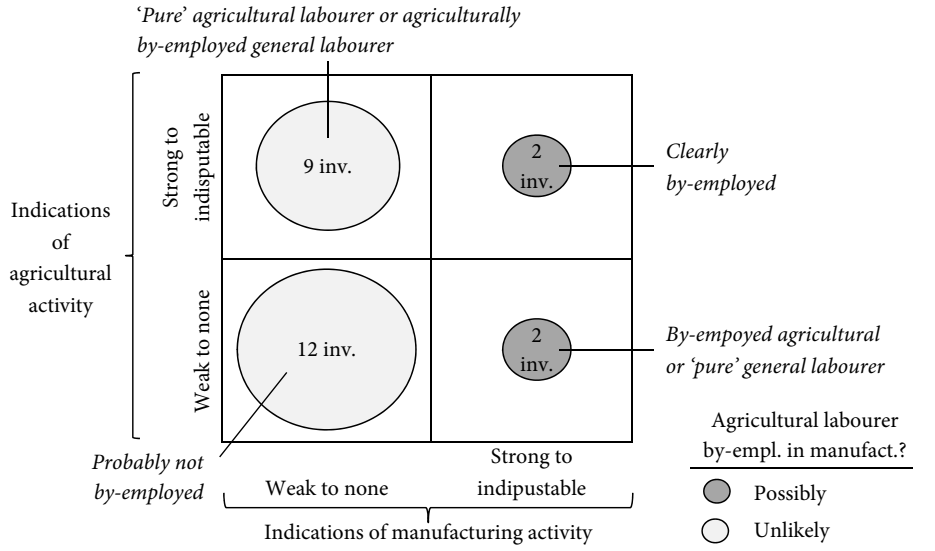


FIGURE 2. By-employment indications in labourers' inventories; a best-estimate approach

Note: The term 'general labourer' has been used here to indicate labourers who performed wage work in the manufacturing trades rather than in agriculture.
Source: Probate inventory dataset.

shows indications of manufacturing but not of agricultural work, it may have been left by a non-agricultural labourer (without by-employment), or by an agricultural labourer whose household was by-employed in manufacturing. Both of these cases *may*, therefore, indicate an agricultural household by-employed in manufacturing. Only four such inventories were found in the dataset. If we, not unreasonably, assume that about 80 per cent of the labourers' inventories in the dataset were those of agricultural labourers, this would suggest that, at most, 20 per cent of those should be identified as by-employed in manufacturing. Given the low number of available labourers' inventories, the statistical significance and arithmetical precision of this simple exercise is limited. Nevertheless, it strengthens the impression of a surprisingly low incidence of manufacturing by-employment amongst agriculturalists' inventories.

This low by-employment incidence amongst labourers contrasts strongly with Everitt's figures, presented in Table 1. Everitt's results refer to a much wider geographic area and an earlier time period, which might explain the difference. Furthermore, his count includes spinning whereas ours does not. There is, however, another and probably more important reason for the difference: Everitt's calculations of by-employments amongst agricultural labourers are defective, as one of the present authors has noted elsewhere.[53] Unable to find a sufficiently large sample of inventories left by men who were explicitly described as labourers, he supplemented his sample by assuming that inventories with a total value below a certain threshold and no stated occupation referred to agricultural labourers. But, it is likely that

[53] Shaw-Taylor, 'Cottage economy', pp. 20–2.

TABLE 6. Shares of manufacturers' households engaging in gainful activities other than the 'stated' occupation of the male decedent

	Share of inventories (%)		
	All manufacturers (224 inventories)	*Rural manufacturers (180 inventories)*	*Urban manufacturers (44 inventories)*
By-employed in agriculture (i.e. engaged in substantial agricultural activities)	59	67	27
Marginally involved in agricultural activities	$\frac{6}{65}$ +	$\frac{6}{73}$ +	$\frac{7}{34}$ +
By-employed in manufacturing (i.e. substantially engaged in additional manufacturing activities)	15	13	20

Note: The by-employment incidences listed in this table are based on inventories with fairly strong to indisputable indications of agricultural or (additional) manufacturing activities. The number of manufacturers' inventories in this table (224) is substantially lower than the total number of manufacturers' inventories in the dataset (373) because only those inventories were included which were sufficiently detailed for by-employment incidence counts and for which the principal, stated occupation of the decedent was clearly confirmed in the assets and rooms listed in the inventory. See main text for background.
Source: Probate inventory dataset.

these inventories would in fact refer mainly to secondary sector workers, making it entirely unsurprising that so many of the selected inventories showed signs of manufacturing.

The picture is very different for manufacturers' inventories. Table 6 presents the results of the analyses of households for which the principal occupation of the deceased lay in the secondary sector. By-employments in (other) manufacturing occupations appear to have been infrequent – indeed, the numbers are even lower than those for the farmers' inventories. But agricultural by-employment does appear to have been prevalent, at least amongst inventoried households. Sixty-seven per cent of the rural manufacturers' inventories showed clear signs of agricultural activities of sufficient scale to rightly call them agriculturally by-employed. A further six per cent listed marginal agricultural assets, that is below the '£3 or one cow' cut-off point for 'true' by-employment, discussed earlier. Less than 30 per cent of all rural manufacturers' inventories showed no sign of any agricultural activities at all. Here, then, we replicate the high incidence of agricultural by-employment in inventories that were derived by other historians from the probate record, as displayed in Table 1. Of course, agricultural assets in male inventories do not necessarily indicate *individual* male by-employment, as the farming may have been largely or entirely carried out by the women and children of the household. As always, the figures in Table 6 are correctly interpreted as upper limits. Still, they at least demonstrate the distinct *possibility* of substantial agricultural by-employment amongst men in the early eighteenth century.

The type of principal manufacturing occupation appears to have had some influence on the presence of by-employment. Clear indications of agricultural by-employment were found in around half the shoemakers', millers', and tailors' inventories, compared to more than 80 per cent of tanners' inventories, the most by-employed occupation. Arguably more important than

TABLE 7. Comparison of average agricultural assets of farmers' and agriculturally by-employed, rural manufacturers' inventories

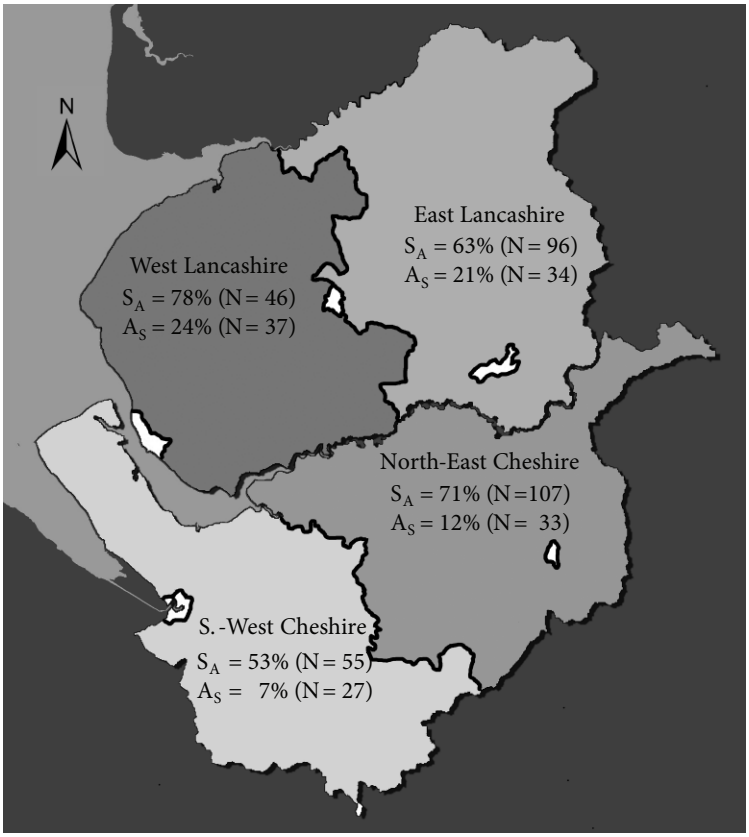
		Yeomen's and husbandmen's inventories		*Agriculturally by-employed rural manufacturers' inventories*	
		Mean values	*Median values*	*Mean values*	*Median values*
Numbers	Cows	6.4		3.2	
	Maturing cattle[a]	2.5		0.9	
	Calves	1.6		0.6	
	Bulls and oxen	0.3		0.0	
	All cattle[b]	11.1	8.0	4.8	3.0
	Horses	2.1	2.0	1.0	1.0
	Swine	0.9	–	0.7	–
	Sheep	3.0	–	2.4	–
Values	All livestock[c]	£31.46	£20.94	£15.27	£9.71
	Crops	£7.67	£2.55	£2.65	£0.35
	Pastoral produce[d]	£4.11	–	£0.71	–
	Animal fodder, straw	£4.28	£2.00	£2.06	£1.00
	All agricultural assets[e]	£47.52	£31.23	£20.69	£12.28

Notes:
[a] Heifers, stirks, etcetera.
[b] This figure differs marginally from the sum of the individual cattle categories because for some inventories, the latter were not available
[c] The value of the listed livestock categories, plus those of poultry and bees
[d] Cheese, butter, milk, dung, wool, etcetera
[e] Excluding the value of machinery, tools, and agricultural real estate (leases). Mean values add up, but median values do not (as a consequence of their statistical nature).
Source: Probate inventory dataset.

these differences, however, is the conclusion that agricultural by-employment is frequently found in inventories for *all* secondary sector occupations.

The scale of agricultural activities varied greatly from one by-employed manufacturer's inventory to another. However, the average number and value of agricultural assets listed in such inventories were quite considerable, as Table 7 demonstrates. The average rural, by-employed manufacturer's inventory listed nearly five heads of cattle. And the combined value of all agricultural assets in that inventory equalled 44 per cent of the average farmer's inventory. Taken at face value, the inventory evidence suggests that agricultural by-employment was not only prevalent amongst manufacturers' households, but was also, on average, quite sizeable.

As stated above, our sample, aimed at obtaining an impression of the overall incidence of by-employments for the entire Chester probate jurisdiction, is not ideal for a comparison with existing studies touching on the issue of by-employments in the area. These studies are typically restricted to one or a few townships, corresponding to only a handful of inventories in our sample, thus making a direct comparison rather difficult. Nevertheless, the sample is big



MAP 2. Cross-sectoral rural by-employment incidence in the probate sample divided into four sub-regions.

Notes: S_A stands for agricultural by-employment incidence amongst secondary sector inventories, whilst A_S indicates the incidence of by-employments in the opposite direction, and *N* equals the number of inventories per sector and sub-region. The large towns in the area, depicted in white, were excluded from this (rural) analysis. Contrary to other analyses in this article, inventories with weak or no indications of the stated occupations in the goods and rooms listed were included here, to ensure the largest possible sub-samples. As explained in the main text, this had negligible influence on the results of the calculations.
Source: Probate inventory dataset.

enough for division into a number of sub-regions. This has been done in Map 2, demonstrating that by-employment incidence was not uniform across the inventory sample's geography.

As Map 2 shows, by-employment in both cross-sectoral directions was lowest in south-west Cheshire. Interestingly, farmers in this region held large cattle herds for dairy farming, averaging 12 adult cows and six other beasts (heifers, calves, and male animals). These 18 heads of cattle compared to nine in north-east Cheshire and west Lancashire, and to less than five in east Lancashire. Their large dairy herds may simply have occupied south-west Cheshire farmers day- and year-round, minimizing the time left for by-employments. Conversely, secondary sector workers 'dabbling' in a bit of agriculture on the side may have found it difficult to compete with these commercial dairy farmers, who were producing cheese for the London market.

Foster's work on the Warburton and Leicester estates is geographically located in Cheshire's north-eastern region (Map 2). In a study of 120 inventories from 1560–1646, he found that almost all of them provided evidence of agricultural activities.[54] Although in our inventory sample, agricultural by-employment amongst secondary sector inventories was high in this area, nearly one in three of them were judged as providing no indication of substantial agricultural activities. This suggests that by-employment incidence may have decreased during the seventeenth century. Again, an increase in the intensity of dairy farming may be part of the explanation; Foster found that herd sizes grew during the seventeenth century, reaching an average of about ten around 1700 – similar to the nine heads of cattle per farmer's inventory in our sample for this area of Cheshire.[55]

Of the four areas in Map 2, the one which has received most attention from historians is east Lancashire. Indications of agricultural by-employment were fairly frequent amongst our secondary sector inventories from this area, which is in agreement with what historians who examined smaller regions within this area have also found for the early eighteenth century, such as Tupling for the Forest of Rossendale, in Whalley parish, Blackburn hundred, and Fishwick for Rochdale, in Salford hundred. A comparison with Ironfield's estimates for Chipping, in Blackburn hundred, displayed in Table 1, suggests that cross-sectoral by-employments may possibly have declined somewhat in the 50 years that divide our sample from hers – but with only 14 inventories, her inventory sample is too small to be sure. Comparing our results to those of Swain, who studied Colne and the Forests of Pendle and Trawden, all in Whalley parish, in north-east Blackburn hundred, provides stronger evidence for a possible decline over time. As displayed in Table 1, approximately half of Swain's farmers' inventories displayed clear signs of weaving for the 1558–1640 period. This suggests that such by-employments may have considerably decreased in importance over the 100 years that separate Swain's and our inventories. As discussed, cattle herds were actually quite small in this area, so dairying squeezing out by-employments is unlikely to explain the decline. Perhaps the explanation should be sought in the level of sophistication which the manufacturing of textiles had achieved in this area by the eighteenth century, leaving little room for such activities to be undertaken 'merely' as a by-employment. However, if that was the case, one would expect that, vice versa, relatively few local weavers would have been by-employed in farming, and this was not the case: with 67 per cent by-employed, they were in line with the overall average. An alternative explanation for the difference between Swain's and our figures is put forward in the next section.

When studying the geographic distribution of cross-sectoral by-employments, a local 'driver' of interest is population density. After all, the lower the number of people per acre, the more room for agricultural by-employments. As Table 6 indicates, the inventories did indeed exhibit a clear urban-rural divide, with agricultural by-employment in urban inventories unsurprisingly much lower than in rural ones. More insight into the relationship between population density and agricultural by-employment can be gained by using Tony Wrigley's recent work on the eighteenth-century populations of the ancient hundreds.[56] In Figure 3, hundreds of similar population densities were grouped, and for each of these groups, the

[54] Foster, *Capital*, pp. 110–36.

[55] C. F. Foster, *Cheshire cheese and farming in the north west in the 17th and 18th centuries* (1998), pp. 13, 29.

[56] Wrigley, *Early censuses*, Table 4.1, pp. 104–5.

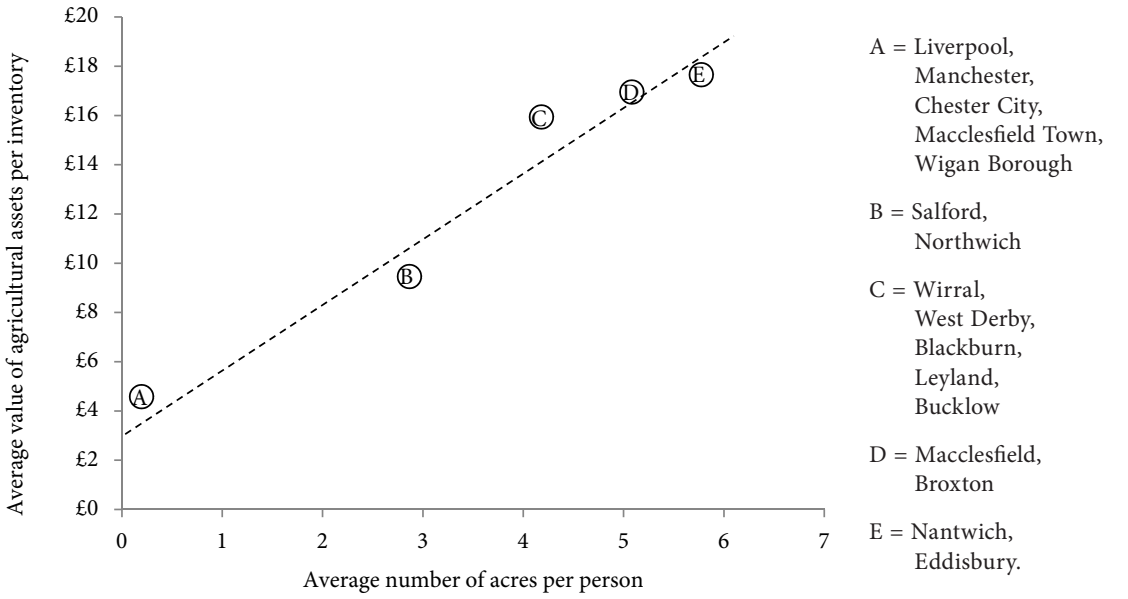


FIGURE 3. The relationship between population density and the scale of agricultural activities in manufacturers' inventories

Sources: Probate inventory dataset; Wrigley, *Early censuses*, pp. 104–5.

average value of agricultural assets listed in manufacturers' inventories was determined. As the figure shows, a clear relationship indeed existed between local population density and the scale of agricultural activities of the population of inventoried manufacturers.

III

In the previous section, inventory evidence was essentially taken at face value. But, as discussed, probate inventories are biased towards wealthier decedents, which leads to a degree of exaggeration of by-employments, particularly of capital intensive ones such as farming.[57] Such by-employments positively affected the value of estates, which were therefore more likely to be inventoried. Ann Kussmaul found that the 11 per cent of nailers and locksmiths in a seventeenth-century Staffordshire village who left inventories all possessed cows and, from this, quite reasonably, inferred that the other 89 per cent were probably 'cow-less'.[58] But there is no need to be content with such speculations, however plausible they may be. The inventories themselves, if probed deeply enough, are remarkably revealing as to the degree in which an inbuilt wealth bias affects estimates of by-employment size and incidence.

Several measures for a household's wealth can be derived from inventories: domestic wealth, that is the combined value of all domestic, household goods, including cash; material wealth,

[57] For an earlier discussion of this point see Shaw-Taylor, 'Cottage economy', p. 9.

[58] A. S. Kussmaul, *A general view of the rural economy of England, 1538–1840* (1990), p. 10.

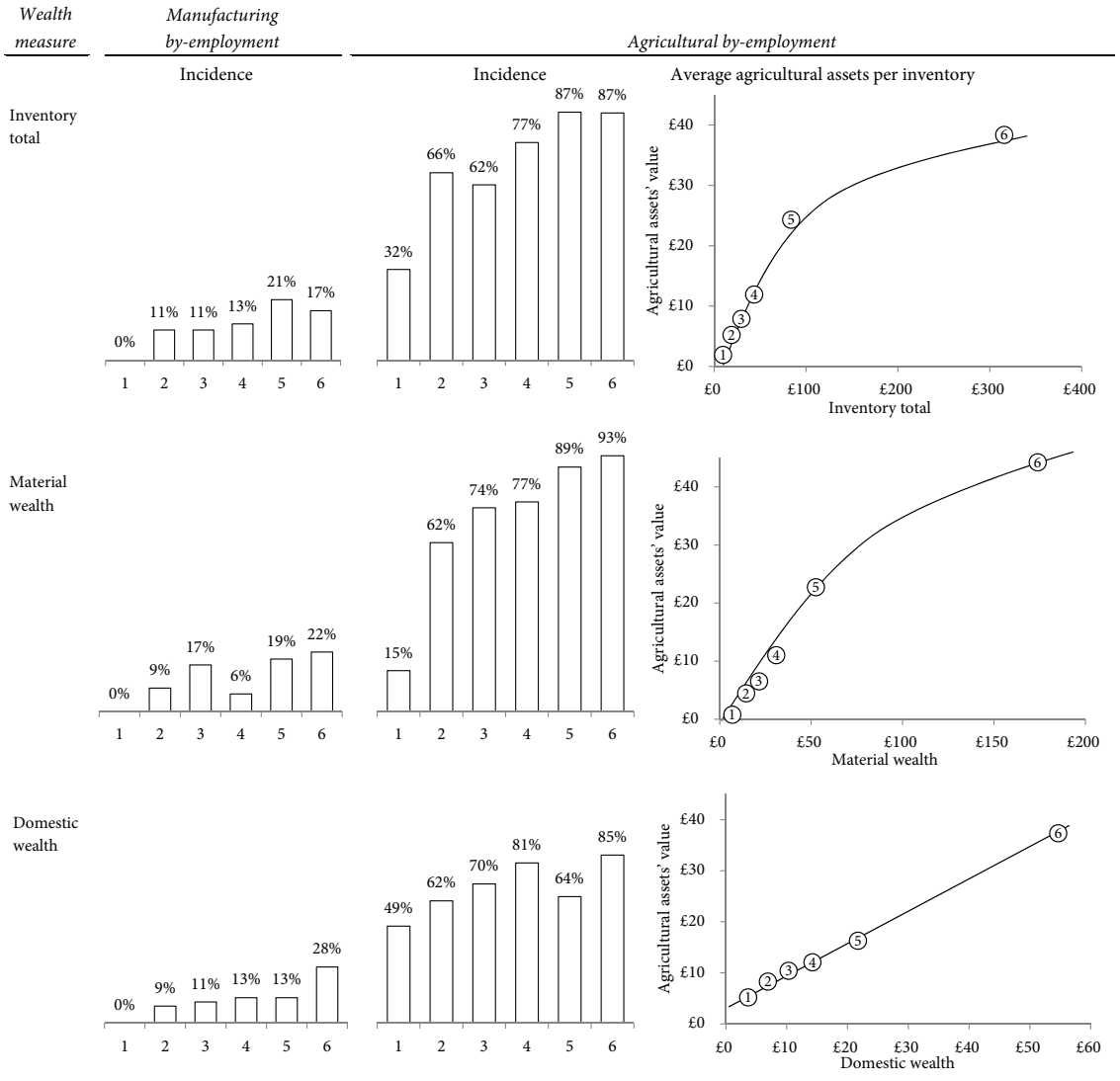


FIGURE 4. The relationship between wealth and by-employments in probate inventories of rural manufacturers

Note: To create these graphs, the set of rural manufacturers' inventories was ordered in sequence of increasing wealth and subsequently divided into six subsets of equal size.
Source: Probate inventory dataset.

that is the combined value of all material goods, including work-related ones; and the inventory total, which includes leases and debts owed to the decedent. A discussion on the appropriateness and reliability of these wealth measures can be found in the appendix to this article. However, Figure 4 clearly shows that, whichever wealth measure is employed, inventories exhibit a strong, positive correlation between by-employment incidence and size on the one hand, and decedents' wealth on the other. The wealthier the inventoried rural manufacturer,

the more likely he was to have been by-employed and the more sizeable that by-employment is likely to have been.

Indeed, the differences in by-employment incidence between inventories of different wealth levels are quite remarkable. Inventoried manufacturers in the upper third in wealth were up to three times as likely to be agriculturally by-employed as those in the lower third, and up to four times as likely to by-employed in manufacturing. If anything, Figure 4 presents an even more striking picture for by-employment size: the wealthiest third of inventoried manufacturers owned four to ten times the agricultural assets of the poorest third. Since the wealthy are over-represented in the probate record, so too are the by-employed.

The conclusion from these unmistakable correlations is clear: for the purposes of by-employment calculations, probate inventories cannot be taken at face value. The by-employed were considerably wealthier than the non-by-employed. This accords neatly with an observation made by Defoe on the textile industry of the contemporary West Riding, where 'every manufacturer generally keeps a cow or two, or more, for his family' but amongst whom lived, in 'an infinite number of cottages or small dwellings', the lesser weavers and labourers, 'all hard at work, and full employed upon the manufacture'.[59] It was the wealthier manufacturers who were agriculturally by-employed, whilst the poor workmen were engaged in their principal occupation only. The inherent wealth bias in the probate record thus leads to the by-employed being (potentially significantly) more likely to leave an inventory than the non-by-employed. In other words, probate inventory evidence exaggerates the incidence and size of by-employments.

The correlation between wealth and by-employment incidence may also help provide an explanation for the difference between Swain's and our figures for farmers from north-east Lancashire, discussed above. Swain, regrettably, only had access to so-called supra inventories, that is, inventories of estates of £40 or more in value. Corrected for inflation, £40 in 1600, the midpoint of Swain's time period, corresponded to about £50 in 1722, the average year in which 'our' farmers were probated.[60] Secondary sector by-employment amongst the group of farmers' inventories with at least £50 in total wealth was more than twice that of the other, poorer farmers in our sample. It is likely, therefore, that the difference between Swain's and our figures is at least partially the result of the excessive wealth bias of the supra inventories on which Swain was forced to base his analyses.

IV

If it were possible to estimate how much the probate record exaggerates by-employment incidence, it would be possible to correct for it, thereby arriving at more reliable estimates. What is required is independent data against which to check the reliability of the picture painted by the probate dataset. In this section we attempt to do just that, using estimates of the agricultural assets of early eighteenth-century Lancashire and Cheshire as the required independent data.

[59] D. Defoe, *Tour thro' the whole island of Great Britain* (1742) used in the edition by G. D. H. Cole (2 vols, 1968), II, p. 602.

[60] Inflation correction based on Robert C. Allen, 'Consumer price indices, nominal/real wages and welfare ratios of building craftsmen and labourers, 1260–1913', http://www.iisg.nl/hpw/allen.rar.

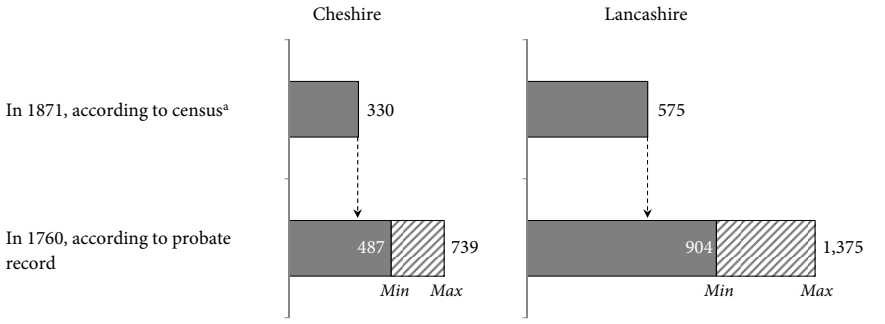


FIGURE 5. Grassland surface in 1760 as implied by the probate record compared to agricultural census figures 1871 (in '000 acres)

Notes: [a] Includes an estimated 15,000 acres of 'rough grazing' for Cheshire and 90,000 acres for Lancashire, based on the 1901 agricultural census. For the assumptions underlying the probate-record-implied figures, see main text.
Sources: Probate inventory dataset; agricultural censuses for 1871 and 1901; Wrigley, *Early censuses*; Wrigley and Schofield, *Population history*; Holland, *Cheshire*; Wedge, *Palatine of Chester*; Holt, *Lancaster*; Rothwell, *Lancashire*; 'Occupational Structure' project (parish record counts for Cheshire and Lancashire).

As a first step, we have calculated the agricultural land area and livestock numbers that would have had to exist if the inventories *were* representative. In 1760, there were an estimated 110,000 men above the average age of marriage in Lancashire and Cheshire, which may serve as a proxy for the number of male householders who could, in principle, have left an inventory.[61] If one subtracts one per cent for 'men of leisure' and another for men on poor relief, this leads to an estimated 108,000 relevant 'male-led' households, including one-person households of unmarried men. Combining this with the occupational sector shares deriving from parish baptism registers, and with average livestock numbers per occupation as suggested by the probate inventories, this implies a total of 432,000 mature and maturing cattle, 67,000 calves, 96,000 horses, 181,000 sheep and 49,000 swine in the two counties combined. To feed these animals, it can be calculated, would have required a total grassland area of between 1.4 and 2.1 million acres.[62]

In Figure 5, this figure is broken down by county and compared to the amount of agricultural land available in 1871, the year of the first truly reliable agricultural census.[63] Actual cultivated surfaces in 1760 are likely to have been significantly smaller than those in 1871 when, driven by spectacular population growth, much remaining barren land had been brought under cultivation. Indeed, this process continued after 1871: between that year and 1891, the total

[61] Calculation based on regional population figures from E. A. Wrigley, 'English county populations in the later eighteenth century', *EcHR* 60 (2007), pp. 35–69, and for the relevant shares of those figures from Tables A.3.1 and 7.26 and 7.10 in E. A. Wrigley and R. S. Schofield, *The population history of England, 1541–1871: A reconstruction* (1981).

[62] Assumptions for grassland requirements per livestock type: 2½–3½ acres for mature cattle and heifers, ½–1 acre for calves, 2½–5 acres for horses, and 0.2–0.3 acres for sheep, as derived from Holland, *Cheshire*; T. Wedge, *General view of the agriculture of the county palatine of Chester* (1793); Holt, *Lancaster*; W. Rothwell, *Report of the agriculture of the county of Lancashire* (1849).

[63] Ministry of Agriculture, *Agricultural statistics for 1871 and 1891*, http://www.visionofbritain.org.uk/data_theme_page.jsp?u_id=10061325&data_theme=T_LAND, with the original data transcribed by Robert Schwarz and David Gatley.

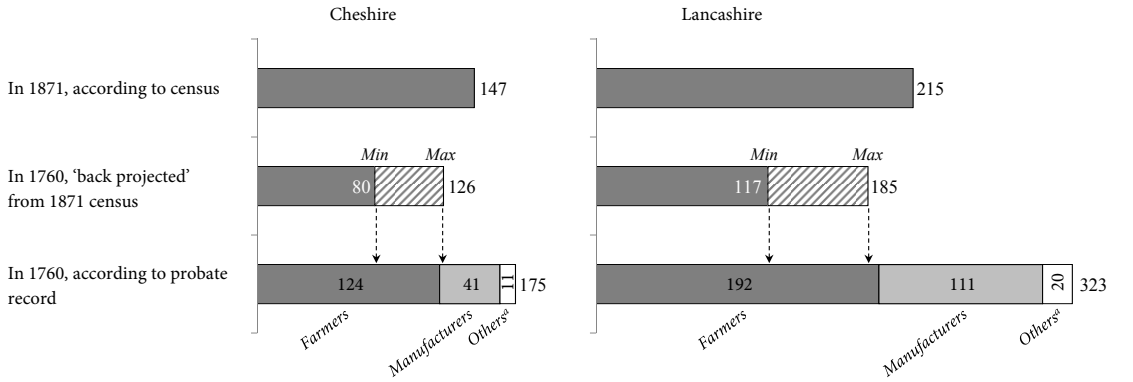


FIGURE 6. Cattle numbers as implied by the probate record compared to census back projections (in '000 heads of cattle of all types).

Note: [a] Labourers and tertiary sector workers. No tertiary sector inventories were actually present in the dataset. Therefore, an assumption had to be made as to their agricultural by-employments. Given the more urban nature of tertiary sector occupations, a by-employment incidence of only one quarter of that of manufacturing households was assumed. Because of the relatively small number of tertiary sector households, however, any variation of this assumption has only a marginal effect on the calculations.
Sources: Probate inventory dataset; agricultural censuses for 1871; Wrigley, *Early censuses*; Wrigley and Schofield, *Population history*; Turner, 'Counting sheep'; 'Occupational Structure' project (parish record counts for Cheshire and Lancashire).

grassland surfaces in the two counties expanded by 19 per cent, with less than a fifth of this expansion generated by arable land being converted to pasture. But, as is clear from Figure 5, the inventory projections vastly exceed even the 1871 figures. The probate record must have been severely biased towards high livestock numbers.

We have also attempted to test inventory projections of livestock numbers more directly, without the intermediary of required grazing acreages per animal. No reliable contemporary estimate of livestock numbers exists. The earliest reliable figures stem from the late nineteenth-century agricultural censuses, but there is a way to estimate figures for earlier dates. Michael Turner has collected and interpreted county livestock data that were accumulated around 1800 to estimate Britain's readiness for the war with France.[64] The counties for which such livestock overviews exist do not, unfortunately, include Cheshire and Lancashire, but one can use the general trend observed in the eight central and southern English counties for which such data *do* exist as a guide to prospective developments in north-west England.

In Turner's eight counties, cattle numbers increased 21 per cent between 1800 and 1871, that is, at 0.28 per cent per annum. This allows one to estimate a fairly safe range for possible cattle numbers in Cheshire and Lancashire, *c*.1760, by assuming that these two countries experienced between half and twice the above growth rate between 1760 and 1871. In other words, a lower boundary was calculated by backwardly extrapolating a growth of 0.56 per cent per annum from the 1871 census figures, whilst an upper boundary was determined in the same manner,

[64] M. Turner, 'Counting sheep; waking up to new estimates of livestock numbers in England *c*.1800', *AgHR* 46 (1998), pp. 142–61.

using a growth rate of 0.14 per cent. In Figure 6, the inventory-implied cattle numbers are compared to the thus calculated lower and upper boundaries. Again, it is clear that the inventory projections far exceed likely actual numbers.

What is evident, then, from Figures 5 and 6, is that the inventories vastly exaggerate cattle ownership; indeed, the farmers' subtotals alone exceed the likely range of contemporary cattle numbers. This confirms the conclusions put forward in the previous sections: inventories are far from representative of the general working population and must significantly overstate agricultural by-employment amongst secondary-sector workers.

An attempt can now be made to estimate the degree to which inventories exaggerate by-employment. It is evident from the above that high-wealth, cattle-rich inventories are over-represented in the inventory dataset. To make the record of probate inventories more representative of the actual contemporary household population requires that one weights low-wealth inventories more heavily than high-wealth inventories. Figure 6 and Table 3 provide data that allow this 'reweighting' to be effected in a controlled, meaningful way. Figure 6 provides the boundaries between which the cattle numbers resulting from the reweighted inventory dataset should lie. Table 3 provides the necessary information for the difference in strength of the reweighting for farmers, manufacturers and labourers; as discussed, this table demonstrates that farmers were about three times more likely than secondary sector workers to leave an inventory, and roughly 20 times more so than labourers.

A straightforward – though admittedly crude – way to construct a reweighted inventory dataset consists of ranking the inventories in terms of wealth, dividing this ranked series into sub-sets, for example, the poorest one third and the wealthiest two thirds of inventories. Subsequently, the 'poor' subset is given a higher weight in the weighted average. By varying both the 'cut-off point' between the two subsets and their relative weights, reweighted inventory sets can be identified that meet the boundary conditions set by Table 3 and Figure 6. That is: they correct for the approximately three-to-one underrepresentation of manufacturers in the probate record and they lead to a realistic estimate of contemporary cattle numbers.[65] For example, suppose the cut-off point is, as suggested above, laid at one third of the dataset of inventories. A reweighting that 'works' for that cut-off point is one in which the poorest third of farmers is given a weight of three and the poorest third of manufacturers a weight of thirteen, with the middle and wealthiest third of the inventories in both sectors given a weight of one. This multiplies the number of manufacturers' inventories with the desired factor of approximately three relative to the reweighted farmers' inventories, and leads to a projected number of 295,000 heads of cattle for the two counties combined, just below the upper boundary set by Figure 6. By varying the cut-off point and weights, other reweighted sets that also 'work' can be determined. Each of the resulting reweighted datasets is more representative of contemporary reality than the original, unweighted set of inventories. They thus each provide a more realistic basis for assessing by-employment amongst contemporary households than the 'raw' inventory data, leading to a range of possible by-employment incidence values, as displayed in Table 8.

[65] To express the described reweighting procedure more mathematically: for each sector, the x% poorest inventories are weighted with a factor y (>1) compared to the other inventories, with y differing per occupational sector, and x and y chosen thus that (a) resulting cattle numbers lie between the boundary values displayed in Figure 6 and (b) total multiplication per sector is in line with Table 3, that is, $x\% \cdot y_{\text{farmer}} + (1-x\%) = \frac{1}{4} \cdot [x\% \cdot y_{\text{manufacturer}} + (1-x\%)]$.

TABLE 8. Rural by-employment incidence, as derived from probate inventories, before and after 'reweighting'

		Incidence derived from inventories (%)	
By-employment	*Rural household*	*'Unweighted' set*	*'Reweighted' set*
Agricultural	Manufacturer	67	23–37
Manufacturing	Farmer	16	6–14
	Manufacturer	13	4–9

Sources: Probate inventory dataset; model calculation, as described in the main text.

The model calculation described above is crude. However, an important conclusion can safely be drawn from Table 8: actual contemporary rural by-employment incidence must have been much lower than suggested by the (unweighted) inventory record. For early eighteenth-century Cheshire and Lancashire south of Ribble, it would appear that the probate record exaggerates by-employment incidence amongst farmers and rural manufacturers by a factor of two to three.

V

It can thus be concluded that rural by-employment was not nearly as prevalent as has generally been assumed in Stobart's 'first industrial region'. Thirsk argued that manufacturing by-employment was 'almost common form' for early modern pastoral farmers, but in the probate jurisdiction of Chester, one of the most pastoral regions of contemporary England, only a very small minority of contemporary households and individuals appears to have been by-employed in manufacturing.[66] Agricultural by-employment was more common, but, again, not nearly as common as probate inventories would lead one to believe when taken at face value; probably only around one in three to four rural manufacturers' households enjoyed more than marginal income from agriculture.

Although the inventory sample analysed in this research was limited in place and time, a second conclusion can be drawn from it which goes well beyond the data's geographical and temporal bounds: that probate inventories, *the* source of systematic and quantitative assessment of by-employments, greatly exaggerate the phenomenon. The cause of this exaggeration, namely the over-representation of the asset-rich, was common to the probate record of the whole of England, throughout the early modern period. This means that by-employment estimates like those presented in Table 1, if they are to be interpreted as representative of the contemporary local labour force, would all appear to be in need of significant downward correction, perhaps by as much as a factor two or three.

It may be no coincidence then that historians have so rarely discussed individual by-employment after the mid-eighteenth century. This is, after all, precisely the moment when probate inventories, with their misleading impression of the ubiquity of by-employments, dry up as a historical source.

[66] Thirsk, 'Agriculture and social change', p. 210.

Appendix
Inventories as a source of wealth estimates

Inventories provide information on four types of 'goods': household goods, work related goods, financial assets, and certain forms of real estate. These can be combined into several measures of the deceased's wealth: total inventory value, material wealth and domestic wealth. Each of these measures has its strengths and weaknesses. Domestic wealth, that is, the combined value of all household goods, is in many ways the most accurate and most useful wealth measure. It captures what, one might argue, the other inventory goods are 'merely' there to provide: the household's standard of living. It is also the only measure that does not itself contain the value of the goods directly associated with the by-employments, thus allowing for a truly independent test of the correlation between wealth and by-employment. But, as Figure A.1 shows, in general it represents only a small part of the total value of the deceased's estate and would therefore not have been the best predictor of the likelihood that an estate was inventoried.

The inventory total is, of course, the most complete measure of the estate's value, and therefore arguably the best predictor of an estate being inventoried. It is often used as a wealth indicator in historical analyses.[67] However, inventories are problematic sources of information for both real estate and financial items. As Margaret Spufford has argued, real estate represents 'the major defect' in inventories, because some forms of real estate, such as freeholds and copyholds were commonly omitted whilst others, such as leaseholds, were included.[68] The recording of financial items is equally problematic. As inventories are a record of assets, only debts owing to the deceased are recorded, not his or her financial liabilities.[69] This makes inventories incomplete and potentially misleading records of the estate's financial position. Indeed, in the only two inventories in the dataset in which the deceased's financial liabilities were included, these substantially exceeded the sums that others owed him.

If real estate and financial items are excluded, one is left with what Overton *et al.* have fittingly called material wealth, that is, the combined value of work-related and household assets. This too has been used as an indicator of the deceased's wealth by historians. It could be argued that it presents a happy medium between the two previous measures, being more complete than domestic wealth and immune to the problems with financial and real estate items in inventories. It is true that some work related goods, particularly certain agricultural ones, were not always reliably recorded either. For example, for complicated legal reasons, certain agricultural assets such as grass, trees, fruit and root crops were often omitted.[70] But such exceptions are of limited importance in areas dominated by livestock farming such as the north-west of England. Furthermore, as Overton has shown by comparing probate inventories with wealth evidence from – much rarer but also more complete – probate accounts, there was

[67] For example, in Shammas, 'Wealth distribution', pp. 297–307.

[68] Margaret Spufford, 'The limitations of the probate inventory', in John Chartres and David Hey (eds), *English rural society 1500–1800: essays in honour of Joan Thirsk* (1990), pp. 139–74.

[69] Jeff and Nancy Cox have argued that even debts owing to the deceased were not always recorded, especially in the eighteenth century: Cox *et al.*, 'Probate, 1500–1800', p. 12.

[70] Spufford, 'Limitations', p. 146.

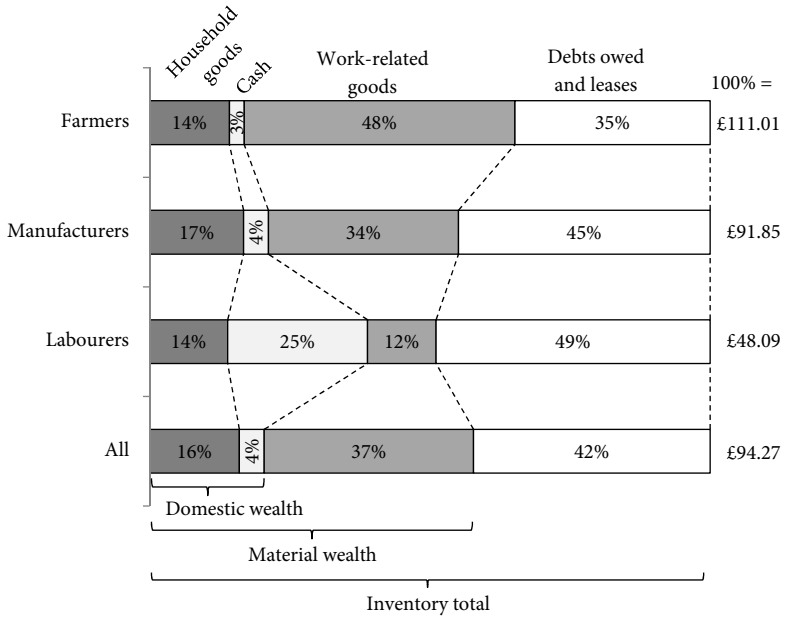


FIGURE A.1 The several inventory-derived wealth measures compared

Source: Probate inventory set.

a strong statistical relationship between the material and net wealth of households.[71] In short, although all three wealth measures have their particular strengths, material wealth is probably the most useful for current purposes.

Of course, the utility and reliability of whatever wealth measure one employs also depends on the quality of the underlying valuations of individual inventory goods. Historians strongly disagree about the accuracy of these valuations, mostly based on anecdotal evidence.[72] The only systematic analysis is Overton's, which demonstrated that inventory valuations for certain commodity goods followed market price developments quite accurately.[73] Also, when using the combined value of groups of inventoried items – as is the case for the three measures employed in this article – there is a danger of goods being omitted. This is problematic for goods that were sometimes included and sometimes left out. Lena Orlin has provided a list of 12 reasons why that might happen.[74] In the research for this article, the effects of such valuation problems were minimized by a combination of two measures. First, by using average values for sufficiently large sets of inventories rather than individual inventory valuations. Second, by

[71] Overton *et al.*, *Production and consumption*, p. 138; M. Overton, 'Household wealth, indebtedness, and economic growth in early modern England', paper presented at the 14th International Economic History Congress, Helsinki, 2006, http://www.helsinki.fi/iehc2006/papers3/Overton122.pdf, pp. 13–14, 35.

[72] For an overview of opinions see K. G. Sneath, 'Consumption, wealth, indebtedness and social structure in early modern England' (unpublished PhD thesis, Cambridge, 2009), p. 130; M. Overton, 'Prices from probate inventories' in Arkell *et al.* (eds), *When death do us part*, p. 125; L. C. Orlin, 'Fictions of the early modern English probate inventory', in H. S. Turner (ed.), *The culture of capital: Property, cities, and knowledge in early modern England* (2002), pp. 54–5.

[73] Overton, 'Prices from probate'.

[74] Orlin, 'Fictions', pp. 64–73.

employing such values only in a relative rather than an absolute manner, limiting their use to analyses in which (sets of) inventories are compared to others. These two measures are only effective, of course, if the sample sets have no systematic bias with respect to valuations. In the sets used in this research that was the case. There is, for example, little reason to fear that farmers' inventories were more susceptible to low valuations of household goods than weavers' inventories, or that more goods were omitted from Salford than Wirral inventories. That said, some evidence exists of a potential systematic bias in inventory valuations related to the wealth of the deceased, with goods in wealthy inventories being appraised higher than goods of the same type in poorer inventories. However, it could be argued that this is not evidence of unreliable valuations at all, as it is only to be expected that wealthier households possessed higher quality and therefore more expensive versions of the same type of item than poor ones. Furthermore, this possible defect was neutralised by comparing groups of inventories with a broad mix of wealth levels each.

The *Criterion*: an inter-war platform for agricultural discussion

by Jeremy Diaper

Abstract

This article examines the *Criterion* to reveal the importance of T. S. Eliot's preoccupation with agriculture. The *Criterion*, edited by Eliot from 1922 to 1939, has received a large amount of critical attention, but the agricultural side of the literary review has been almost entirely disregarded. This article begins by analysing the agricultural concerns present within Eliot's *Criterion* Commentaries. It then brings to attention the agricultural books that Eliot selected for review in the 'Books of the Quarter' section and the key figures of the organic husbandry movement who contributed to the *Criterion*. It reveals that a number of central organic concerns were discussed within the *Criterion*, including those of rural decline, the imbalance of town and country, mechanization, artificial fertilizers, humus and soil erosion. It concludes that the *Criterion* helped forward the organic philosophy throughout the 1930s and that, consequently, Eliot can be considered a supporter of the organic movement.

The *Criterion* has long been recognized as integral to a full understanding of T. S. Eliot's literary practice. The literary review, which ran from 1922 to 1939, provided Eliot with a means to discuss, debate, and dispute various issues that were of crucial importance to him during this period. Unsurprisingly, the *Criterion* has prompted a large amount of critical scholarship that has enhanced our understanding of the journal.[1] Yet, despite the large volume of critical attention the *Criterion* has received over a number of decades, all the accounts either completely ignore, or give very little consideration to, one crucial element: the journal's deep-seated interest in agricultural issues.

Valentine Cunningham was the first to point out Eliot's interest in agriculture and rural issues, highlighting that 'The *Criterion* became a kind of house journal for the spokesmen of post-war British ruralism'.[2] Similarly, Steve Ellis in *The English Eliot* (1991), and Jed Esty in *A shrinking island* (2004), both acknowledge the importance of Eliot's concern with agriculture by quoting briefly from his *Criterion* commentaries. Elsewhere, David Matless momentarily

[1] See for instance, Herbert Howarth, *Notes on some figures behind T. S. Eliot* (1965), pp. 250–99; Russell Kirk, *Eliot and his age: T. S. Eliot's moral imagination in the twentieth century* (1971), pp. 93–129; John D. Margolis, *T. S. Eliot's intellectual development, 1922–1939* (1972); Denis Donoghue, 'Eliot and the *Criterion*', in David Newton-De Molina (ed.), *The literary criticism of T. S. Eliot: new essays* (1977), pp. 20–41; Agha Shahid Ali, *T. S. Eliot as editor* (1986); Jason Harding, *The Criterion: cultural politics and periodical networks in inter-war Britain* (2002).

[2] Valentine Cunningham, *British writers of the Thirties* (1988), p. 231.

refers to the agricultural figures who contributed to Eliot's journal: 'Massingham, Stapledon, Gardiner, Lymington and Mairet all contributed to Eliot's *Criterion* journal in the 1930s'.[3] The aforementioned academics, however, neglect to expand in any detail upon such allusions to the *Criterion*, and consequently fail to emphasize sufficiently its significance as an agricultural platform.

Moreover, even when Eliot is recognized as a noteworthy figure in the organic husbandry movement and as having made some contribution to the agricultural debates of the period, the importance of the *Criterion* is completely neglected. Thus, for example, Philip Conford suggests that:

> Eliot's importance to the organic movement was three-fold: as a director of Faber and Faber he took an active interest in Richard de la Mare's commissioning of books on organic husbandry; as a member of the Chandos Group he helped formulate the ideas of a Christian Sociology which were the context of the organic movement's development; and as a member of the editorial board of the *New English Weekly* he helped run the paper which was the major vehicle for organic ideas.[4]

Undoubtedly, Conford provides us with an invaluable account of the organic movement, and helps raise awareness of the fact that Eliot had an 'active interest' in the agricultural issues of the time. There is far more to be done, though, in exploring the full significance of Eliot's contribution to these roles. Admittedly, even Conford himself accepts that his section on Eliot in *The origins of the organic movement* (2001) is but a 'small contribution to that task'.[5] Hence David Bradshaw's insistence that more critical scholarship needs to be carried out on Eliot's interest in agriculture and environmentalism still remains true over 15 years on from his observation.[6] But, whilst nearly all aspects of Eliot's involvement with the organic movement demand closer attention, it is perhaps most pressing that the agricultural character of the *Criterion* receives elucidation, as it was only as recently as 2010 that this was adequately acknowledged.

The first notable step towards exploring the role the *Criterion* played in Eliot's preoccupation with agriculture was made by Alexandra Harris, in her critically acclaimed monograph *Romantic moderns* (2010). She asserts that '[i]n T. S. Eliot we find the poet as farmer, or at least as a champion of agriculture', and reinforces my contention that 'the extent of Eliot's interest in farming is not always acknowledged'.[7] Crucially, she maintains that 'it was a significant part of his intellectual life' and clarifies the *Criterion*'s function within this:

[3] Steve Ellis, *The English Eliot: design, language and landscape in 'Four Quartets'* (1991), p. 80; Jed Esty, *A shrinking island: modernism and national culture in England* (2004), p. 124; David Matless, *Landscape and Englishness* (1998), p. 134. See also Steve Ellis, 'Eliot and earth', in *The Journal of the T. S. Eliot Society* (2012), pp. 1–8.

[4] Philip Conford, *The origins of the organic movement* (2001), p. 223. For a brief account of the Chandos Group, see Roger Kojecký, *T. S. Eliot's social criticism* (1971), pp. 79–85. For more information on the *New English Weekly* (*NEW*), Philip Conford, 'A forum for organic husbandry: the *New English Weekly* and agricultural policy, 1939–1949', *AgHR* 46 (1998), pp. 197–210.

[5] Conford, *Organic movement*, pp. 223, 266.

[6] David Bradshaw, 'T. S. Eliot and the major: sources of literary anti-semitism in the 1930s', *Times Literary Supplement*, 5 July 1996, pp. 14–6.

[7] Alexandra Harris, *Romantic moderns: English writers, artists and the imagination from Virginia Woolf to John Piper* (2010), p. 183.

> Eliot wanted a wider audience for these ideas, so he used the editorial pages in his journal, the *Criterion*, to comment provocatively on rural matters. Conceiving culture and agriculture as mutually dependent, he understood the degradation of one to be disastrous for the other. The urbanization of the ruling and literary classes was a kind of standardization that signalled the degeneracy of a whole society.[8]

As well as providing an overview of the main agricultural viewpoints that Eliot put forward in the *Criterion*, she also notes that he was in correspondence about agriculture with some of the key figures in the organic husbandry movement, including Viscount Lymington (Gerard Wallop, the ninth Earl of Portsmouth).[9] Harris's contribution to our understanding of the *Criterion*, then, is a critical one, and has finally brought us round to considering seriously the agricultural issues which arose in the pages of the *Criterion*. Nonetheless, her discussion passes swiftly over the key topics that arise in Eliot's journal and leaves many blanks, which I intend to fill in.

My examination of the agricultural aspects of the *Criterion* will be multifaceted. First and foremost, I shall offer a detailed consideration of Eliot's *Criterion* Commentaries in order to illustrate how these reveal his increasing preoccupation with agricultural issues. In doing so, I hope to create a clearer picture of Eliot's agricultural concerns and the agrarian society he envisaged. Furthermore, I shall stress that Eliot's appeal for a return to the land was not a solitary plea, but reiterated by a number of other *Criterion* contributors. I shall then focus on the 'Books of the Quarter' section of the journal, where Eliot chose influential authorities on agriculture to review a number of crucial texts. The significance of Eliot's book reviews has been acknowledged, but the agricultural books he selected for review and the reviewers themselves have been almost entirely disregarded. Thus I shall bring to light these key texts, both by looking at the content of the reviews they received in the *Criterion*, and by discussing the books and reviewers themselves. Moreover, I shall use these books to contextualize our understanding of Eliot's views on agriculture, and to draw comparison with his own opinions. My main aim is to elucidate the agricultural and rural viewpoints Eliot put forward in the pages of the *Criterion*, but also to establish it as an important platform for discussion and debate amongst many prominent members of the organic husbandry movement.

I

In a *Criterion* Commentary of October 1934, Eliot considered the annual report of the National Trust for Places of Historic Interest or Natural Beauty.[10] Eliot begins this Commentary by asserting that it is promising to see the work of the National Trust being carried out as a result of the charitable donations of a substantial number of people. For Eliot, this is of significance as it seemed to be a clear indication that there was public support for such a

[8] Ibid., pp. 183, 184.

[9] Ibid., pp. 184–85. For a detailed account of Viscount Lymington and his position in the organic husbandry movement, Philip Conford, 'Organic society: agriculture and radical politics in the career of Gerard Wallop, ninth Earl of Portsmouth (1898–1984)', *AgHR* 53 (2005), pp. 78–96.

[10] For more on the National Trust, Graham Murphy, *Founders of the National Trust* (1987); Jennifer Jenkins and Patrick James, *From acorn to oak tree: the growth of the National Trust, 1895–1994* (1994); Merlin Waterson, *The National Trust: the first hundred years* (1997).

body: 'what is most important is that it has obviously stirred the feelings of a very large number of people'. The fact that the £350,000 which had been donated up until 1933 did not simply come from 'a single American millionaire' was telling, as Eliot felt this meant the National Trust had more chance of survival: 'It would seem that the kind of work that the National Trust does in preservation has appealed to a general public spirit which is the best assurance of its continuation'.[11]

Eliot made it clear from the outset of his Commentary that he did not wish to diminish the merit of the National Trust: 'I do not in any way depreciate the value of the National Trust, or belittle the generosity of those who have given labour, money and land'. Notwithstanding that, he states that the presence of such an enduring institution inevitably 'gives rise to curious reflections'.[12] Thus, whilst Eliot applauds the 'generous efforts' of the Trust, he finds it regrettable that there exists a need for such an institution: 'Surely we are living in a very odd and unsatisfactory state of society, when such a struggle has to be carried on to preserve England from destruction and disfigurement'.[13] That the Trust had to strive to protect the beauty of England signalled to Eliot a visible deficiency in the present state of civilization:

> The existence of such an institution as the National Trust, and the present necessity for its existence, seems to me to imply some pretty drastic criticism of contemporary society; and we should like all the people interested in the preservation of 'beauty spots' to investigate a state of society in which beauty spots have to be preserved.

Therefore, despite initially offering praise for the Trust and commending their 'excellent' work, Eliot was troubled by the requirement for its existence and wanted to probe behind the deeper implications this had for society. Accordingly, he was adamant that the efforts of the Trust, which included those who had generously donated to it, should not be deemed sufficient, boldly recommending that they 'should not content their hearts and consciences with the thought that this is all that needs doing'. Instead, he encouraged Trust supporters to comprehend the current state of 'natural development', and to move towards a more detailed understanding of why their work was necessary in the first place:

> For when such work has to be done, we must acknowledge that we are interfering, in a way never before attempted in history, with natural development; and when natural development has to be interfered with, ought we not to look a little deeper and try to do something about the 'nature' which develops in such an unpleasant way?[14]

Eliot called for a move beyond the basic concerns with beauty and historical importance, to a firmer understanding of the powers behind the ruination of rural Britain: 'we want to form some notion of the nature of the forces which we may expect to be active in destruction of the beauty of England in the future'. Until this information was provided, Eliot made it clear that he could not offer his full backing to the National Trust: 'It is difficult to be quite whole-hearted in one's support of the National Trust, until one is able to answer such questions'.[15]

[11] Eliot, 'A Commentary', *The Criterion* 14 (1934), p. 86.
[12] Ibid., p. 86.
[13] Ibid., pp. 87, 86.
[14] Ibid., p. 87.
[15] Ibid., pp. 87, 87–8.

Most importantly, then, although Eliot was encouraged by the amount of support the National Trust had accumulated, he felt that it did not go far enough to protect the countryside and he consciously wanted to avoid offering a passive resistance:

> While supporting the work of the National Trust so far as it goes, I am apprehensive lest it help to engender a lack of confidence in the future, and consequently a neglect of action about the future … Such work as that of the National Trust seems to belong to a transitional period of society. Either society will somehow rearrange itself in such a way that whatever ought to be preserved exactly as it is, will be in no danger; or the whole business of artificial conservation will be taken over by the State. The latter event is much the more probable, the former the more desirable.

As far as Eliot was concerned the National Trust was not proactive enough in its attempts to preserve the countryside. In order for the countryside to be salvaged, Eliot believed that modern civilization must be changed through 'humility' and 'conviction'. The crucial verb in the above passage, however, is 'rearrange'. Eliot goes on to outline that this rearrangement of society should entail 'a very different economic basis, and a healthy, settled agriculture, with a proper balance between town and country life'.[16]

The *Criterion* Commentary of October 1934 illustrates how deeply concerned Eliot was about the despoliation of the English countryside. In particular, Eliot underscores the need to preserve rural England from the development carried out by an increasingly urban-minded society:

> Some parts of England are more beautiful than others; some, because of their natural configuration, are quite exceptional; but there is very little of rural England that is not beautiful and worthy of protection. Some of the wilder and more romantic spots may be quite unsuited for tilth, grazing, or other legitimately profitable uses; these are rightly to be protected against the hotel on the hilltop, the week-end bungalow on the slope, the 'roadhouse' in the valley, the golf course on the downs, the pavilion on the beach.[17]

Yet Eliot's vision of the English countryside was far from a romanticized conception of rural beauty. As Ellis succinctly puts it: 'not for Eliot any Wordsworthian swooning over mists and mountain-peaks'.[18] In fact, as Eliot himself stated, 'the beauty of England' was not to be seen in 'the more remote hills and moors which men have not yet found it worth their while to disfigure'. On the contrary, it was visible in 'the ordinary countryside which is largely the work of generations of humanizing labour'. Crucially, though, if this was to be preserved at all, Eliot insisted that it must be 'preserved *alive*'.[19]

Eliot's notion of a countryside that was 'alive' was one that maintained an agricultural

[16] Ibid., p. 89.

[17] Ibid., p. 88. Eliot's concern surrounding the encroachment of an urban landscape upon the countryside was commonly held in the 1920s to '30s. See Clough Williams-Ellis, *England and the octopus* (1928); Clough Williams-Ellis (ed.), *Britain and the beast* (1937); J. B. Priestley, *Our nation's heritage* (1939). For a discussion of these attitudes, Trevor Rowley, *The English landscape in the twentieth century* (2006), pp. 196–98, 212–16.

[18] Ellis, *The English Eliot*, p. 81.

[19] Eliot, 'A Commentary', *The Criterion* 14 (1934), p. 88.

basis. Agriculture, therefore, forms the backdrop to all of Eliot's thinking on the issue of the countryside. This is not to say, however, that the rural is separated from his discussion of agricultural issues. Rather, as is often the case throughout the *Criterion*, the two issues are inter-linked. In order for agriculture to be in true harmony with its natural surroundings, Eliot maintained that there must be a healthy balance between town and country. To uphold this balance, the country had to be preserved from the threat of the town populace:

> It is from a population habituated to town life, a population to which the countryside represents holidays, whether on an elaborate or a simple scale, that the countryside has to be protected, rather than from those to whom the country means the scene of their daily work and life.[20]

Certainly, Eliot was perturbed by the prospect of towns becoming larger, and he argued that should this happen it would not provide a health-giving environment for the population: 'much of the change of a destructive kind which we are concerned to combat, seems to result from the over-development of town life and the atrophy of the country'.[21] Thus, Eliot recommended that alongside the preservation of the countryside, the development of towns needed to incorporate sufficient means of countrified relaxation and recreation:

> It is as important – to take questions which are actual – to plan wisely for the future development of the Surrey Bank, and to see that the new suburbs in Middlesex are properly provided with parks and gardens and arranged so that they may grow to be communities, as it is to preserve any part of rural England.[22]

Eliot later re-examined the relationship between the countryside and the town in a Commentary published in the *Criterion* in April 1938. In this Commentary he turned his attention towards the Music and Drama Bill and pondered whether this would successfully prevent the alarming, and ever increasing, drift to the towns. The inter-war years saw a mass departure from the countryside, and this rural exodus was especially pronounced in the 1930s.[23] In particular, the number of people living and working on the land significantly reduced as a result of low incomes and poor living conditions. For example, between 1931 and 1938, for example, the number of those working in rural employment fell by 17 per cent.[24] Indeed, in the years 1929–1939, the number of people employed full time in British agriculture dropped by 128,000.[25]

The Music and Drama Bill was a measure prepared by the League of Audiences which aimed to boost the attractiveness of life in the countryside by providing more frequent tours

[20] Ibid., pp. 89–90.

[21] Ibid., p. 89

[22] Ibid., p. 90.

[23] Rowley, *English landscape*, p. 218; Alan Armstrong, *Farmworkers: a social and economic history, 1770–1980* (1988), pp. 200–1; Richard Perren, *Agriculture in depression, 1870–1940* (1995), pp. 62–5.

[24] John Stevenson, 'The countryside, planning, and civil society in Britain, 1926–1947', in Jose Harris (ed.), *Civil society in British history: ideas, identities, institutions* (2003), p. 200.

[25] Perren, *Agriculture in depression*, p. 48. See also Ministry of Agriculture, Fisheries and Food, *A century of agricultural statistics: Great Britain 1866–1966* (1968), p. 62.

[26] For more information on the League of Audiences, see *The League of Audiences* (an explanatory leaflet, 1936); J. H. Alden, 'The League of Audiences', *Music and Letters* 19 (1938), pp. 79–83.

from various musical performers, including orchestras and brass bands.[26] Eliot was extremely sceptical of the Bill and was outspoken in his belief that it was not the appropriate measure to stop the movement away from the countryside, bluntly stating: 'It is a pity that action should take precedence over thought'.[27] Despite Eliot's reservations regarding its effectiveness, the Music and Drama Bill provided him with another opportunity to consider further the issue of rural Britain. Once again, he not only reinforced the significance of this concern, but highlighted that it was directly related to the issue of agriculture:

> The two most serious long-distance problems we have, apart from the ultimate religious problem, are the problem of Education and the problem of the Land – meaning by the latter the problem, not merely of how to grow enough food, but of how to obtain a proper balance between country and town life.

Eliot then analysed what he deemed to be the central flaw in the majority of proposals to protect the countryside. This main weakness was, fundamentally, that they seemed to be devised by those with an 'urban outlook'. As a result, many of the ideas were centred on moving the benefits of the towns directly to the countryside. One such example was the wireless, which Eliot felt was not only wholly unsuccessful in encouraging country folk to stay within their rural setting, but injurious to the meritorious aspects of their lifestyle: 'Some have thought that the wireless would do it: what the wireless can do is to tempt country folk to stay up late when they ought to go to bed in order to get up early'.[28]

Accordingly, Eliot proposed that schemes to prevent the drift to the towns should be thought out by the true 'country gentry' and real 'villagers', whom he defined as follows: 'I mean, people who have been brought up in the country, whose substance comes from the cultivation of the land – people who are, economically, as much bound to the land as their tenants or their tenants' labourers'. Indeed, he insists that the legislation of such schemes should not be carried out by those urban-minded citizens who have falsely attached themselves to the country by their own accord: 'I do not mean retired bankers and industrialists who have become landowners or who own land maintained out of dividends from the City'.[29]

Following on from his critique of the Music and Drama Bill, Eliot mused upon his own personal feelings towards country life: 'I should myself find it as difficult to live in the country as to give up smoking – more difficult, for my urban habits are of much longer standing than the habit of smoking: they are, indeed, pre-natal'.[30] Interestingly, in volume three of T. S. Eliot's *Letters* (1926–27) there are a number of illuminating insights which lend weight to the notion that Eliot was never truly comfortable in the countryside. In a letter of August 1926, Eliot makes it apparent that although he has no intrinsic dislike of the countryside, it would not be conducive to his productivity to be based there: 'I do not suppose for a moment that it would be possible for me to do much good work under such conditions – not that I have any objection to the country *per se*'.[31] Perhaps the most important insight, however, comes from

[27] Eliot, 'A Commentary', *The Criterion* 17 (1938), p. 483.

[28] Ibid., p. 482.

[29] Ibid., p. 482.

[30] Ibid., p. 482.

[31] Letter to John Middleton Murry, 31 Aug. 1926, in Valerie Eliot and John Haffenden (eds), *The letters of T. S. Eliot,* III, *1926–1927* (2012), p. 268.

Vivienne's thoughts on Eliot and the country: 'Tom, I don't know. He never seems to really *like* the country, or to know what to do with it'.[32] Here Vivienne's thoughts are strikingly in accord with Eliot's own pronouncements, over a decade later, in his *Criterion* Commentary of 1938. Therefore, even when taking into account Vivienne's mental fragility at this time, such a remark seems to be a fair assessment of Eliot's personal feelings towards a residence in rural surroundings.[33]

As the correspondence of 1926–27 makes manifest, Eliot was not predisposed to settle in the countryside or on a farm. It seems reasonable to deduce, however, that this was partly because he had always been a city dweller, and felt naturally at home in such urban surroundings.[34] Although Eliot himself could not envisage living in the country for any sustained period of time, he increasingly felt that the populace should be centred in the country: 'And I believe that the real and spontaneous country life – not *legislated* country life – is the right life for the great majority in any nation'. The fact that Eliot made it clear he would personally have found it difficult to live in the countryside does not diminish the significance of his enduring preoccupation with agriculture and ruralism. Rather, it enabled him to see that country and town life should be distinct, and that trying to merge them together by providing urban amenities, as proposed in the Music and Drama Bill, would ultimately create a false country life:

> But I can at least see that *living* in the country must be something quite different from *living* in the town; that many benevolent people who want to make country life more endurable are merely aiming to make it suburban; and that a genuine country life must be one which is in a position to provide its own amenities, and to do without London newspapers, Langham Place, and Whitehall.[35]

This was not the only point at which Eliot questioned the modern fascination with making 'life more endurable'. For instance, a year earlier in a Commentary of April 1937, Eliot was highly sceptical about mankind's increasing focus on contemporary conveniences: 'It is likely that too much importance is attached to the modern craving for luxury, comfort and recent inventions'. Whilst Eliot did not deny that many recent inventions (such as electric refrigerators) were of value, he warned of their dangers: 'The worst that can be said for these things is that they keep people's minds in a perpetual rapid distraction'. Furthermore, whilst he did not begrudge modern society's desire to 'keep up one's standard of living', he was wary that this propensity was accompanied by unnecessary 'self-indulgence'.[36]

Most importantly, though, Eliot's deliberation over the issue of mankind's standard of life led him once again to meditate on the now frequent concerns of religion, ruralism and agriculture.

[32] Ibid., p. 268. Letter to John Middleton Murry, 30 Aug. 1926.

[33] Eliot's first wife Vivienne grew increasingly unwell in the years 1926–27 and this led to her being admitted to the Sanatorium de la Malmaison in Paris.

[34] Eliot was born in the city of St. Louis, Missouri in 1888. He later spent brief periods in a number of cities including Paris and Oxford, although for the majority of his adult life he resided in London.

[35] Eliot, 'A Commentary', *The Criterion* 17 (1938), pp. 482–3. Langham Place is a reference to the BBC whose headquarters building, Broadcasting House, was (and still is) in Langham Place.

[36] Eliot, 'A Commentary', *The Criterion* 16 (1937), p. 471.

Firstly, he bemoaned the poor standard of life of the clergy: 'clergy – of all denominations – are among the classes of decreasing prosperity'. Yet, he regarded the needs of agricultural workers as the number one priority, stating that their 'standard of life is already so low that it ought to be improved first'.[37] Eliot was certainly not alone in observing that the populace of rural areas had a poor standard of life in the 1930s. A. G. Street, for example, famously pronounced that this era marked 'the waning of the farmer's glory'.[38]

For many skilled agricultural workers, wages were significantly lower than that of unqualified townsmen. Edith H. Whetham notes that 'Both farm wages and the earnings of farmers in the inter-war years remained at about 60–65 per cent of non-agricultural incomes'.[39] Furthermore, the impoverishment of those living in the countryside was not only evident in their low wages: the living conditions and amenities were equally wretched. As the Scott Report of 1942 detailed: 'Thousands of cottages have no piped water supply, no gas or electric light, no third bedroom … For the great majority of rural workers a bathroom is a "rare luxury"'.[40] By contrast, many townspeople had access to these facilities, as well as other conveniences such as shops, buses and cinemas.

In Eliot's Commentary of 1937, the position of agriculture in society was again at the forefront of his thinking. In calling for an improvement of the rural population's living conditions, he warned that it was not just rural communities who were dependent on a healthy agriculture, but the towns as well: 'The agricultural districts perhaps deserve place of importance, for it is from the country that the towns are alimented and not vice versa'.[41]

The issue of financial difficulties was also addressed by Eliot in his Commentary of April 1936, where he examined the consequence of the Tithe Bill on the country clergy. Eliot suggested the clergy were 'impoverished' as a direct result of the Tithe Bill and that it served as 'recognition of the unimportance of the country clergy'. In a similar manner to his Commentary of April 1937, Eliot did not conceive of religion, agriculture, and ruralism as separate entities, but saw a distinct correlation between them. Eliot argued, therefore, that the decline of the Church would lead directly to the decline of rural life:

> The Church has been an essential, a central point in English rural life. It needs reorganization: but if it simply decays and disappears, then the decay of the English rural community will proceed apace; and England will become divided into three parts: industrial areas (elevated or depressed), suburbs, and beauty-spots.[42]

Eliot was also perturbed by the correlation he perceived between the decay of rural society and human well-being. In a Commentary of 1938, Eliot singled out the importance of Lymington's book *Famine in England*, and highlighted that Lymington was not merely troubled by the

[37] Ibid., p. 472

[38] A. G. Street, *Farmer's glory* (ninth edn, 1944), pp. 146–9.

[39] Edith H. Whetham, 'The waygoing', in Whetham (ed.), *The agrarian history of England and Wales*, VIII, *1914–1939* (1978), p. 315. See, also Eric M. Ojala, *Agriculture and economic progress* (1952), p. 135 and J. R. Bellerby, *Agriculture and industry: relative income* (1956), p. 50.

[40] *Britain's trade and country pattern: a summary of the Barlow, Scott and Uthwatt reports* (Rebuilding Britain Series, no. 2, prepared by the Nuffield College, Social Reconstruction Survey, 1943), pp. 86–7.

[41] Eliot, 'A Commentary', *The Criterion* 16 (1937), p. 472.

[42] Eliot, 'A Commentary', *The Criterion* 15 (1936), p. 666.

state of the land, but with the 'inevitable deterioration … of its people … if the present tendencies are not checked'.[43] In *Famine in England* Lymington illustrates the 'deterioration' of man from several angles, in concurrence with Eliot's own views. One perspective that Lymington and Eliot shared was the anxiety over the increasing urbanization of man. For example, in a *Criterion* Commentary of 1934, Eliot debated: 'whether it is desirable that the large towns should become larger; whether it is healthy that the mind of the whole nation should become urban'. Eliot concluded that: 'in asking such questions we are questioning all the assumptions of our society for many generations past'.[44] Eliot continued to be troubled by the predominantly urban state of society, and declared in a *Criterion* Commentary of 1938 that:

> What is fundamentally wrong is the *urbanization of mind* … which is increasingly prevalent as those who rule, those who speak, those who write, are developed in increasing numbers from an urban background.[45]

In a similar manner to Eliot, Lymington was distressed by the urban conditions in which the preponderance of mankind was living:

> A crowded street of London traffic where there is no breeze will be to the countryman almost unbearable from the highly poisonous petrol fumes … Add to this pollution the facts that the air itself is overcrowded with human beings, and that nearly everyone of them is living in a state of noise, hurry, stress, and crowded journeys to and from work, then one has the very worst conditions in which to create a healthy people.

Lymington deduced therefore 'that morbidity, restlessness, and malaise (physical and spiritual) are our daily lot', unless we were to change our approach to agriculture.[46] Lymington was confident that agriculture was the solution to the problems of urban society, and that 'the health of the nation will be affected spiritually as well as physically by tending our soil with love and diligence'.[47] Likewise, Eliot felt that the salvation of civilization lay in agriculture. As he states in the *Criterion* Commentary of 1938:

> To have the right frame of mind it is not enough that we should read Wordsworth, tramp the countryside with a book of British Birds and a cake of chocolate in a rucksack, or even own a country estate: it is necessary that the greater part of the population, of all classes (so long as we have classes) should be settled in the country and dependent upon it.[48]

During the 1930s there was a rapid rise in the amount of people who participated in outdoor activities such as rambling, hiking and cycling. By the end of the decade there were

[43] Eliot, 'A Commentary', *The Criterion* 18 (1938), p. 59.

[44] Eliot, 'A Commentary', *The Criterion* 14 (1934), p. 90. From 1870 there was a fixed movement away from the countryside to the towns among the populace, and this trend continued throughout much of the twentieth century. By the beginning of the twentieth century, the greater number of the population resided in towns. See, Rowley, *The English landscape*, p. 218.

[45] Eliot, 'A Commentary', *The Criterion* 18 (1938), p. 60.

[46] Viscount Lymington, *Famine in England* (1938), p. 83.

[47] Ibid., p. 150.

[48] Eliot, 'A Commentary', *The Criterion* 18 (1938), p. 60.

approximately half a million hikers in England alone.[49] Yet the attraction of these outdoor activities was not simply as another form of recreation. Indeed, in the *Clarion Club handbook,* the rambler was assured he was not merely a 'pleasure-seeker', but rather 'an actor and doer in some movement which makes for the improvement and uplifting of humanity'.[50]

However, in order for humankind to be rescued from the malady associated with an urban lifestyle, Eliot was convinced agriculture had to be situated at the forefront of society. Brief rural expeditions would not suffice; for Eliot it was essential that 'the greater part of the population … should be settled in the country and dependent upon it'.[51] This was underscored by Eliot in a *Criterion* Commentary of October 1931: 'The essential point is that agriculture ought to be saved and revived because agriculture is the foundation for the Good Life in any society; it is in fact the normal life'. He maintained, therefore, that despite the hardships agricultural workers had to endure, it remained the most desirable way of life for most of society: 'No one would pretend that life on the land is a very good one for a man with a family, whose wage is only a few shillings more than the dole; but agricultural life is capable of being the best life for the majority of any people'. Eliot envisaged an agrarian society which would consist of 'a primarily agricultural society in which people have local attachments to their small domains and small communities, and remain, generation after generation, in the same place'.[52]

This conception of a society based on rural settlement and agriculture received further clarification in *The idea of a Christian society* (1939). Eliot stated here that he wanted to bring into fruition 'the idea of a small and mostly self-contained group attached to the soil … having its interests centred in a particular place'.[53] In leading a life 'attached to the soil' he believed mankind would develop the necessary 'behaviour and habit' to fulfil a religious existence.[54] As Harris asserts: 'He had done his research and was absolutely serious. England's most prominent poet was advocating a vast, co-ordinated return to the soil'.[55] What Harris fails to observe, though, is that Eliot's entreaty for a return to the land was not a lone cry, but functioned within a network of writers contributing to the *Criterion*. Eliot was not just using his Commentaries to call for a return to the land, but enabling many others to articulate similar sentiments within the *Criterion*'s pages.

In 1930, Christopher Dawson proclaimed with a fearful sense of foreboding that mankind had reached 'The end of an age'. In this *Criterion* article he argued that the age of science was coming to a conclusion, and that society must restore to life its spiritual consciousness: 'The more one studies the origins of humanism, the more one is brought to recognize the importance of an element which is not only spiritual but definitely Christian'. Dawson expounded that 'The reign of the machine' could 'only be conquered by the spiritual power

[49] Ross McKibbin, *Classes and cultures: England, 1918–1951* (1998), p. 379. For a detailed account of outdoor recreational activity in the 1930s, see: Harvey Taylor, *A claim on the countryside: a history of the British outdoor movement* (1997).

[50] *Clarion Club handbook* (Sheffield, 1929), p. 5, cited in Frank Trentmann, 'Civilization and its discontents: English neo-romanticism and the transformation of anti-modernism in twentieth-century Western culture', *J. Contemporary Hist.* 29 (1994), p. 587.

[51] Eliot, 'A Commentary', *The Criterion* 18 (1938), p. 60.

[52] Eliot, 'A Commentary', *The Criterion* 11 (1931), p. 72.

[53] Eliot, *The idea of a Christian society* (1939), p. 31.

[54] Ibid., pp. 31, 30.

[55] Harris, *Romantic moderns*, p. 184.

which is the creative element in every culture'.[56] Crucially, though, Dawson argued that it was only through going back to an agricultural basis that society could find the necessary balance of communal spirituality:

> The return to an organic type of society and the recovery of a spiritual principle in social life need not imply the coming of an age of obscurantism or of material squalor and decay. On the contrary, it may well give a new lease of life to Western civilization and restore the creative power which the secularization of modern culture has destroyed.[57]

Similarly, three years after Dawson's article 'The end of an age', Robert Aron and Arnaud Dandieu repeated his call for the restoration of an agricultural basis to society: 'Man needs once more to find his roots – the roots from which spring his specifically human strength and the spirit of locality and family. In these he will find the source of creative risk'.[58] Elsewhere, Marcel Aurousseau affirmed that both F. R. Leavis and Denys Thompson had rightly emphasized the weight of the decline in agricultural communities. In his review of *Culture and environment: the training of critical awareness,* he suggests that they illustrate 'most clearly what this country lost by the change':[59]

> They hold that the destruction of the 'organic community' is (in the West) the most important fact in recent history; and that its replacement by the 'organized modern state' has led to such a deterioration of values that the training of sensibility and taste are necessary if we are to avoid the danger of 'substitute living'.[60]

Aurousseau himself concludes that in destroying our agricultural basis, we had blindly damaged society: 'Not aware of all they were doing, the English undoubtedly destroyed a good life – though less good than we suppose – and created a bad one'.[61]

II

At this point, we must observe the valuable function of the 'Books of the Quarter' section as a platform to express opinions on agrarian matters. Indeed, the agricultural topics raised in Eliot's Commentaries were regularly addressed at length in the 'Books of the Quarter' section of his literary journal. Eliot went into considerable detail about the process of choosing books for review: 'The selection of books for review – and even the shortest notices represent a very careful selection – is regularly one of the most difficult of editorial problems'. In addition, Eliot

[56] Christopher Dawson, 'The end of an age', *The Criterion* 9 (1930), p. 396. Christopher Dawson was an English historian and scholar who wrote a number of books on Christianity and religion. Eliot himself was among those influenced by Dawson and, in the preface to *Notes towards the definition of culture* (1948), he conveyed 'a particular debt' to him.

[57] Dawson, 'The end of an age', pp. 400–1.

[58] Robert Aron and Arnaud Dandieu, 'Back to flesh and blood: a political programme', tr. Helen Grant, *The Criterion* 12 (1933), p. 199. Aron and Dandieu were 'French social theorists' who edited the journal *L'Ordre nouveau*. In his Commentary of Jan. 1934, Eliot recorded the death of Dandieu as 'a loss to the *Criterion* as well as to the intellectual life of Paris', cited in Harding, *Criterion*, p. 185.

[59] Marcel Aurousseau, Review of *Culture and environment: the training of critical awareness* by F. R. Leavis and Denys Thompson, in *The Criterion* 13 (1933), p. 137.

[60] Ibid., p. 136.

[61] Ibid., p. 137.

endeavoured to keep clear of 'the perfunctory review' and felt that 'a long notice should be either a review of an authority by an authority, or a review of an important book by someone whose opinions on that book are likely to be interesting or valuable'.[62] This aspect of Eliot's editorial policy is of considerable consequence and when we survey the 'Books of the Quarter' section of the publication, it becomes evident that the *Criterion* reviewed some extremely influential books on agriculture, and that these were reviewed by several eminent figures.

This is made apparent by a consideration of Rolf Gardiner's review published in October 1932.[63] In this number of the *Criterion* Gardiner reviewed *Horn, hoof and corn: the future of British agriculture* by Lymington. Gardiner opened his review with complimentary acclaim: 'This book is something to be thankful for; despite a too easy optimism in certain directions, its emphasis is refreshingly clear and sound'. In fact, throughout his review, Gardiner was in accord with many of Lymington's ideas and reaffirmed that the 'matrix of civilization is the soil'.[64]

At the centre of Lymington's proposals for agricultural policy in *Horn, hoof and corn* lay the recommendation that it was 'Not only for the state to save agriculture, but for agriculture to save the state'.[65]According to Gardiner, such an approach was both 'statesmanlike and far-sighted'.[66] Moreover, he was especially pleased to see that Lymington's focus was to enable mankind to move away from the effects of industrialism towards a creative and nurturing relationship with the soil. In this regard, Lymington suggested that it was for the 'mental and physical health of our people' that statesman must endeavour 'to offset the spiritual vanity of industrial progress by repeopling the land'.[67] By returning to the work of husbandman, Lymington proposed that mankind would not only improve their personal well-being, but that the equilibrium of society would be restored: 'There can only be a balance in national life when enough of the population can satisfy their instincts for craft and the oldest craft instinct of all, the use of the land'.[68]

Gardiner echoed Lymington's call to restore the balance of society to a healthy level by bringing British agriculture back to prominence. Indeed, he emphasized that mechanization had dangerously disrupted the balance of civilization: 'Lord Lymington … show(s) us the perilous condition of a society of which, if it be likened to a pyramid, the base is ever contracting and the apex flattening out until all proportion and balance are lost'.[69]

Similarly, when reviewing R. G. Stapledon's book, *The hill lands of Britain*, Philip Mairet drew attention to the imbalance caused to society by having industry at its core, as opposed to agriculture: 'It is true Mr. Stapledon prays for a better way of life; sees clearly the evils of

[62] Eliot, 'A Commentary', *The Criterion* 5 (1927), p. 188.

[63] Rolf Gardiner was an important member of the organic husbandry movement who was affiliated with the far-right group the English Mistery, but also helped form the Kinship in Husbandry and the Soil Association. For more on Gardiner, see R. J. Moore-Colyer, 'Rolf Gardiner, English patriot and the Council for the Church and Countryside', *AgHR* 49 (2001), pp. 187–209; Matthew Jefferies and Mike Tyldesley (eds), *Rolf Gardiner: folk, nature and culture in interwar Britain* (2011).

[64] Rolf Gardiner, Review of *Horn, hoof and corn: the future of British agriculture*, in *The Criterion* 12 (1932), p. 134.

[65] Lymington, *Horn, hoof and corn: the future of British agriculture* (1932), p. 161.

[66] Gardiner, Review of *Horn, hoof and corn*, p. 134.

[67] Lymington, *Horn, hoof and corn*, p. 30.

[68] Ibid., p. 21.

[69] Gardiner, Review of *Horn, hoof and corn*, p. 134.

an economy overbalanced by industry not only nor chiefly in the neglected landscape, but in the creeping psychosis of an over-urbanized humanity'. This phrase, 'creeping psychosis of an over-urbanized humanity', may seem at first to be veering towards hysteria if taken in isolation.[70] But Mairet's remark, when placed alongside the anxiety expressed by other *Criterion* contributors, can be interpreted as an accurate summation of the threat that many ruralists perceived to lie in urbanization. In concord with Eliot, both Mairet and Stapledon felt that encroaching urbanization was seriously damaging to society as a whole.[71] In *The hill lands of Britain* Stapledon asserts that 'modern man is not in harmony with this man-made environment, and is not happy, and does not enjoy himself'.[72] In order to gratify mankind Stapledon called for a return to the land:

> we must get back to the land and to the simple enjoyment of the rhythm of nature, as opposed to the excruciating rhythm of modern transportation, urbanization and industrialization if we are to maintain and perpetuate our race and our species.[73]

Patently, the central theme of Lymington's *Horn, hoof and corn*, that both the stability of society and human well-being will suffer when mankind is not kept in contact with the land, resonates not only with Eliot's own agricultural concerns expressed in his *Criterion* Commentaries, but those expressed by a number of other contributors.

Significantly, the vast majority of the agriculturalists who contributed to the *Criterion* were members of the organic husbandry movement, and consequently the journal espoused the organic ideology.[74] The organic movement grew rapidly in the 1930s and 1940s owing to anxiety over the increasing use of artificial fertilizers and industrial farming methods. Soil erosion and soil fertility were also major concerns for organic farmers and featured prominently in the agricultural texts in these two decades.[75] One of the key issues for the organicists was the importance of humus to maintaining a healthy and fertile soil. The debate surrounding humus caused such great controversy that it reached the House of Lords in 1943, with members of

[70] Philip Mairet, Review of *The hill lands of Britain*, in *The Criterion* 17 (1938), p. 341.

[71] Mairet was a significant member of the organic husbandry movement and participated widely in a number of associated groups, including the Chandos Group, the Council for the Church and Countryside, the Sociological Society and the Kinship in Husbandry. Perhaps his most important role, however, was as editor of the *New English Weekly* from 1934 until 1949. For more on Mairet, see Conford, *Organic movement*, pp. 167–75 and 191–94. R. G. Stapledon influenced a number of the organic movement's prominent members such as Viscount Lymington and Rolf Gardiner. Stapledon also featured regularly in the *New English Weekly*.

[72] R. G. Stapledon, *The hill lands of Britain: development or decay*? (1937), p. 107.

[73] Ibid., p. 112.

[74] Stapledon is the exception here as he also held a dominant position amongst those in favour of orthodox agricultural methods. Thus, Stapledon found himself in a middle ground between the two main agricultural sides of debate. For accounts of the organic movement see, Conford, *Organic movement*, Matless, *Landscape and Englishness*, pp. 103–35 and 137–60; Jeremy Burchardt, *Paradise lost: rural idyll and social change in England since 1800* (2002), pp. 131–40; William Lockeretz (ed.), *Organic farming: an international history* (2007); Matthew Reed, *Rebels for the soil: the rise of the global organic food and farming movement* (2010).

[75] See, for example, G. C. Watson, *The soil and social reclamation* (1938); A. G. Street, *Already walks to-morrow* (1938); Lord Northbourne, *Look to the land* (1940). Of most significance here, though, is the world survey of soil erosion by G. V. Jacks and R. O. Whyte entitled *The rape of the earth* (1939), published by Faber and Faber in the same year as Eliot's *The idea of a Christian society*.

the organic movement openly questioning the Ministry of Agriculture's stance on the use of artificials.[76]

The disputation surrounding humus and artificial fertilizers also took place within the pages of the *Criterion*. In his review of *The land: now and tomorrow*, Lymington took issue with Stapledon's advocacy of artificials: 'As a practical farmer and improver of land I have been driven increasingly to doubt the wisdom of using artificials save the age old method of chalking land'. He goes on to stress the value of the humus content of the soil:

> While I do not doubt the temporary effects of artificials, and the permanent need of some form of lime for the soil, the fact remains that humus is the natural food of the soil, and not artificial manures, which are pills that require a constantly increased use to maintain the same crop, certainly on arable land.

Lymington held extremely strong views against the use of artificials, as he believed that their unlimited application was responsible for 'many diseases of plant, beast and man'. Furthermore, Lymington steadfastly regarded his opinion to be true owing to the fact that it had been founded 'entirely from practical experience'. He even went as far as to make the bold claim that: 'In the long run, the farmer who is eighty years behind the times today may, when our false gods are exposed, be the herald of a saner age'.[77]

Interestingly, many of the key issues in the organic philosophy discussed within the pages of the *Criterion* were later raised by Eliot in his social criticism. Thus, for example, in Mairet's review of *The hill lands of Britain* he delineates how the failure to cultivate British soil sufficiently has resulted in man's exploitation of the land abroad in South America, Africa and the Southern States:

> we are not allowed to live as husbandmen, wedded to the land we hold, to cultivate it and make it bear. We are set to rape lands abroad, loot and root out what is in them, and having ruined them to pass on to others.

Moreover, Mairet goes on to blame the economic basis of society: 'Ecological crime at home and abroad are interdependent, produced by the same financial-industrial style of living on the one side and on the other'.[78]

Similarly, in *The idea of a Christian society*, Eliot bemoaned the state of modern agriculture and illustrated how dreadful the situation was with reference to soil erosion: 'I need only mention, as an instance now very much before the public eye, the results of "soil erosion" – the exploitation of the earth, on a vast scale for two generations, for commercial profit: immediate benefits leading to dearth and desert'.[79] In addition, Eliot deplored society's foundation on 'the principle of private profit' and the drastic effects of 'material progress':

> We are being made aware that the organisation of society on the principle of private profit, as well as public destruction, is leading both to the deformation of humanity by unregulated

[76] Conford, 'A forum for organic husbandry', p. 207. See also Jorian Jenks, 'The great humus controversy', *NEW*, 25 Feb. 1943, pp. 161–62.

[77] Lymington, Review of *The land: now and tomorrow* by R. G. Stapledon, *The Criterion*, 15 (1936), p. 700.

[78] Mairet, Review of *The hill lands of Britain*, pp. 342, 342–43.

[79] Eliot, *Idea*, p. 61.

> industrialism, and to the exhaustion of natural resources, and that a good deal of our material progress is a progress for which succeeding generations may have to pay dearly.[80]

This questioning of 'material progress' was also frequently expressed throughout the pages of the *Criterion*. For instance, it was vividly depicted in W. G. Peck's article 'Divine democracy', where Peck acknowledges man's tendency to 'plunge into a greedy exploitation of the earth's resources and engage in an orgy of materialistic pride'.[81]

The issue of mechanization was another key feature of the organic movement's concern with modern agricultural methods.[82] A greater use of machines was deemed perfectly reasonable by those in the orthodox school, as they felt it would enable greater efficacy in production and ultimately increase wages. Viscount Astor and B. Seebohm Rowntree, in *British agriculture: the principles of future policy*, were of the opinion that 'Science and the machine will gradually conquer the peasant … greatly to the advantage of the common man'.[83] Yet many in favour of organic husbandry felt the movement towards more machines was a recipe for disaster, and that it would 'accelerate rural decline'.[84]

The topical debate concerning machinery emerged at various points in the lifespan of Eliot's literary review. For instance, in January 1935, *Money and morals* by Eric Gill was reviewed in the *Criterion*, which raised this contentious issue of machinery in farming. In a similar manner to A. J. Penty, Eric Gill was fiercely against a society built largely on mechanized industry and longed instead for a community based on 'art, agriculture, craftsmanship and worship'.[85] Interestingly, Gill's book was reviewed by W. G. Peck, who himself is notable for his support of the Social Credit movement and for his prominence in the Christendom group.[86] Peck begins his review in praise of Gill's *Money and morals,* which, he asserts, is 'of great interest, rich in gnomic wisdom and fraught with provocative assertions'.[87]

In *Money and morals*, Gill's viewpoint contrasts starkly with the views of Frank McEachran, which were put forward in a book review of October 1935. McEachran, in his review of *The growth and distribution of population* by S. V. Pearson, acknowledged the importance of having rural labourers working on the land, but reiterated his opinion that mankind should be able to maintain an appropriate balance between mechanization and ruralisation:

> On the one hand population needs land and needs it for use, while on the other, land itself, under modern methods, has grown infinitely rich. The machine in industry (urban land values) and intensive cultivation (rural land values) have rendered man's labour applied to land immensely productive.[88]

[80] Ibid., p. 61.

[81] W. G. Peck, 'Divine democracy', in *The Criterion* 16 (1937), p. 265.

[82] For more on mechanization see E. H. Whetham, 'The mechanization of British farming 1910–1945', *J. Agricultural Economics* 21 (1970), pp. 317–31; Jonathan Brown, *Agriculture in England: a survey of farming, 1870–1947* (1987), pp. 139–41.

[83] Viscount Astor and B. Seebohm Rowntree, *British agriculture: the principles of future policy* (1939), p. 253.

[84] Conford, *Organic movement*, p. 30.

[85] Ibid., p. 225. Eric Gill was an eminent sculptor and designer. He occasionally wrote for the *NEW* and Philip Mairet spent some time as an agricultural labourer at his community in Ditchling, Sussex.

[86] Ibid., p. 233.

[87] W. G. Peck, Review of *Money and morals* by Eric Gill, in *The Criterion* 15 (1935), p. 324.

[88] Frank McEachran, Review of *The growth and distribution of population* by S. V. Pearson, in *The Criterion* 15 (1935), p. 123.

However, as Peck makes clear, Gill is of a completely different disposition:

> This gentleman clearly hates machines. The machine, he says, and the human person, can reach no ultimate agreement. The machine is not a tool to aid a man's work: it is a device to eliminate a man's work. Therefore, in the end, humanity will conquer the machine by abolishing it.[89]

Gill then, according to Peck, has 'not yet come to terms with the machine, either economically or theologically' and mistakenly refers to it as if it were the product of 'capitalistic black magic'. Ultimately, Peck suggests that Gill is caught between two sides of his nature: Mr Eric Gill the artist and Mr Eric Gill the economist. These two sides of Gill's thinking produce divergent opinions, and thus Peck concludes that 'after an excellent beginning, Mr. Gill plunges into some very muddled thinking' which leads him to 'a wild renunciation' of machines.[90]

In *The idea of a Christian society* Eliot seemed to convey disdain towards industrialism: 'In an industrialized society like that of England, I am surprised that the people retains as much Christianity as it does'. Yet whilst Eliot undoubtedly felt an industrialized society detrimentally affected man's capacity for a truly spiritual existence, he did not feel it necessary to rid ourselves of machines altogether. He made this explicit in his Appendix to *The idea of a Christian society*:

> Any machinery, however beautiful to look at and however wonderful a product of brains and skill, can be used for bad purposes as well as good: and this is as true of social machinery as of constructions of steel. I think that, more important than the invention of a new machine, is the creation of a temper of mind in people such that they can learn to use a new machine rightly.[91]

Here, Eliot makes it apparent that in his opinion it was not machines in themselves that were inherently bad, but rather our attitude towards them.

In his review of *Money and morals*, Peck appears to sit firmly on the side of Eliot himself with regard to the controversial matter of machines: 'It is not the acceptance of the machine that is the source of our trouble, but rather the fact that we have not yet learned to accept it for valid ends'.[92] Likewise, in *Famine in England*, Lymington held the view that it was mankind's outlook on machinery that needed to be amended, and that thus far our approach had been misguided: 'So far machinery has been designed to exploit rather than to help the land'.[93] With regard to machinery, Eliot felt the most important issue was to learn to use the machine for ends which were not destructive. Ultimately, Eliot felt that if we could learn to adopt a new 'temper of mind' we would not only change our attitude towards nature's resources, but become closer to a spiritual relationship with God. It is in this sense, then, that for Eliot, 'religion … implies a life in conformity with nature'.[94]

[89] Peck, Review of *Money and morals*, p. 324.
[90] Ibid., p. 325.
[91] Eliot, *Idea*, pp. 30, 98.
[92] Peck, Review of *Money and morals*, p. 325.
[93] Lymington, *Famine in England*, p. 100.
[94] Eliot, *Idea*, pp. 98, 61.

III

This discussion has endeavoured to illustrate that the *Criterion* should be studied not only for the insights it lends to Eliot's literary career and development, but also for the rural and agricultural topics which are present within its pages. Eliot declared in the 'Idea of a literary review' that:

> A review should be an organ of documentation. That is to say, the bound volumes of a decade should represent the development of the keenest sensibility and the clearest thought of ten years. Even a single number should attempt to illustrate, within its limits, the time and the tendencies of the time.[95]

Certainly, the disputation surrounding agricultural and rural issues that occurred at regular intervals in the *Criterion* should be seen as 'an organ of documentation' in and of itself. Indeed, Eliot's literary review presents us with an array of thoughts on several of the key organic issues of the 1920s and '30s, including the preservation of the countryside, agricultural decline, mechanization, soil fertility, humus, and the use of artificials.

There were a number of important journals that supported the organic philosophy in the 1930s, including the *New English Weekly*, *Christendom*, *Purpose* and *The Adelphi*. It is my contention that the *Criterion* should be considered another notable journal which helped develop the organic cause. In the final issue of the *Criterion* Eliot used his Commentary as an opportunity to reflect upon his editorship. Here, in an often-quoted section entitled 'Last Words', Eliot claimed that one of the most beneficial outcomes of the review was that it brought him into contact with a variety of individuals:

> The *Criterion* has brought me associations, friendships and acquaintanceships of inestimable value; I like also to think that it may have served contributors, by initiating friendships and acquaintances between those who might not otherwise have met, or known each other's work.[96]

Though many critics have quoted from Eliot's 'Last words', none have explicated in sufficient detail the 'inestimable value' of the 'associations, friendships and acquaintanceships' that Eliot formed during his time as editor of the *Criterion*. I have attempted, however, to demonstrate that Eliot's editorship of the *Criterion* brought together an impressive array of agricultural specialists and rural revivalists. In particular, in thoroughly investigating the neglected pages of the *Criterion,* we are presented with an extensive who's who of the organic husbandry movement. Indeed, amongst the many contributors to the *Criterion* were Viscount Lymington, Rolf Gardiner, Henry Williamson, H. J. Massingham, Kenneth Barlow, Montague Fordham, Eric Gill, Antony M. Ludovici, Philip Mairet, John Middleton Murry, William G. Peck, Arthur J. Penty, R. G. Stapledon and Edmund Blunden.

Most significantly, I have offered evidence that Eliot played an important role in the evolution of the organic husbandry movement. As editor of the *Criterion*, Eliot's regular inclusion of

[95] Eliot, 'The idea of a literary review', *The Criterion* 4 (1926), p. 2.

[96] Eliot, 'Last words', *The Criterion* 18 (1939), p. 275.

agricultural and rural issues in the articles, Commentaries and book reviews featured within the literary review is highly significant. Certainly, Margolis is right to suggest that the *Criterion* documents Eliot's interests and attitudes:

> the *Criterion* had served an immensely valuable and intensely personal function for its editor. During the period when Eliot's attitudes and interests were developing most rapidly, its regular appearance gave him an opportunity to explore and articulate the implications of that development. Both in his own contributions and in those he solicited from others, the *Criterion* provided a chronicle of Eliot's interests and attitudes.[97]

Hence, the fact that agrarian issues were repeatedly dealt with in the *Criterion* throughout the 1930s serves as a clear sign that Eliot was becoming increasingly preoccupied with the deteriorating state of agriculture and the implications this had for society as a whole. Whether ruminating upon the relationship between the town and country, mankind's standard of life, the position of the Church, or the current state of politics, Eliot's thoughts were frequently drawn to agriculture. Indeed, Eliot asserted in a Commentary of October 1938, that 'to understand thoroughly what is wrong with agriculture is to understand what is wrong with nearly everything else: with the domination of Finance, with our ideals and system of Education, indeed with our whole philosophy of life'.[98]

At frequent intervals in his *Criterion* Commentaries, Eliot was actively encouraging the preservation of rural Britain and pointing out the need to prevent further agricultural and rural decline. Thus, it is impossible to agree with Jeremy Burchardt's claim that 'it is clear that rurality and the countryside were very far from being at the centre of Eliot's preoccupations'.[99] One of the most vital functions of the *Criterion*, therefore, is that it establishes beyond doubt Eliot's sustained interest in agricultural issues.

Critics have often considered the closure of the *Criterion* as representing an end point in Eliot's professional life. Margolis provides one such example of this critical tendency, stating that: 'In a very real sense, the end of the *Criterion* represented the end of a chapter in Eliot's career'.[100] Yet, from an agricultural perspective, this critical commonplace can be challenged and a new way of thinking posited about the termination of the *Criterion*. That is, rather than interpreting the closure of the *Criterion* in terms of an 'ending', we should see it as a 'beginning'. In this sense, the final years of the *Criterion* represented the beginning of Eliot's preoccupation with agricultural issues, which was to continue throughout his role as a director of Faber and Faber and a member of the editorial board of the *New English Weekly*.

[97] Margolis, *T. S. Eliot's intellectual development*, p. 205.

[98] Eliot, 'A Commentary', *The Criterion* 18 (1938), pp. 59–60.

[99] Burchardt, *Paradise lost*, pp. 75–6.

[100] Margolis, *T. S. Eliot's intellectual development*, p. 205.

'His footmarks on her shoulders': the place of women within poultry keeping in the British countryside, *c*.1880 to *c*.1980*

by Karen Sayer

Abstract

The exact nature and extent of women's involvement in agriculture, at all levels, but especially on family farms, has remained largely hidden in the numerical data relating to the late nineteenth and twentieth centuries. This is especially true of a quintessentially female activity, poultry keeping. To focus entirely on the large-scale intensive producer, and adhere to the narrative of change laid down by the industry, is to obscure the continuities that have existed and still exist within that industry. Specialist publications and the farming press, ranging from the turn of the nineteenth and twentieth centuries through to the late 1970s, are therefore used to assess the possible shifts in the long-standing association between women and poultry keeping. It is suggested that this association was strong enough for women's involvement to continue at all levels into the post-war period, if not beyond. It appears that women remained involved as producers, as well as labourers, especially on smaller-scale and within family-run enterprises, which themselves survived longer than we might expect.

British farmers, Joan Thirsk argued, only began to specialize in poultry farming in the late nineteenth century. In the previous century, whilst poultry production was of increasing note within continental agriculture, especially in France and Denmark, it was perceived in Britain as being of little consequence.[1] But, worried by rising imports of eggs and looking to lead agriculture out of depression, the government became increasingly concerned to improve domestic production, distribution and marketing, and British poultry production became a worthy subject of enquiry. Henry Rew reported on the poultry rearing and fattening industry of Sussex in 1895 as part of the Royal Commission on Agriculture, and suggested that farmers in other counties might learn from the management and marketing practices of Heathfield. Then, in 1909, a committee was established to look at poultry breeding and egg marketing in Scotland; this committee observed that the domestic demand for eggs had outstripped supply in the UK since the 1870s, and that this demand had increased steadily since. Attempts to improve methods of production and distribution in Scotland had largely come to nothing; this,

* An earlier version of this paper was delivered to the Women's History Network Conference, 2005. My thanks to delegates there, and to the *Review's* referees for their constructive comments. The quotation in the title comes from W. Brett, *Poultry-keeping to-day: pictured and explained* (1938), p. 137.

[1] J. Thirsk, *Alternative agriculture: a history from the Black Death to the present day* (1997), pp. 189–91.

the committee argued, should be tackled via centralized action, education and organization in order to benefit small farmers and crofters.[2] As B. A. Holderness observed, one contributor, Edward Brown, 'wrote and preached tirelessly to the indifferent and sceptical, and expressed a clear conviction that the large import bill for poultry produce could be significantly reduced with the benefit of organization'.[3] However, at the national level the changes effected were initially uneven; as the same committee noted, 'the poultry industry has made a much greater advance in England and Ireland than it has done in Scotland'.[4] After the First World War the government took a greater interest in egg production. In 1926 it published a report on egg marketing in England and Wales, which focused on distribution. A National Standard was proposed, to address difficulties in marketing and supply, as was a system of stamping, but on a voluntary basis.[5] In 1928 the Imperial Economic Committee believed that voluntary preference, alongside increased domestic production, could be exercised to address the shortage in domestic production, as the Empire supplied only 3 per cent of egg imports into the UK in 1926. It too suggested that standard grades and packing be introduced with the UK and the Empire, but no national standard was adopted until the British Egg Marketing Board (BEMB) was set up in 1957.[6] It is worth noting that until campaigns to improve the sale of eggs from the Empire emerged during the Interwar period, the only significant advertising for eggs was for dried egg powder manufactured by companies like Nooeg and, during the First World War, War-Eggo.[7]

In 1939, 'eggs and chickens' were referred to in a parliamentary debate on the Agricultural Development Bill as 'the third major agricultural industry … at a total value of some £25,000,000 a year'.[8] However, as more and more new producers began to specialize in poultry following the First World War, and early forms of large-scale and intensive production started to become popular, so there was also increasing official concern about the spread of disease among fowl.[9] Disease began to peak in the 1930s and in 1935 the voluntary registration of breeders was introduced in an attempt to improve the quality of the stock supplied to specialized poultry farmers.[10] During the Second World War feed was rationed and poultry numbers (and production) inevitably fell. Post-war, following the Agriculture Act of 1947, production picked up again and specialist commercial producers once more began to build up large-scale flocks, despite continued feed rationing. By 1952–3 there was an estimated national

[2] BPP, 1895, xvi, Royal Commission on Agriculture; BPP, 1909, xxxvi (409), Departmental committee on poultry breeding in Scotland.

[3] B. A. Holderness, 'Intensive livestock keeping', in E. J. T. Collins (ed.), *The agrarian history of England and Wales,* VII, *1850–1914* (2 vols, 2000), I, p. 494.

[4] Departmental committee on poultry breeding in Scotland, para. 10.

[5] *Report on egg marketing in England and Wales* (MAFF, Economic Series 10, 1926).

[6] BPP, 1928, x, Imperial Economic Committee, Marketing and Preparing for Market of Foodstuffs: Sixth Report: Poultry and Eggs.

[7] E.g., History of Advertising Trust Archive, Raveningham, Norfolk (hereafter HAT), OM (5) 15, South African Poultry Association Advertising Department, London, S.A. Eggs 1930; 'British and Best, and Best Sellers', an advert for South African eggs, *The Grocer*, 4 Oct. 1930.

[8] Parliamentary Debates (hereafter PD), Lords, fifth ser., 114, 24 July 1939, col. 418.

[9] W. Boyd, 'Making meat: Science, technology, and American poultry production' *Technology and Culture* 42 (2001), pp. 640–3. As Boyd recounts, new diseases also emerged in the 1960s and some established diseases wiped out whole flocks in the USA and UK in the 1960s and 1970s.

[10] L. Robinson, *Modern poultry husbandry* (1948), pp. 1–4.

gross output of 125 million hen eggs, equating (with the value of slaughtered fowls added) to 12.5 per cent of national gross agricultural and horticultural products, or a fifth of livestock products, with an additional £37 million-worth of eggs and meat from fowls in domestic flocks and in flocks kept on less than an acre. However, the new commercial egg industry began to struggle and, by 1955, a detailed analysis of post-war production by D. H. Lloyd came to the conclusion that 'a point has been reached where the margin of profit on egg production is fine'. He observed that many farmers were reluctant to stop producing eggs, but argued that the industry needed 'either reduced costs or … firmer markets'. Greater restrictions on supply to increase prices at the point of sale, or increased demand, were the only ways forward.[11] The answer came in the form of the establishment in 1957 of the BEMB, which was given the pre-war (voluntary) national mark to manage and which set out to stimulate domestic demand. The essential drive when it came to eggs was, officially, to intervene at the national level, and this continued throughout the BEMB's existence.

Until this time patterns of poultry keeping throughout Britain had remained highly localized and were differentiated by producers' responses to the demands of the regional marketplace. Within England, for instance, as Holderness noted, the counties of Lincolnshire and Cumberland were known, before the 1890s, for their egg production by smallholders.[12] Brian Short has outlined the rise and fall of the 'cramming' business on the Sussex Weald between 1850 and 1950, while Michael Winstanley has shown that small farms, at least in Lancashire, continued to be economically viable until the Second World War in part by answering local demand for eggs along with dairy produce.[13] This was all relatively small-scale production, but the evidence points towards the emergence of relatively small numbers of comparatively large flocks. At the moment, though, it is hard to pin down the exact chronology of change because the available evidence on flock sizes is known to be unreliable. In 1961, the BEMB's statistics division carried out its first producer survey, which revealed the average flock size to be 200 birds, although 10 per cent of the eggs that went through their packing stations were supplied by producers with laying flocks of at least 2000 birds. Subsequently, BEMB data published in 1968 revealed that 'small holders own an estimated 11½ million layers (contrasted with 44.3 million others which are recorded in the June census) … Two-thirds of all producers have flocks of less than 200 birds … [and] produce nine per cent of all eggs'.[14] It is therefore clear that, despite the increase in large-scale production and emergence of large flocks of over 10,000 birds, many smaller flocks remained and that, although they were responsible for the minority of eggs, they nonetheless still constituted the majority of flocks. The transition to increased production is also associated with the specialized breeding of the birds, which began

[11] D. H. Lloyd, 'The economics of the commercial egg production industry of the United Kingdom', *J. Agricultural Economics* 9 (1955), pp. 242–3, 258–9.

[12] Holderness, 'Intensive livestock keeping', pp. 491–2.

[13] Brian Short, '"The art and craft of chicken cramming": Poultry in the Weald of Sussex, 1850–1950', *AgHR* 30 (1982), pp. 17–30; M. Winstanley, 'Industrialization and the small farm: family and household economy in nineteenth-century Lancashire', *Past and Present*, 152 (1996).

[14] HAT, OM (L) 21, 'Table 1: British Egg Marketing Board, 1961–64, advertising portfolio and BEMB information advertisement, *Financial Times Supplement,* Dec. 1961; Jean Tester, 'British industry shakeup yields fewer flocks but more birds,' *Poultry International* 6 (Jan. 1967), pp. 59–60; W. P. Blount, 'Statistics: stock and stockmen', in W. P. Blount (ed.) *Intensive livestock farming* (1968), p. 347.

in the early twentieth century, but really only took off from the mid-1950s. Though Walker *et al.* note that earlier records often just flag up the achievement of individual birds rather than performance by flock, following S. H. Gordon and D. R. Charles, they estimate production at 150 eggs per bird in 1898, rising to 300 per bird in 1999.[15]

According to the type of progressive account produced by the industry's apologists, for example that by Gordon and Charles, the history of poultry production can be broken down into the following three periods, based on the technologies and methods adopted: a) the 'historic' period, before the First World War; b) the 'traditional' period, after the First World War, through to 1953–4 (when poultry feed rationing ended); and c) the post-war 'conventional' period that followed.[16] However, what this model does not reveal is that the changes were much debated and far from uniform. The small-scale producer remained numerically significant in the UK, as did those who employed deep-litter and extensive production methods, until the mid–1960s. In 1963, 56 per cent of birds were kept in litter or barn systems and 17 per cent were free range; by 1966 this had fallen to 25 per cent and 8 per cent respectively, as shown in Table 1. Producers were also, as will be shown, highly gendered. Post-war, farming sought to find what Goodman, Sorj and Wilkinson have called a complete 'integrated industrial solution to agricultural production', and, what they called 'appropriationism', defined as a 'truly industrial alternative to the rural, land-based organisation of agricultural production', came to dominate.[17]

Historians have become increasingly interested of late in the history of twentieth-century British agriculture. Within the broader history of the sector, the history of poultry keeping, which has mainly focused on the very striking rise of poultry meat production and consumption, has been taken as emblematic of the rapid rise of industrialisation and intensification within farming post-war, and of the impact on it of science and technology.[18] As Andrew Godley and Bridget Williams rightly argue, looking at the business history of poultry meat in the UK, what allowed intensification to take place initially were new developments in disease control, nutrition and management. But, as Abigail Woods has contended using the case study of innovation within British pig farming, it is crucial to avoid too linear or teleological a narrative when it comes to the history of agriculture in the twentieth century.[19] Following the history

[15] A. Walker, F. Short and M. G. Macleod, 'Limits to the performance of poultry', in R. Sylvester-Bradley and J. Wiseman (eds), *Yields of farmed species: constraints and opportunities in the twenty-first century* (2005), pp. 519, 521–2.

[16] S. H. Gordon and D. R. Charles, *Niche and organic chicken products: their technology and scientific principles* (2002), pp. v–vi. The terms draw on definitions 'agreed by a [DEFRA-funded] study group', p. iii; this periodization is used by Walker, Short and Macleod, 'Limits'.

[17] David Goodman, Bernardo Sorj and John Wilkinson, *From farming to biotechnology: a theory of agro-industrial development* (1987), p. 123.

[18] E.g., A. Howkins, *The death of rural England: a social history of the countryside since 1900* (2003); Nicola Verdon, 'Agricultural labour and the contested nature of women's work in inter-war England and Wales', *Historical J.*, 52 (2009), pp. 109–130; Abigail Woods, 'Rethinking the history of modern agriculture: British Pig production, *c.*1910–1965', *Twentieth-century British History* 23 (2012), pp. 165–91.

[19] Boyd, 'Making meat', pp. 631–64; W. Boyd and M. Watts, 'Agro-industrial just-in-time: The chicken industry and post-war American capitalism', in D. Goodman and M. J. Watts (eds), *Globalising food: Agrarian questions and global restructuring* (1997); A. Godley and B. Williams, 'Democratizing luxury and the contentious "invention of the technological chicken" in Britain', *Business History Rev.*, 83 (2009), pp. 267–90; J. Dixon, *The changing chicken: Chooks, cooks and culinary culture* (2002); Woods, 'Rethinking'.

TABLE 1. Changes in egg production systems: percentage of total egg production

Year	*Cage systems*	*Litter or perchery (barn) systems*	*Free-range*
1946	–	–	98
1951	8	12	80
1956	15	40	45
1963	27	56	17
1966	67	25	8
1976	94	2	4
1980	95	4	1
1986	93	2	5
1990	85	3	12
1993	85	3	12
1995	87	2	11
1996	86	3	11

Source: Farm Animal Welfare Council, *Report on the welfare of laying hens* (1997), available at http://www.fawc.org.uk/reports/layhens/lhgre007.htm, accessed 16 Sept. 2013.

of egg production, we see that there was also, as with pigs, much greater complexity within British agriculture than any simple account of modernization and progressive industrialization might suggest; and, most significantly, failure to address this complexity results in women's invisibility within farming.

The quantitative data describing the participation of women in agriculture in general and poultry in particular is poor, but, as will be demonstrated, there are ample qualitative sources available. Indeed, it has been widely argued that to understand women's position within agriculture, it is essential to use the qualitative material, because, as sociologists as well as historians have argued for the twentieth century, 'one is faced with statistical conventions' within the quantitative sources 'which render women themselves and their work marginal or invisible'.[20] Sources of official advice, books written to advise farmers like Leonard Robinson's seminal *Modern Poultry Husbandry* (first edition, 1948), material from the British Egg Marketing Board (BEMB), government enquiries, general farming publications such as *Farmer's Weekly* and *Farmer and Stockbreeder*, publications produced by poultry organizations and specialist periodical literature such as *Poultry World*, however, all provide a valuable record of British agriculture and agricultural debate on this topic throughout the period. As geographer Brian Ilberry has suggested of the American experience, farm magazines, 'the most important source of information for farmers' in decision making, show how 'the geography

[20] P. O'Hara, 'Out of the shadows: Women on family farms and their contribution to agriculture and rural development', in M. van der Burg and M. Endeveld (eds), *Women on family farms: Gender research, EC policies and new perspectives* (Dutch Network on farm and rural women's studies, Circle for rural European studies, Wageningen Agricultural University, The Netherlands, 1994), p. 50; Verdon, 'Agricultural labour', pp. 110–11.

of agriculture is created, and how patterns of production might be reinforced or altered'.[21] The same is true of the UK. As Nicola Verdon has observed of 'the printed farming press' in the inter-war period, it is 'a rich and varied source … which has yet to be fully exploited by historians'.[22] To do so, Verdon has argued, it is important to recognize the different eddies and currents of strategy, opinion and reaction 'at play' in these publications.[23] As Abigail Woods has demonstrated with reference to pig production, figures, photographs, job adverts, articles, feed and machinery adverts, news, and letters can provide evidence of the ideas, attitudes and arguments within farming in general.[24] Here, qualitative material from the turn of the nineteenth century through to the late 1970s, will be used to demonstrate that the long-standing association between women and poultry keeping was sufficiently strong that their involvement in the industry, at all levels, continued well into the post-war period, if not beyond. As agricultural historians begin to investigate the twentieth century, this demonstrates that it is crucial that they aim to capture not only what Wood has called 'key changes that do not fit into [the] general trajectory', but also the continuities for a full and accurate picture of post-war British agricultural production.[25]

I

'Poultry in general and fowls in particular', as Holderness outlined, 'were traditionally the avocation of the farmer's wife'.[26] In 1904 Sir Walter Gilbey, a practical agriculturalist, horse breeder, and prolific author on art and animal subjects who had published an acclaimed biography of Stubbs, felt that it was perfectly appropriate to preface his *Poultry-keeping on small farms and small holdings* with Stubbs's much older 'Going to market: the farmer's wife and the raven', originally an illustration for Gay's *Fables,* in which we see the farmer's wife taking her eggs to market in panniers (see Figure 1). (In the fable, as the farmer's wife's blind horse, 'Ball', stumbles, so the eggs are broken and all her dreamed-of profits lost. She blames the raven for his ill-omened call, but he blames her for failing to choose her much more sure-footed horse, 'Dun', for the task at hand.)[27]

In Britain throughout the so-called 'historic' period, both poultry keeping and the marketing of eggs were thought of as women's work. This ensures their invisibility in the census record.[28] If we look at the nineteenth-century decennial censuses for example, 'poultry keepers' – alternatively 'poultry farmers, breeders and rearers' – was a category which first appeared in the list of occupations in 1861, but was subsequently moved, with 'poultry feeders and fatteners', into the larger category of 'Dog, bird, animal keeper, dealer', only to be moved again in 1901 to the even more general heading 'Farmers and Graziers', where it broadly

[21] B. W. Ilbery, *Agricultural geography: social and economic analysis* (1985), p. 77.

[22] Nicola Verdon, '"The modern countrywoman": farm women, domesticity and social change in interwar Britain', *History Workshop J.*, 70 (2010), p. 87.

[23] John J. Fry, cited by Verdon, '"Modern countrywoman"', p. 90.

[24] Woods, 'Rethinking', p. 5.

[25] Ibid., p. 2.

[26] Holderness, 'Intensive livestock keeping', p. 490.

[27] Sir Walter Gilbey, *Poultry-keeping on small farms and small holdings* (1904), frontispiece; id., *Life of George Stubbs, R.A.* (1898); *ODNB*, 'Gilbey, Sir Walter, first baronet, (1831–1914). For the picture, R. D. Altick, *Paintings from books: art and literature in Britain, 1760–1900* (1985), p. 386.



FIGURE 1. George Stubbs, 'Going to market: The Farmer's Wife and the Raven' (engraved 1788), reproduced as the frontispiece of Walter Gilbey, *Poultry-keeping on small farms and small holdings* (1904), depicts a farmer's wife travelling to market to sell her eggs, which are carried in panniers. Baskets of broken eggs were commonly used allegorically by artists to represent misfortune, but such images also unwittingly reproduce the commonplace practices of marketing.

remained in 1911. This category, under Agricultural Occupations, also included 'fruit farmers, growers and potato growers, and hop growers'; 'poultry feeders and fatteners' being removed at the same time to 'others engaged in/connected with agriculture' such as peat cutters.[29] Following increased official interest in the trade, poultry farming acquired its own census sub-headings in 1921, though the resulting occupational data remained subsumed within

[28] In 1861 there were 352 egg merchants/dealers, 90 of whom were women, while of 2796 poulterers and gamekeepers 576 were women. 1861 Census for England and Wales, II, Table XVII, and III, Table XIX; General Report, p. 36. But the nineteenth-century census record has been shown to underestimate women's formal and informal participation in the agrarian economy. On this point, see E. Higgs, 'Women, occupations and work in the nineteenth century censuses', *History Workshop, J.* 23 (1987); C. Miller, 'The hidden workforce: female field workers in Gloucestershire, 1870–1901', *Southern Hist.*, 6 (1984); A. Howkins, *Reshaping rural England, A social history, 1850–1925* (1991), and id., 'Labour history and the rural poor', *Rural Hist.* 1 (1990), p. 118; N. Verdon, *Rural women workers in nineteenth-century England: gender, work and wages* (2002).

[29] BPP 1914, 1911 Census of England and Wales, Occupations and Industries, Part I, Table 25.

the broader categories: 'Chicken Farmer', 'Hen farmer', 'Poultry Breeder, Farmer', 'Rearer' within category 011, 'Farmers'; and 'Chicken Fattener, Feeder, Plucker', 'Poultry Attendant', 'Poultry Boy, Feeder, Man, Manager' within 039, 'Other agricultural occupations'.[30] And, because poultry keepers and their like were of little official consequence in Britain until the early twentieth century, and even then remained hidden within the other agricultural employment data in the occupational tables, it remains very hard to determine how many people, and of which sex, worked with poultry. However, by 1900 women's ostensible dominance was beginning to be challenged. As Thirsk put it, 'the work of women was only briefly acknowledged, if not contemptuously dismissed'.[31]

In line with Gilbey's doom-laden frontispiece, the Departmental Committee on Poultry Breeding in Scotland, reporting in 1909, was particularly critical of women's methods of handling poultry and eggs. 'The management of poultry', it observed, 'is generally relegated to the women members of the family, and the methods adopted are, in the majority of cases, very antiquated'.[32] Such a statement unwittingly demonstrates that in Scotland the majority of poultry keepers were women (and though of necessity they had to be skilled, the use of the word 'relegated' shows that they were be perceived as unskilled), that the methods of managing the birds were long established and that the government was attaching a new significance to this element of agricultural production. As this was an industry that sought information at the international level, it is therefore worth noting that much the same opinions held sway in early twentieth-century America and Canada. 'Contemporaries', as Margaret Derry argues with particular reference to chicken breeding in North America:

> linked female control to inferiority, and by extension were inclined to view lack of a specialization emphasis in poultry breeding as a characteristic, or even an outcome, of that linkage. Both women and men were blamed for this situation: women because of the type of bird they preferred, and men because they took no interest in the breeding of their wives' chickens.[33]

It was not universally assumed that women could or should no longer handle poultry in Britain. Edward Brown, as Thirsk observed, appears to have been quite critical of British farmers' disinterest in poultry keeping, something that he attributed to their disregard of women's work in this field as being simply for 'pin money'. He believed, too, that British farmers could therefore learn much from the French, who valued women's handling of the poultry, left them to manage it and profited in so doing.[34] It was also suggested in some quarters that girls might usefully be trained up in the latest methods of poultry keeping. In 1880, for instance, W. B. Tegetmeier had included a section on 'poultry keeping' in his *Manual of domestic economy* (1880), a textbook addressed to 'female students in training institutions, and to the elder classes in girls' schools'.[35] Moreover, Charles Curtis declared in *Estate Management: a*

[30] Census 1921, Classifications of Occupations, 'Classified List', 1924, pp. vi, 14, 15.

[31] Thirsk, *Alternative agriculture*, p. 194.

[32] Departmental Committee on poultry breeding in Scotland, para. 23.

[33] M. E. Derry, *Art and science in breeding: creating better chickens* (2012), p. 161.

[34] Edward Brown's testimony to parliamentary Commissioners on the agricultural depression, cited by Thirsk, *Alternative agriculture*, pp. 194–95.

[35] W. B. Tegetmeier, *Manual of domestic economy: with hints on domestic medicine and surgery* (Eleventh edn, 1880), p. 1; Preface to the tenth edition, pp. 120–24, ch. XIV, pp. 115–27.

practical hand-book for landlords, agents, and pupils (1895) that '[p]oultry thrive better as a rule with women than with men,' and that therefore this 'department, where possible, should be left to the bailiff's wife, dairy-maid, or, failing this, to the bailiff's housekeeper'.[36] But, though the 1909 Committee suggested that 'the servant girl class' ought to be educated in the new methods in order that 'poultry-keeping on the larger farms … be extended and improved', it associated rational, profitable management and good business practice – something that it wanted to encourage – primarily with the 'farmers and crofters themselves', who it believed were indifferent to the possibilities. In other words, until the men could be persuaded that it would pay, the industry would not evolve.[37]

The work done by the Irish Department of Agriculture for the Improvement of the Poultry Industry in Ireland was noted positively by the Committee on Poultry Breeding in Scotland and was drawn on in its research.[38] And, as Joanna Bourke has discussed, much the same argument was made in Ireland. 'Rearing poultry' Bourke observes:

> was one of the most important occupations of the farm woman. Indeed, despite the impassioned debates and controversial decisions concerning the poultry industry from the 1890s, one thing was agreed: for better or (more commonly) for worse, the poultry industry was dominated by women.[39]

This, as Bourke says, was something that eventually those who wanted to intervene in the industry in Ireland had to accommodate via the use of female instructors; though Bourke argues that, as the new methods developed after the First World War involved moving the birds away from the farmhouse, Irish farm women found it increasingly difficult to participate in the management of poultry, it is quite striking that even in 1937 all of the county poultry instructors in the Irish Free State were women.[40]

In fact, the involvement of women in the British poultry industry during the inter-war period, like the trade itself, varied widely by region. Whereas in 1937 all of the county poultry instructors in the north of Scotland, as in the Irish Free State, were women, in the West of Scotland they made up 60 per cent of the instructors, in Wales about 50 per cent and in England 27 per cent.[41] It is nevertheless possible to see women's continuing involvement in the sector throughout this period and, in 1921, reportedly, 33 per cent of The National Utility Poultry Society's members were women.[42] A number of women who were breeding poultry published adverts in the *Feathered World Year Book and Poultry Keeper's Guide for 1937*, edited for over 30 years by Mrs O. Comyns Lewer, while others were listed in its Who's Who section.[43]

[36] Charles E. Curtis, *Estate management: a practical hand-book for landlords, agents, and pupils* (1895), p. 227.

[37] Departmental Committee on poultry breeding in Scotland, para. 23.

[38] Ibid., para. 7.

[39] J. Bourke, 'Women and poultry in Ireland, 1891–1914', *Irish Historical Stud.* 25 (1987), p. 293.

[40] Ibid., pp. 289, 310.

[41] *Feathered world year book and poultry keeper's guide for 1937*, pp. 11–14.

[42] Miss E. G. Maidment, 'Women's sphere in the poultry world', *Papers and communications*, *Trans. First World's Poultry Congress at the Hague-Scheveningen* (2 vols, 1921), I, p. 147.

[43] This was 'a practical poultry journal devoted to "the business side"'; advert for *Feathered Life: the utility poultry journal* in the Official Report of the Second National Poultry conference, Reading, 1907, advertisements, p. xvii.

On 15 November 1938 the *Farmer's Home Supplement* to the *Farmer and Stockbreeder*, which was aimed at 'working farmers' wives and families',[44] included in a photo spread an image of a woman surrounded by young birds entitled: 'Feeding-time on Miss Harrison Bell's Poultry Farm, where 8,000 chicks are being reared'.[45] British women (in some cases, unmarried) who worked commercially with large flocks, were recognized as expert participants within the poultry world at least until the Second World War, and were feted as such by the farming press. Responding to rising demand, women increased their production and sale of eggs. Therefore women's management of the farm's poultry remained economically significant throughout the inter-war period, at least in those regions where there was a market. By the 1930s, Winstanley notes, '14 per cent of all hens in England on holdings of one acre or more were to be found in Lancashire'.[46] In cases of small-scale specialization such as this, farmers' wives continued to be involved in the marketing as well as the production of perishables; eggs along with milk and vegetables were sold off farm carts and at local markets.[47] And, Winstanley suggests, in Britain the success of these small farms involved taking on board many of the new methods that came in the end to be associated solely with large-scale, commercial poultry farming.

It is important to recognize that the circulation of knowledge at this point was undergoing considerable change, in line with the increasing complexity and extent of scientific and technical research associated with agriculture. As Colin Holmes has observed with reference to the Provincial and County Advisory Services, at least half of farmers read general farming publications like *Farmer and Stockbreeder* (which began publication in 1889) and *Farmers Weekly* (first edition June 1934), and most of them the local press. Verdon says that at least a third of the British 'farming population' would have accessed *Farmer and Stockbreeder* in the inter-war period, in part because of its low price. Meanwhile *Farmers Weekly* attracted the notice of the larger tenant farmers most interested in progress.[48] There was also advice on offer from agricultural colleges, expert salesmen, and, as in America, in 1910 in south Wales, a 'poultry demonstration train', in this case run by The Agricultural Organisation Society and Edward Brown's National Poultry Organisation Society.[49] Though, as Holmes says, initially 'little use was made of films, radio, and publications in agricultural advisory work in [pre-war] Britain', the advisory services did engage in 'farm visits', 'lectures', and 'classes', while MAF used 'advisory leaflets and pamphlets'.[50] To this may be added other forms of advice literature such as Robinson's text or *The Feathered World*, and the meetings of poultry societies. Specialist trade journals and magazines continued to expand internationally: by 1978 there were 21 'major farm magazines' relating to 'poultry and poultry products in the USA alone'.[51]

[44] Verdon, '"Modern countrywoman"', p. 88.

[45] Supplement to the *Farmer and Stockbreeder*, 15 Nov. 1938, p. 16.

[46] Winstanley, 'Industrialization and the small farm', p. 180.

[47] Ibid., pp. 175–8.

[48] Colin J. Holmes, 'Science and the farmer: the development of the Agricultural Advisory Service in England and Wales, 1900–1939', *AgHR* 36 (1988), p. 82; Verdon, '"Modern countrywoman"', pp. 88–9.

[49] P. Brassley, 'The professionalisation of British agriculture?', *Rural Hist.* 16 (2005), p. 241; K. J. Cooke, 'From science to practice, or practice to science? Chickens and Eggs in Raymond Pearl's Agricultural Breeding Research, 1907–1916', *Isis*, 88 (1997), p. 86; 'Egg and poultry demonstration train' *J. Board of Agriculture* (Aug. 1910), pp. 394–5.

[50] Holmes, 'Science and the farmer', p. 82.

[51] Brunn and Raitz (1978), cited in Ilbery, *Agricultural geography,* p. 77.

Winstanley argues that dissemination of practical agricultural and scientific information was achieved from the 1890s largely via the local press and courses run by county councils (which in Lancashire were mostly attended by farmers' daughters).[52] Alongside this, as Holmes has argued, by the end of the '1930s, farmers were probably receiving more information from the sales and technical staff of the large feed and fertilizer manufacturers than from the advisory services'.[53]

The impact of this is hard to assess in any direct way. For instance, because the methods of recording egg production have changed, for instance, it is hard to compare performance over time, and the agricultural record is far from clear as it relates to production.[54] What is clear is that the number of eggs produced annually per laying hen rose steadily in Britain from the late nineteenth century. Tegetmeier, a regular correspondent of Charles Darwin's, who employed close scientific observation of the birds and whose influence among poultry keepers extended to the United States until the 1930s, suggested in 1880 that those keeping poultry should expect between 140 to at most 200 eggs to be laid per year, depending on the breed of the bird. The average was 180.[55] Robinson, in *Modern poultry husbandry* (1948), recorded the average as still standing at just over 180 per laying bird in 1937–38. His account of the period then shows that this dipped to around 176 eggs per laying bird in 1939–40, at the outbreak of the Second World War, but rose again to just over 196 per laying bird by 1944–5 as producers sought to address the loss of imported eggs and answer demand for staple foodstuffs.[56]

It is also clear that, from the late nineteenth century through to the inter-war period, a number of economically successful women ran their own concerns – breeding fancy and other birds – worked in colleges and on poultry farms, and participated at the national and international level in the debates then emerging about the best forms of management of poultry. Miss Edwards, for instance, ran a farm at Coaley, Gloucestershire, for 26 years from 1894, exported breeding stock to South Africa and the USA, and established the first school of instruction in poultry keeping for women in England. Another, Mrs Hindson Hall of Cumberland, hatched 4000 chicks in 1920–1, sold £50 11*s*. 6*d*.-worth of eggs wholesale in January 1920, and won Gold and Silver medals and a First Class Certificate in the Harper Adams Large Flock Competition in 1919.[57] Harper Adams already had an established record in poultry education, as a specialist poultry department had been established there in 1909. Subsequently, it set up a National Institute of Poultry Husbandry in 1926 and, as Heather Williams has observed, the first Harper Adams student to be awarded the National Diploma in Poultry Husbandry was Helen Crawford. Indeed, as Williams says, there were a 'large number of women on poultry

[52] Winstanley, 'Industrialization and the small farm', pp. 180, 182–3.

[53] Holmes, 'Science and the farmer', p. 83.

[54] Holderness, 'Intensive livestock keeping', p. 491; Walker, Short and Macleod, 'Limits', p. 522; this was typical for the sector, in this period there was little standardisation in agricultural data collection, or survey methodology. Holmes, 'Science and the farmer', p. 80.

[55] Tegetmeier, *Manual of domestic economy*, pp. 122–3; Gilbey, *Poultry-keeping*, p. iii; M. A. Jull, *Poultry husbandry* (1930), p. 28; K. Sayer, '"Let Nature be your Teacher": W. B. Tegetmeier's distinctive ornithological studies', *Victorian Literature and Culture* 35 (2007), pp. 589–605.

[56] Robinson, *Modern poultry husbandry*, p. 5, Table showing 'Average egg production per bird at the national laying test, 1937–38–1944–45'.

[57] Maidment, 'Women's sphere', pp. 142, 146.

courses' of all types.[58] Whether this suggests that there was plenty of scope for the employment of qualified women in this field, or for the education of women – including farmers' female relatives – in new 'rational' methods, would require further research. However, as we have seen, expert women were certainly involved as county instructors in disseminating the new methods being circulated at this time. Mrs Rawson, for many years the Secretary of the National Utility Poultry Society, who specialized in breeding pedigree birds on her farm in Kent, apparently trained the wives of soldiers blinded during the First World War in poultry management, which was 'of the greatest assistance to the many blinded men who took up poultry keeping'.[59]

Women, including Miss Edwards, were committee members, and both attended and presented papers at the Second National Poultry Conference, held at Reading in 1907. Miss Edwards presented on 'Opportunities for women in poultry breeding', and a Miss Galbraith on 'The keeping of fowls permanently on arable land'.[60] Others went to the First World Poultry Congress in 1925; for instance, Miss E. G. Maidment, who spoke on the diversity and wide-ranging experience of women in the field, and Miss N. H. Bell, who delivered a paper on 'Poultry-keeping as a home-industry for women'.[61] In 1925, Miss Maidment, who had travelled to France, American, Canada, Southern Rhodesia, Britain and Ireland for her research on poultry farms, and who focused in particular on winter egg production, argued that women 'are now keenly alive to the fact that it is an industry which they can handle with success and ease'.[62] She listed the jobs then being taken up by women in the industry as:

(1) Farm Poultry Workers. This is by far the largest side of the poultry industry and almost entirely in the hands of women – and we hope for continued development;
(2) Breeders of pedigree stock and owners of Commercial Egg Farms;
(3) Suburban poultry Keepers;
(4) Egg Laying Competitions;
(5) Heads of Training Colleges;
(6) County Instructors;
(7) Editor of Poultry Paper;
(8) Secretarial Work.[63]

Looking at this evidence for women's participation, it therefore seems that during the inter-war period women were expected to manage and work with poultry in a skilled and knowledgeable way, and that women might not only be recognized for their expertise, but also contributed to the professionalization of this new branch of commercial agriculture through competition, education and publication. Jane Adams has said much the same of women's management of poultry in America: 'as market demand increased, women increased their production of the two agricultural products that in most regions of the country they controlled, first dairy

[58] Heather Williams, *The lure of the land: a century of education at Harper Adams* (2000), p. 103.

[59] Maidment, 'Women's sphere', pp. 147–8.

[60] Miss N. Edwards, 'Opportunities for women in poultry breeding'; Miss Galbraith, 'The keeping of fowls permanently on arable Land', both in E. Brown (eds), *Second National Poultry Conference, Reading, 1907, Official Report* (1907).

[61] Maidment, 'Women's sphere'; Miss N. H. Bell, 'Poultry-keeping as a home-industry for women', both in *Papers and Communications*, *Transactions of the First World's Poultry Congress*, I, pp. 139–150, 156–7.

[62] Maidment, 'Women's sphere', p. 150.

[63] Ibid., p. 150.



FIGURE 2. Feeding fowl at Swanley Horticultural College in Kent, 1933

Reproduced by courtesy of the Museum of Rural Life, University of Reading, P DX281 PH3/410.

(churned into butter) and poultry'.[64] In the 1920s and 1930s, she says, farm women increased their 'flocks into almost entirely market-oriented enterprises'. And, that market, though specialized, rational and focused on production, remained relatively stable until the end of the Second World War.[65] Meanwhile, the photographic evidence from the colleges, such as that at Swanley in Kent, offers additional evidence of the practical training in the management of poultry that was being received by young women by the 1930s as well as of the application of the modern extensive methods and use of single-breed improved single-purpose utility stock set out in key texts like Robinson's (see Figure 2).[66]

[64] J. Adams, '"Modernity" and U.S. farm women's poultry operations: Farm women nourish the industrializing cities, 1880–1940', paper delivered to The Chicken: its biological, social, cultural, and industrial history: from Neolithic middens to McNuggets, 17–19 May 2002, Yale University Program in Agrarian Studies (http://www.dgorton.com/farmsite/chickens_modernity/adams-pg_1.html, accessed on 23 Sept. 2013), p. 6.

[65] Adams, '"Modernity"', p. 12; also see Derry, *Art and Science*, pp. 68–73.

[66] 'Feeding poultry at Swanley Horticultural College in Kent: female student at work', Museum of Rural Life, University of Reading (MERL), P DX281 PH3/408; http://www.rhc.rdg.ac.uk/olib/images/Voysey/livestock/ph14_374.jpg, accessed 12 Aug 2005; and see also Robinson, *Modern poultry husbandry*, pp. 532–38, 113–14.

II

As Thirsk suggested, once the industry began to take off it 'gave scope to some notably successful women'.[67] But, it is unclear to what extent women continued to be involved in it. By the 1930s, the wide range of roles available to anyone seeking employment in what was, by this point, an expanding industry, was reflected in the decennial censuses. In 1931 the Classified List under Order II – Agricultural Occupations – included 'Chicken Farmer', 'Hen Farmer', 'Poultry Breeder, Farmer, Rearer' within 'Farmers'; and 'Poultry Attendant', and 'Poultry Boy, Feeder, Man, Manager' and also 'Poultry Keeper (own account), in 'Other Agricultural Occupations'.[68] But, as with the earlier census data, it remains difficult to determine exactly how many women fell within each occupation. As Verdon has argued with reference to women's employment in agriculture in this period, the conventions of official data collection continued to render women's work all but invisible.[69] In the case of their involvement in poultry production, this would seem particularly so. It is therefore important to use alternative sources to assess the degree, and more importantly perception and nature, of women's continuing involvement in poultry keeping. There were many images in the specialist press of women working within the industry in subsidiary roles, such as egg packing.[70] Walter Brett's *Poultry-keeping to-day: pictured and explained* (1938), a widely-read text aimed at 'the commercial man [and] the "private" man', also includes illustrations that show women as well as men handling chickens skilfully and carrying out a range of poultry operations.[71] To take one: 'Common Causes of Breeding Failures' shows a woman clipping a hen's feathers to aid mating. These were tasks deemed to be necessary within the modern form of the industry, adapted in this case to the small farm, and they show how, in the inter-war period, as Verdon has argued more generally, women's involvement in agriculture at this time was both traditional and new.[72] As Verdon has said:

> poultry work, even as it expanded and training became more formalized, continued to be viewed as a particularly appropriate job for women as they were in possession of a number of essential 'feminine' attributes crucial to success in the industry. These included diligence, a keen sense of observation, and a natural empathy with their charges.[73]

This could be a selling point at the time. The fact that, before the 'conventional' period, despite the emerging technologies and government-sponsored voluntary schemes, eggs were not, or could not be, supplied reliably meant that a company such as A. Wander Ltd., which manufactured Ovaltine in the UK from 1909, took care to secure its fresh egg supply by building its own specialist egg farm in 1929 at Kings Langley, Hertfordshire. A product that was sold on the basis of its health-giving properties, it was aimed at children and nursing mothers as a 'tonic food beverage' and those experiencing 'mental and nervous

[67] Thirsk, *Alternative agriculture*, p. 189.

[68] Classified List, Census, 1931, Classification of Occupations, (1934), p. 14.

[69] Verdon, 'Agricultural labour', pp. 111–15.

[70] E.g. *Farmer and Stockbreeder*, June 1936; 'Workers grading and sorting eggs at the Thames Valley Egg Packing Station', MERL, P FS PH1/K13725, http://www.reading.ac.uk/merl/research/countrysideimages/merl-PFSPH1_K13725.aspx, accessed 5 Nov. 2012; 'British industry shakeup yields fewer flocks but more Birds', *Poultry International*, Jan. 1967, p. 58.

[71] Brett, *Poultry-keeping to-day*, p. x.

[72] Verdon, 'Agricultural labour', pp. 115, 116–17.

[73] Ibid., p. 117.



FIGURE 3. Women tending birds being reared in the innovative 'sun parlours' at the Ovaltine Egg Farm, *c.*1930.

Image courtesy of RES Group Ltd.

exhaustion'.[74] In Britain, Ovaltine was drunk, initially at least, almost exclusively by the middle classes. As the Labour Co-op member for Sheffield Hillsborough, Mr A. V. Alexander, put it in a Commons debate in 1938, 'I was brought up among the working class … They do not have the variety of beverages that the rich have, they do not have Ovaltine at night'.[75]

The Ovaltine Egg Farm provides an excellent example of the complexity of the early British egg industry as it relates to women's employment. Built to an Arts and Crafts design, modern yet evocative of tradition, the farm could accommodate up to 100,000 birds, reared in horse-shoe-shaped 'sun parlours', farmed extensively across the *c.*350-acre site (where barley and milk were also produced).[76] Though Wander Ltd could not have sourced all of the eggs it needed to manufacture Ovaltine in this way, this level of integration and consequently its ability to control the environment in which its ingredients and products were handled was treated as a key selling point in its advertising. Moreover, the company sought prizes for its birds at specialist shows, and made its success in animal husbandry another selling point. The 'modernity' of the farm, the cleanliness, the efficient use of space, the healthfulness of the birds in their 'sun parlours' reared out of doors, cared for by young women, was highlighted within its advertising (see Figure 3).[77] As Verdon has suggested, women were capable of symbolizing

[74] *An introduction to health food and drinks* (1935), Oxford, Bodleian Library, John Johnson Collection of Printed Ephemera, Food 13 (60), p. 35, in The John Johnson Collection: An archive of printed ephemera, http://johnjohnson.chadwyck.co.uk (accessed 25 Oct. 2012).

[75] Hansard, Commons, fifth ser. 335, 3 May 1938, col. 823.

[76] By the 1970s the farm had become a local landmark: Mr. Geoffrey Dodsworth in Hansard, Commons, fifth ser., 917, col. 907, 'I have learned this week that borings are being taken on the line of route 2, the preferred route, across the land known picturesquely as the "Ovaltine Farm", under the instructions of the Eastern Road Construction Unit'.

[77] See also the Ovaltine advert, Supplement to the *Farmer and Stockbreeder,* 28 Oct. 1935, p. 2; photo-spread, Supplement to the *Farmer and Stockbreeder,* 25 Oct. 1938, p. 16.

'a new "modernity" in agricultural work', something that was 'promoted by the rural women's organizations and sections of the national farming press' in the inter-war period.[78] Ovaltine demonstrated that this had commercial value beyond agriculture.

Women continued to be recognized as skilled employees within the specialist industry until the post-war period. In 1948, three of Robinson's 259 plates in *Modern poultry husbandry* showed a woman working alongside a man engaged in the detailed and 'exacting' task of pedigree recording.[79] The book remained a leading text through the 1950s (the fourth edition of 1957 included over 290 figures), and continued to carry those images. In Britain, 'experienced' women were also sought alongside men during the 1950s and 1960s as specialist, that is skilled, labourers on commercial poultry farms, in the 'Situations Vacant' adverts in the *Farmer's Weekly*.[80] And, an article in *Farmer and Stockbreeder* in 1950 records a Miss Roberts as being 'in charge of poultry oversight' on Mr E. E. Pottow's 135-acre farm in Wiltshire, which is said to have 1250 accredited birds.[81] There is also evidence in the farming publications of farming in their own right. A 1955 article in the *Dairy Farmer* by George Henderson, based on a 'tour of Wales and marginal farms', describes Miss Ruth Ruck of Carneddi Nantmor. Henderson was a small farmer who had already gained widespread recognition for his book, *The farming ladder* (1946). Ruth Janette Ruck had been one of his pupils, and subsequently she wrote *Place of stones* (*c.*1961), based on her farming experience at Carneddi, and for which Henderson provided a foreword. In the article she is described as a 'pioneer for making silage', and, though it principally describes her sheep and cattle, it is made clear that 'poultry make a very important contribution to the success of the holding'.[82] This demonstrates the continued economic significance of poultry on mixed farms in the mid-1950s. There is also evidence in the general farming press at this time of women who remained in the specialist poultry business as managers and owners. The 1956 Poultry Section of the *Farmer and Stockbreeder* (which, tellingly, immediately preceded the 'Farmer's Homes' section in the periodical) carried at least two adverts for chicks and pullets produced by established breeders who were women: Miss M. V. Larkworthy of Cooper's Bridge, Liphook, Hants., and Mrs S. Ikin, Druids Heath Farm, Aldridge, Staffs.[83] At this time, women like Marjorie Elaine Foster and Blanche Badock also ran poultry businesses in partnership at this point.[84] Finally, it should be noted that two women – Mrs Sue Richardson of the University of Manchester (dates unknown) and the Polish geneticist-zoologist Laura Kaufman (1889–1972) – were significant contributors to the scientific and economic development of the poultry industry, on the world stage, and women continued to deliver papers at the World Poultry Congress.[85] Though the exact numbers involved are not

[78] Verdon, 'Agricultural labour', p. 130.

[79] Robinson, *Modern poultry husbandry*, p. 262.

[80] E.g. *Farmer's Weekly*, 8 July 1960, p. 14, col. C.

[81] A. K. Speirs Alexander, 'Hens and Cows in Wiltshire', *Farmer and Stockbreeder*, 23 May 1950, p. 1595.

[82] George Henderson, *Dairy Farmer*, 2 (2), (Feb. 1955), p. 23.

[83] Poultry Section, *Farmer and Stockbreeder* (northern edn), 23–4 Oct. 1956, pp. 120–1. Both Miss Larkworthy and Mrs Ikin had also advertised in 1952; Poultry Section, *Farmer and Stockbreeder* (northern edn), 2–3 Dec. 1952, p. 112.

[84] ODNB, 'Foster, Marjorie Elaine (1893–1974). The two women met during the First World War and ran their poultry business in Frimley, Surrey from the end of the war until Blanche Badcock's death in 1957.

[85] E.g., Richardson argued for and achieved the 'The establishment of a world secretariat for the compilation of international egg statistics', First World Egg Marketing Conference, Sydney, 1962; her work was cited in *Poultry World*, 'Review of 1971', 6 Jan. 1972, p. 8, col. B. For more details about both of these women, see the

clear from the statistics, there is therefore ample evidence for women's continued involvement in commercial, 'modern' poultry production in the immediate post-war decade.

III

However, moving into the late 1950s and early 1960s, though women were still assumed by general farming publications like *Farmer and Stockbreeder* to be among those interested and engaged in poultry keeping, the articles in question also assumed that such women were either employees or farmers' wives, not breeders or independent traders.[86] A very specific understanding about women's participation at the level of ownership also began to emerge within the industry: such an involvement was to be seen exclusively at the level of the small-scale, general, or family farm. In Britain, this association had its own consequences for the historical record. We can see an example of this practice by considering the bulletin for producers issued on 3 November 1960 by the British Egg Marketing Board (BEMB). To benefit from the BEMB national mark, the producer had to send their eggs to registered packing stations, clean, fresh, in good condition and conforming to standard weights.[87] The BEMB therefore published regular bulletins for producers to help them achieve this. On this occasion, a two-page spread, published in journals such as *Poultry World*, discussed issues of supply and demand, provided advice and passed on information about BEMB plans and campaigns. The bulletin also carried a profile entitled 'Two producers who look to the future'. These producers were both modernizing and planning ahead, and both were characterized as being involved in commercial egg laying, but they represented, as the piece explained, two 'distinctly different types' of British production. Where 'Mrs G. Buckley [had] 224 birds in deep litter … sending between 90 and 100 dozen eggs to the packing station each week', 'Mr M. F. Benjamin [had] just under 3000 birds' in batteries.[88] The article continued:

> The first thing you see driving up to Mrs. Buckley's front door at Garden Cottage, is the large serviceable poultry house which her husband built in his spare time after they were married last March, using just his ingenuity, a hammer and a saw …
>
> Over at the headquarters of Broad Oak Poultry … Mr Benjamin is working on a rather larger

Note 85 *continued*
World's Poultry Science Association's International Poultry Hall of Fame, 1988, http://www.wpsa.com/organization/iphf_members/1988_iphf.html (accessed 5 Nov. 2012); 'Papers Listed in the Program of the XIth World Poultry Congress', *World's Poultry Science J.*, 14 (1958), pp. 268–77; e.g. Helen Nagra of the State College of Washington, Pullman, USA (Igor L. Kosin, Iwane Sato and Helen Nagra, 'Studies on parthenogenesis in the domestic turkey and chicken'), Ruth Renner of the University of Alberta, Canada (D. R. Clandinin, Ruth Renner and A. R. Roblee, 'Factors affecting the nutritive properties of rapeseed oil meal'), and Elsie H. Dawson of USDA (Elsie H. Dawson and Farth Clark, 'Household use of poultry and eggs in the United States of America').

[86] E.g. see *Farmer and Stockbreeder,* Mar. 1956: image 'Woman collecting eggs in a basket, possibly Mrs York-King, Price Review Tour', MERL, P FS PH1/K58321.

[87] Its aims: 'to sell more eggs; to speed their journey from the farm to the shopping basket; to encourage high quality production', two-page BEMB information spread, July 1957, run in *British Farmer*, *Farmer's Journal*, *Ulster Farmer*, *Poultry Field*, *Farming Leader*, *Poultry World*, *Farmer and Stockbreeder*, *Poultry Farmer*, etc. HAT, OM (S) 08.

[88] HAT, 14480/1, 'Two Producers Look to the Future' 3 Nov. 1960.

> scale … After training at Harper Adams College, he came to Broad Oak to rear broilers, but decided after three years that there was a better future for him in eggs.
>
> When he had broilers he conscripted his wife to do his secretarial work, but now he has been able to retire her![89]

At the time there was still considerable diversity among egg producers in Britain, in terms of both scale and preferred method of production, and, as the BEMB intended, the two producers represent this diversity. The debates that began to arise at the time about production were (and still are) often represented, Watts has observed, as traditional *v.* intensive agriculture.[90] However, articles like this one, published by the BEMB, show the ways in which the emerging technologies and science surrounding poultry and egg production continued to be adopted and adapted in practice: there was no simple binary at work.

As Thirsk argued, in the early days poultry keeping 'was specially suited to the circumstances of small farmers'.[91] This was because, as Miss Maidment had stated in her assessment of it in 1925, it 'requires less capital than any other branch of agriculture and the labour question can be solved by [the women's] own exertions'.[92] As the BEMB article suggested, this largely continued to be true. But, what is striking is that, where Mr Benjamin was represented by the BEMB very much as an individual, a professional and college-trained specialist who ran his growing, large-scale unit full-time (with, the article explains later, the 'help of one boy'), Mrs Buckley was quite clearly presented to the reader as a newly-married wife who turned to her husband for practical help.[93] Any economic autonomy or independence that Mrs Buckley might have had was erased. Not only was she represented as having relied on her husband's 'ingenuity' and manual skill to establish her business, it was not she who sent the eggs to the packing station, but 'they', i.e. Mr and Mrs Buckley, who did so, though it is to be assumed that Mr Buckley was employed full-time elsewhere, given that he did the building work in his 'spare time'. This contrasts quite starkly with Mr Benjamin, who had not only retired his wife from the enterprise, her newly leisured position being treated as a mark of success, but was represented as making all of the business decisions. Aiming at 'a better future for *him* in eggs' [my italics], he was presented as participating in a rational assessment of all of the information to hand; he judged the quality of, and where necessary drew on, external expertise. In a nod to the feed suppliers, the article stated that 'Mr Benjamin is a fair man. [He] stressed the help he had had from the feeding stuffs manufacturers' representatives who, he said, really knew their jobs'.[94] The accompanying plates similarly showed Mr Benjamin in an active and equal discussion about 'his prospects' with Mr J. K. Hay-Reid, the BEMB's Producer Relations Officer inside the converted broiler house, whereas Mrs Buckley was pictured standing alone outside her much smaller if 'serviceable' 'home-made poultry house'.[95] Here, the family farm is defined as small-scale, based on shared labour and adaptation; the larger concern is quite opposite.

[89] Ibid.

[90] Michael J. Watts, 'Afterword', in C. Philo and C. Wilbert (eds), *Animal spaces, beastly places: new geographies of human-animal relations* (2000), p. 301; R. Harrison, *Animal machines: the new factory farming industry* (1964).

[91] Thirsk, *Alternative agriculture*, p. 189.

[92] Maidment, 'Women's sphere', p. 150.

[93] HAT, 14480/1, 3 Nov. 1960.

[94] Ibid.

[95] Ibid.

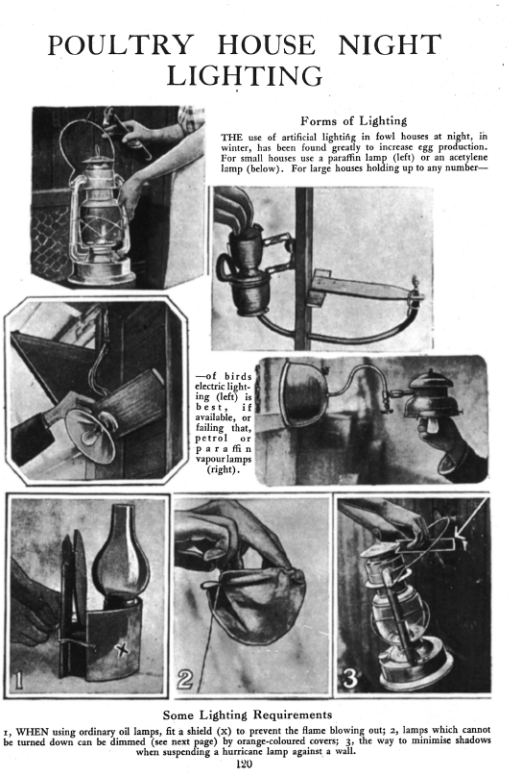


FIGURE 4. 'Poultry house night lighting', from Walter Brett, *Poultry-keeping to-day: pictured and explained* (1938), p. 120.

There was a long-standing association in the literature between women's involvement and adaptation. Pre-war, Brett's *Poultry-keeping to-day*, included the figure 'Poultry house night lighting' which showed women's hands using the older forms of lighting technology and men's hands using the newer forms (see Figure 4). Though women at this point remained very much present, and were still depicted as skilled, they were frequently associated with the more low-road solutions available to the farmer than were the men; the most technologically adept poultry producer and the one with access to scarce or costly resources like electricity was, it was assumed, male.[96] This association between female small-scale production and low-road adaptation, and the expectation that they operated as the farmer's wife, was, in the long run, problematic in an industry that focused on progress, the individual, rapid change and large-scale growth.

IV

During the 1950s and '60s, the industry as a whole was said, by the leading journals of the day, to be undergoing rapid and major structural change, manifested in a mixture of oversight and regulation by the BEMB (from 1957 to 1971), significant individual investment, the benefits of scale that might be gained by co-operation, vertical integration, and the

[96] Brett, *Poultry-keeping to-day*, p. 131.

increasing dominance of national (over regional) markets.[97] A company like Deans Brothers, for example – an egg marketing business that began in Hertfordshire – originated in 1938 as a small family concern, then became Deans Farm Eggs, which grew rapidly. Dalgety (a global concern) bought the company in 1969 as part of a larger process of vertical integration, linked to Sainsbury-Spiller egg packing and production, so that by 1970 Deans had become a participant in the national networks of egg distribution in the UK.[98] Short suggests that by 1950 the family-led, low-input businesses of Sussex had lost ground relative to the national marketplace, as the local environment became less significant with the uptake of artificial methods of management, the knowledge and contact base widened, and the rise of motorized transport, 'freed the producers of poultry and eggs from their nineteenth-century locations'.[99] In a 1954 article on the subject of change in the poultry industry for the *Journal of the Royal Agricultural Society of England*, Rupert Coles, Chief Poultry Advisory Officer of the National Agricultural Advisory Service 1945–1970, predicted 'in the near future a complete alteration from its pre-war prototype of the pattern of British poultry keeping'.[100] Whereas he calculated that 80 per cent of British agricultural holdings had kept poultry in 1948, the majority of them had had fewer than 100 birds. After that date, the number of large flocks and their contribution to the egg supply began to increase.[101] When Coles returned to the subject in the *JRASE* in 1961, he argued that 'trends have continued … Increases in numbers of stock and expansion in size of operation are apparent in all three main sections of the industry, viz. breeding, table poultry and egg production'.[102] In fact, Britain became an exporter of eggs for the first time in 1965.[103] The push in the specialist literature was for reduced labour costs, greater quality control and increased profits.[104] This was a period of rapid consolidation, when agricultural cooperatives were merging and many of the largest farmers, such as John Eastwood – of JB Eastwood Ltd – were looking to establish integrated concerns, emulating developments that had already taken place in the USA. Though there were grave concerns expressed in Britain at the time about overproduction being stimulated by state subsidy, the adoption of high-yielding intensive methods became commonplace among specialist egg producers like Eastwood. When the company sought to establish a two-million-bird egg-laying unit in Lincolnshire, fears were expressed that it would put 50,000 farmers – a seventh of all producers – out of business. As it turned out, planning permission was refused, but Eastwood nonetheless supplied almost a tenth of the domestic market from the 1960s until the business was sold to Imperial Tobacco in 1978 for £40 million.[105]

[97] Co-operation had been proposed as a way forward for the small producer from Brown's time onwards. See Holderness, 'Intensive livestock keeping', p. 490.

[98] Competition Commission, *Clifford Kent Holdings Limited and Deans Food Group Limited; a report on the completed merger of Clifford Kent Holdings Limited, parent company of Stonegate Farmers Limited, and Deans Food Group Limited* (2007), pp. 82–3. Dalgety sold them back into private ownership in 1991.

[99] Short, 'Art and Craft', pp. 29–30.

[100] R. Coles, 'Changes in the pattern of poultry keeping', *JRASE* 115 (1954), p. 69; Coles was elected President of World's Poultry Science Association in 1954. WPA International Poultry Hall of Fame, 1988 (cited above, n. 85).

[101] Coles, 'Changes', p. 70.

[102] R. Coles, 'Current Developments in the Poultry Industry', *JRASE* 122 (1961), p. 39.

[103] *Poultry International*, Jan. 1965, p. 18.

[104] Geoffrey Sykes, *Poultry: a modern agribusiness* (1963), pp. 89–101.

[105] *Poultry International*, July 1964, p. 20; Obituary, Sir John Eastwood, *The Independent,* 4 Oct. 1995.

In the analysis he presented in 1961, Coles held that, in the period 1948–57, producers had sought principally to raise output (in response to declining profits immediately following the War). The consumption of imported eggs fell as a consequence from a third of eggs consumed in 1939 to 2 per cent in 1960. However, at that point, he argued, demand did not increase, and retail prices (and therefore, from 1957, the guaranteed price), fell.[106] While some producers (mainly, he argued, those who engaged in technical innovation) continued to expand, Coles believed that others 'for the first time since 1954, are withdrawing from the business of egg production'.[107] Towards the end of that article he made the following striking observation:

> For the first time since the 1930s the numbers of really small-scale poultry-keepers are declining. These flocks, which until recently, supplied about one-third of the country's eggs, are rarely costed and consist of units of under 100 layers or so. Generally, their continuance depends on the reaction of the farm wife to the income received either from packing station or farm gate. If the amount seems reasonable the flock is continued, whether or not it is making a profit. The fact that the number of such flocks is now definitely declining can be taken to imply that the farm wife is no longer satisfied with the return for her efforts.[108]

Coles assumed that the farmer's wife would never be interested in rational commercial practice. The BEMB, which knew that it had to serve the interests of the full range of its suppliers, was less critical of small producers. In the rest of the article the (commercial) producer was assumed to be male, whether the size of flock was thousands strong, or 'middle-sized', i.e. 'several hundred birds'. And, Coles held out little hope for 'the small or moderate-sized independent egg producer … unless he is highly skilled in stockmanship'. There had been some public 'criticism' of these changes, he noted, but 'the criticism may be wish-fulfilment by disgruntled, traditionally minded poultry-keepers'.[109] In other words, the changes he described were contingent and negotiated. But, this was not something that fitted the story of progress that Coles told, and within this narrative women's participation in modern farming practice began to fall away.

It is from this time that there seems to have been a shift in the specialist literature, whereby women gradually ceased to be recognized as having the authority, capital, expertise or requisite technical skill to participate within the new industry.[110] Just as in the turn-of-the-century literature, their long-standing association with poultry keeping as farmers' wives was read in this context as 'traditional', that is, not only small-scale, but also uninterested in improvement. Women were at this point finally dismissed by the rising industry, and came to be seen as incapable of answering the altered conditions of modern, commercial egg production. This association led to their subsequent invisibility, as the progressive story of the 'conventional' period took hold.

[106] Coles, 'Developments', pp. 39–41, 42–3.
[107] Ibid., p. 43.
[108] Ibid., pp. 46– 47.
[109] Ibid., p. 48.
[110] Or, in Brassley's terms, professionally determining 'uncommon skills'. Brassley, 'Professionalisation?' pp. 238–42, 248–9, 247.

V

As the work of sociologists such as Ruth Gasson in the 1980s demonstrated that at that time, the majority of British farmers' wives were still very much involved in the day-to-day business of farming.[111] They were definitely among the readers of the general farming press, as is clear from the letters pages. Of six letters to the editor in one edition of *British Farmer*, two were from women: a Mrs Somerfield and Mrs Richardson. The latter represented herself as 'Chairman of the Cheshire NFU public relations committee'. Nonetheless the salesmen on the ground assumed that 'The Boss' was the husband.[112] Indeed, the advertising within these publications also suggests that most breeders, feed manufacturers and other specialists selling to British egg producers in the 1960s assumed that their customer was male. A campaign by Crosfields, advertising both its feed and its advisory services in 1961, included a full-page advert in the *Farmer and Stockbreeder*, in which a man who has been looking at his hens, turns to camera at the words: 'Egging them on, Mr Ash?'[113] This was also the case in the specialist trade literature, as indicated by an award-winning campaign run during 1967 in *Poultry International*, on behalf of the Canadian company Shaver, which focused in each instance on what the individual (male) farmer would be able to buy for his family with his enhanced profit. Each farmer clearly has a family, is a father and a husband, but these are not family farms. This campaign was about progress through consumer capital, where the breadwinning farmer, regardless of where he might live, became a purchaser not only of an authenticated commercial breed, within an international marketplace, but also of 'the better things in life', such as (in Ghana) an education for his son, (in Sweden) a yacht for his wife, or (in Ireland, as shown in Figure 5) a (push-)bike for his daughter. (It might be noted that the Irish farmer's son had a *motorcycle*).[114]

Five years later, *Poultry World* (published in the UK and aimed solely at intensive egg and meat producers) carried a full-page advert for Thornbers – 'the international livestock and equipment specialists' – entitled 'How'd you fancy living with one of these birds for the next 18 months?' under a three-quarter-page image of six human female models (one being Raquel Welch) and three hens, one of which – the Thornber 909 – was the product for sale. 'Naturally', the text went on, 'you're spoilt for choice. Well, to save you getting too hot under the collar, Thornbers have … made the choice for you. We've chosen one of the three most popular birds in Britain', and then played extensively with the idiomatic and literal meanings of 'bird' and 'chick' to get its message across.[115] This was clearly an advert aimed quite literally, if with tongue-in-cheek rhetoric, at egg *men*, in a publication with an implied readership that was, without question, male.

By the late 1960s and early 1970s, when these campaigns ran, specialist poultry farming had

[111] See R. Gasson, 'Roles of farm women in England,' *Sociologia Ruralis* 20 (1980), pp. 165–79; and ead., 'Farm wives: their contribution to the farm business', *J. Agricultural Economics* 43 (1992), pp. 74–87.

[112] Mrs Somerfield, Letters to the Editor, *British Farmer, J. National Farmers' Union*, 5 Apr. 1969, p. 74.

[113] The *Farmer and Stockbreeder*, 4 July 1961, p. 52.

[114] Kingsley Smith, 'The history of Shaver Breeding Farms' (2010) http://www.hendrix-genetics.com/en/About-Us/History/Institut Selection Animal BV ISA/~/media/Files/ISA/History/History of Shaver Breeding Farms Ltd Canada.ashx accessed 19 Apr. 2013, pp. 55–7. For more on the history of Shaver, see Derry, *Art and Science*, pp. 189–97.



FIGURE 5. Shaver advert, 'A bird that came from Shaver put an Irish lass on wheels', 1967.

Reproduced by courtesy of *Poultry International* and Wattagnet.com.

come to be linked to the continuing attempts to raise yields supported by commentators such as Coles. That is, linked to the large-scale, profitable management of the birds, and therefore also with what was perceived to be the more progressive (the technological, mechanized and intensive) element of the agricultural sector as a whole.[116] A report for the Agricultural Economics Research Institute detailed that production had risen to nearly 202 eggs per annum per bird by 1965–66, while the DEFRA records for 1973–2003 demonstrate that this continued to rise steadily and had reached 290 by 2000.[117] Adverts like those run by Shaver, and its competitors such as Thornbers and KimberCHIKS, (in which the egg producer is addressed directly in the text, under photographs of a typical poultry-man) focused on the results of their research and development, and the qualities most likely to produce profitable results: 'more large eggs', thick shells that resulted in fewer breakages, a lengthier laying season, and more efficient feed conversion.[118] Structured on a business footing and therefore with money to spend on new technologies such as 'stimulighting' and other environmental controls, it was

[115] Thornbers advert, *Poultry World*, 6 Jan. 1972, p. 4.

[116] See David Goodman, Bernardo Sorj and John Wilkinson, *From farming to biotechnology,* for the characteristics of agricultural production at this time.

[117] K. E. Hunt and K. R. Clark, *Poultry and eggs in Britain, 1966–1967* (1967), p. 55; Table showing 'Utilisation of total home production of shell eggs – United Kingdom; Hen Eggs 1973 to 2003', in DEFRA, *Agriculture in the United Kingdom* (2004), Table 6.19 available online at http://archive.defra.gov.uk/evidence/economics/foodfarm/reports/ (accessed 23 Sept. 2013).

[118] KimberCHIKS advert, *Poultry International,* Jan 1967, p. 33.

the large-scale commercial British egg units that were targeted by feed manufacturers, such as those entertained by Mr Benjamin, and by international breeders like Shaver, KimberCHIKS and Thornbers.[119]

Derry has argued that Kimber and other breeders who came to prominence in early twentieth-century North America preferred large-scale units and single-purpose breeds – especially, at that point, the Leghorn, in order to cash in on the profit to be made from eggs – whereas in both America and Canada the press assumed women preferred dual-purpose birds and small-scale units and that women were uninterested in the finer points of quality and breeding. Later, post-war, she argues that when meat production took off, though North American women still worked with poultry, few led economically significant specialized poultry concerns.[120] This pattern is not quite born out in Britain, as will be seen, but if that was the assumption, based on the local US market, made by Kimber, then it goes some way to explaining their targeting of the male producer. Strikingly there is one advert showing a woman in *Poultry International*, and that is of a woman who has made a decision to buy the product in question (a Chore Time feeding system, from Belgium) with her husband, i.e. in a different context for producers of agricultural machinery.[121]

Post-war, Adams suggests with reference to the USA, as poultry became one of the first agricultural products to increase in scale and, in effect, move onto an industrialized footing, some women 'entered the wage labor force, while others became assistants to their husband, the farmer'.[122] Was this also the case in the UK? The official data remains unhelpful here. The census classifications changed in 1951, to some extent reflecting the altered conditions of agriculture post-war, so that the heading 'Farmers' in 1931 was expanded to 'Farmers, Farm Managers'. However, all those working within the poultry business were enumerated as before, with the addition of 'Chick-sexer', and 'Poultry Expert' under 'Other Occupations Ancillary to Agriculture'. In 1961, the broader classification was expanded again, this time to 'Farmers, Farm Managers, Market Gardeners', and as the percentage of all those employed in agriculture contracted, fishing was added. In 1971, category 002 'Farmers, farm managers, market gardeners' also included 'Persons managing (either on their own behalf or for an employer) farm or market gardens … [or] keeping bees or poultry'. Within category 003, 'Agricultural Workers N. E. C. [not elsewhere classified]' were 'Persons tending crops or animals, insects, etc. (including those in zoos, circuses, research establishments, etc.)'. The specific tasks, such as 'chick-sexer', 'egger and washer' or 'poultry man,' were listed in the index, but were returned within the broader agricultural categories.[123] Moreover, in Britain and Europe, as Patricia O'Hara has argued, official 'statistics … continue to ignore women's involvement in subsistence production, in the informal sector, and their domestic and volunteer work'.[124] It therefore

[119] Coles, 'Developments', p. 43. For the history of artificial lighting regimes in the UK see K. Sayer, 'Battery Birds, "Stimulighting" and "Twilighting": the ecology of standardised poultry technology', *Hist. of Technology* 28 (2008), pp. 149–68.

[120] Derry, *Art and Science*, pp. 159–62, 173–4, 207–8.

[121] Core Time advert, *Poultry International,* Aug. 1972, p. 105.

[122] Adams, '"Modernity"', p. 13; she notes that this varied by region, n. 6.

[123] Census of 1951, Classification of occupations, (1956), Classified List, p. 14; Census 1961, England and Wales, Occupation Tables (1966), Table 1, Occupation by Status; Classification of Occupations, 1970 (1970), Appendix D, Occupation Unit Groups (with Short Descriptions).

[124] O'Hara, 'Out of the shadows', p. 61.

remains necessary to draw on other source material to assess the level of women's involvement within agriculture as a whole.

VI

As Brassley *et al.* have discussed, following their analysis of the Farm Management Survey and interviews with farmers, the late 1970s were often the point at which farmers felt that they either had to put their farm onto a large-scale commercial footing or abandon poultry production altogether, as they increasingly found that it was only possible to modernize the production of a single commodity given the capital investment required.[125] We might therefore expect women to vanish from the picture at this point. And, looking at the situations vacant pages, the positions advertised by the specialist press (for 'careers in poultry') were by the mid-1970s already aimed predominantly at men. Nevertheless, in 1973, *Poultry World* carried a job advert for a 'conscientious poultry man *and his wife* … for work with broiler breeders'.[126] The previous year *Poultry World* had reported on three women – Mrs K. Jarvis, Miss G. Seals, Miss D. Willis – receiving long-service awards (five years) from the then managing director at Shaver, Mr Jim Ingram.[127] So, by the mid-1970s, after the BEMB had closed and the point at which British farmers often seemed to find eggs in particular harder and harder to market, women had still not quite vanished from sight within the poultry industry as a whole, nor had shared family labour. Further research would be needed to establish this for certain, in particular interviews with those who had hands-on experience of the industry, which as Derry has established, are essential for understanding the poultry industry at this point in its development.[128]

Despite this continued presence at all levels of the industry, however, the management and ownership of commercial egg production came to be treated almost entirely as masculine pursuits.[129] In W. P. Blount's *Intensive livestock farming* (1968), in a discussion about the value and wages of well-trained 'stockmen', only the wages for male agricultural labourers are given.[130] Women came to be seen more often within the specialist press solely as undertaking the low-paid, unskilled work (such as grading and egg packing) associated with the mass production of eggs produced via battery and other intensive systems.[131] In a 1972 *Poultry World* news item about the introduction of metric egg grades, as British packers and producers geared up for entry to the EEC, we therefore see a woman working at a grading machine surrounded

[125] Paul Brassley, 'Technical change in agriculture, 1935–85: the evidence from southwest England', paper delivered to BAHS Spring Conference, Apr. 2013.

[126] Situations vacant, *Poultry World*, 20/27 Dec. 1973, p. 31, [italics added].

[127] *Poultry World*, 6 Jan. 1972, p. 17 col. A; note that their jobs were not specified.

[128] Derry, *Art*, p. 9

[129] For a related discussion on the depiction of women in specialist farming publications after 1976, see Carol Morris and Nick Evans, 'Cheesemakers are always women: gendered representations of farm life in the agricultural press', *Gender, place and culture* 8 (2001), pp. 375–90.

[130] W. P. Blount, 'Statistics: Stock and stockmen: agricultural statistics related to intensive livestock farming', in Blount (ed.), *Intensive livestock farming* (1968), p. 357.

[131] HAT 25934, BEMB, '(2) How an egg earns its lion stamp', A special series of advertisements for the *Grocer*, final proofs 8 Nov. 1963, for publication Nov. 1963 to Jan. 1964; advert for Keenco 'A'-Line Automatic Cage System, *Poultry International*, May 1967, p. 10; *Poultry World,* 6 Jan. 1972, pp. 12, 33.

by managers from the manufacturers Ben Nevis. 'Ben Nevis directors with Bernard Mallett, chief executive of the Eggs Authority (right), and Mr M. Bartlett, manager Sainsbury Spillers' Kenninghall packing station (second right), watch a case of Standards being fed onto the company's 2/20 machine'; the woman's name is not given, nor the fact that it is she who is feeding the eggs 'onto the … machine'.[132] The same is also true of the specialist literature at this time. Take here, as an example, Figure 36 in Blount's study, entitled 'A 4½ cwt. Electrically operated feed truck which travels down a 100 ft length of Grossmith static cages, filling three feed troughs on the way down and the others on the return journey'.[133] This depicts a woman (with her back to the camera) at work within a battery system. In instances such as this, all human labour (male or female) entirely disappears, while the technology is writ large, and the hand subsumed within the mechanism of production. This is not to say that women had left poultry farming, rather that the structures and focus of the industry makes it difficult to track them within its literature.

By the mid-1970s, there was one visual record in which women persisted, and that was in the merchandising and consumption of the product. This is important, because, as Pamela Sharpe has established, 'within the broad framework of the economic past' women are clearly economically significant as consumers, not just potentially as producers.[134] The industry was well aware of this. In fact, in 1973, when the British industry was still adjusting to the recent closure of the BEMB, *Poultry International* ran a special edition on egg marketing, which stated that 'the industry must learn to merchandise eggs, a term which covers all aspects of packaging and promotion … and being prepared to employ every available gimmick that will tempt the housewife to leave the supermarket with more eggs in her shopping basket than she originally intended to buy'.[135] This was key at a time when 'the "free" market was [proving] a difficult animal to handle'.[136] That merchandizing more often than not involved using a romanticized image of the farmer's wife keeping a mixture of birds in the old 'antiquated' way.[137] Picking up on established and commonplace associations of small-scale production and the convention of women as poultry keepers, this image remained profitable and effective through its creation of a message of tradition, reliability, authenticity and Englishness: trust. Trust had also been at the heart of the BEMB's campaigns; that is, both at the heart of the campaigns directed at the consumer and those directed at the producer, so that the consumer's requirements for high-quality fresh eggs could be met year-round.[138]

By 1960, when the BEMB published its article on Mrs Buckley and Mr Benjamin, the idea of woman as 'expert' on poultry and eggs had already largely metamorphosed into the figure of 'the housewife', and saleswoman because, 'after all, it's women who do all the buying!'[139] From

[132] 'April start for change to metric egg grades?' *Poultry World*, 6 Jan. 1972, p. 12.

[133] M. J. Gaisford, 'Battery cage egg production', in Blount (ed.), *Intensive livestock farming*, p. 212.

[134] P. Sharpe, 'Continuity and change: Women's history and economic history in Britain', *EcHR* 48 (1995), p. 364.

[135] 'Nest Egg', *Poultry World*, 6 Jan. 1972, p. 12, col. D; *Poultry International,* Mar. 1973, p. 6.

[136] 'Mixed Year for eggmen but better returns for 1972', *Poultry World*, 6 Jan. 1972, p. 18.

[137] E.g. a woman holding a basketful of eggs on a Deans Farm box, MERL, 76/216/1–6.

[138] Sayer, 'Battery Birds,' pp. 157–8.

[139] HAT, 23160/1, BEMB, 2 page advertisement for 'Self service and supermarket' Feb. 1963. In this particular advert they represent women as marketing experts: the BEMB made a splash of hiring 13 women '(and only one man!)' as their regional sales promotion team, in an information ad for the trade in 1963.

the marketer's point of view it was materially more effective to concentrate on the (house-) wife who would buy the eggs, than on the (farmer's) wife who produced them. And, within the British industry, the long-standing correlation between the farmer's wife, poultry keeping and the small-scale, or family-run, farm, even if described to some extent as 'forward-looking' and 'commercial' as in the BEMB article, nonetheless linked their work intrinsically with what came to be seen post war as 'old-fashioned' mixed farming. Women's continuing and very real association with the smaller-scale unit, the family farm and even with adapted modern poultry keeping was, in this context, damning. Where, in Thirsk's words, 'poultry were foreseen as having a bright future on a mixed farm' in the 1880s, following the 1947 Agriculture Act, the family farm was itself coming to be seen as obsolete in texts such as Viscount Astor and Seebohm Rowntree's key *Mixed farming and muddled thinking*.[140] Thus, notwithstanding their productive and clearly expert participation, women like Mrs Buckley, who managed poultry concerns on the smaller scale, were increasingly dismissed both at the level of their involvement as decision-makers on the farm when written up by the British industry, and became less visible within the international commercial press (in an industry that had always drawn from the world-wide circulation of ideas), because small-scale, mixed, and family farms were themselves dismissed.[141]

The BEMB had from its beginnings funded research.[142] It also had its own statistics division, which carried out a producer survey for the first time in 1961.[143] At that point the average flock size was 200 birds, but 10 per cent of eggs were supplied by producers with laying flocks of at least 2000 birds.[144] Blount, using BEMB data, subsequently reported in 1968 that roughly:

> 3½ per cent of all households in Great Britain keep poultry, two-thirds of which are not covered by the Ministry's data relating to holdings over 1 acre. Between them these small holders own an estimated 11½ million layers [contrasted with 44.3 million others which are recorded in the June census] … Although two-thirds of all producers have flocks of less than 200 birds, these only produce 9 per cent of all eggs.[145]

The large producers within the industry were increasingly hostile to the small producers. During the 1971 fowl pest epidemic, they accused them of failing to vaccinate against the disease; small flocks were seen as a 'threat'[146] by the big producers, who were coming to determine how the industry overall was perceived. Given that this data was focused on the extent, productiveness and size of the flocks, not the details of their human managers, it would take further work to untangle the full extent of women's involvement in poultry keeping during this period, especially their continued participation in managing egg production on

[140] Thirsk, *Alternative agriculture*, p. 190; Viscount Astor and B. Seebohm Rowntree, *Mixed farming and muddled thinking: an analysis of current agricultural policy*, ([1945]), pp. 81–2.

[141] Sayer, 'Battery Birds,' p. 150.

[142] E.g., 'Egg cleaning methods and their effect on quality', a paper delivered by N. R. Knowles, British Egg Marketing Board, London, England, to the Fifth Section, Economics and Marketing, of the XIth World's Poultry Congress, 1958, and listed in the conference programme, p. 277. In 1967 the BEMB funded a two-year postdoctoral fellowship undertaken by Jack Pearce into 'nutritional biochemistry in poultry'. *British Poultry Science* 43 (2002), p. 641.

[143] HAT, OM (L) 21, Extract of BEMB Annual Report and Accounts, published *British Farmer*, Jan. 1962.

[144] HAT OM (L), 21, BEMB information advert, *Financial Times Supplement*, Dec. 1961.

[145] Blount, 'Statistics', p. 347.

[146] 'Review of 1971', *Poultry World*, 6 Jan. 1972, p. 8.

small, family and general farms, which by their very nature were less noteworthy and therefore less recorded than the large, specialist units.[147] But, turning this around, or shifting the focus, the majority ('two-thirds') of poultry keepers in 1968 were still handling small flocks of under 200 birds, and it is likely that many of these smaller-scale concerns were managed by women independently, or that the flocks were part of larger, general, family concerns.

VII

Poultry keeping, egg collecting and marketing were predominantly female occupations, to at least the end of the nineteenth century in Britain, and considered low status and unprofitable in part because of that association. As commentators and officials sought to stimulate production, get British farmers to answer British consumer demand for eggs and thereby reduce imports, so the link between women and poultry keeping however appears to have continued, but now on a business footing. In Britain, a number of women engaged profitably with poultry keeping as it developed through the 1920s, 1930s and 1940s; as expert commentators, as instructors and advisors, as egg producers, as breeders, and in the marketplace. At both the regional and national level, women were involved with the emerging 'modern' form of the trade. In each instance, the new methods of production were adopted and adapted to local conditions and farm resources. Women's participation continued on into the 1950s and 1960s. However, post-war, a shift took place whereby, as production intensified in response to the 1947 Agriculture Act, so women's long-standing association with poultry as farmers' wives, on general and family farms, meant that they dropped out of the industry's progressive picture. Despite their work with the new systems they were once again, as in Edward Brown's day, associated with antiquated methods, and seen as uninterested in profit.

By looking at the evidence of women's participation in poultry keeping, in a policy and business context that favoured the development of large-scale, specialist operations, the evidence from the specialist literature and commercial trade press of the 1960s suggests that, on the larger, commercial farms, as egg production came to be modernized and professionalized, so the mixed or general farm, the small-scale (indeed, even middle-sized) farm, and the family farm all fell out of favour, and therefore out of sight. At this point, the new large-scale, specialist poultry concerns became the focus of attention, paralleled by a story of modernity and progress. The visual record for this period at the national and international level shows that trade advertisers, themselves drawing on the dominant narrative and, in the case of international operations like Kimber, assuming that women were not interested in specialization, targeted men when selling birds, feed and equipment to the industry. There was no expectation that a woman would manage or own such a unit; meanwhile those selling the industry's products constructed their consumer as 'the housewife'. But, these accounts do reveal British women working within the specialized model of poultry farming as labourers:

[147] It should be noted that the poultry industry remains a significant employer in the UK. In 2006 it was estimated that 10,000 people were employed in egg production and 13,000 in related industries including poultry meat. 'Facts and Figures: BEIS Facts and Figures', Egg Industry Council http://www.britisheggindustrycouncil.com/WhatistheBEIC/FactsandFigures.asp (accessed 3 Sept. 2008).

delivering carefully-balanced bulk-bought feeds, in environmentally-controlled intensive systems; or handling, sorting and packing eggs; and working within established methods and procedures with standardized birds.[148] This seems contradictory until we consider that it may be possible to extend to agriculture Ellen Jordan's classic argument that in those industries which had previously employed women, 'either as independent producers … or as part of a proto-industrial family' employers accepted that such manufacture, or parts of it, were "women's work" and therefore included women in the factory workforce'.[149] This goes part way to explaining women's continued presence as employees in the new industry; the growth of the specialized, large-scale commercial units continued to offer women opportunities for employment in a sector that had always been associated with women's work.

Beyond this, though, change within poultry production was also uneven, even in this, one of the most technologically advanced parts of the sector, and it appears that women were also involved as poultry keepers, that is, as producers, especially on smaller-scale and within family-run enterprises. The exact nature and extent of this requires further investigation, because women's involvement in agriculture, at all levels, but especially on family farms, was largely hidden. It is as true in Britain as it is in the rest of Europe, and of the historical as it is of the contemporary, that the 'gaps in our knowledge [of women's participation in family farming] are immense – ranging from conventions in official statistics that obscure women's work in production and their labour force identity to ignorance of household decision-making'.[150] In terms of the historical record, the only way to address this is through qualitative research and, latterly, oral testimony, while to focus simply on the large-scale intensive producer, and adhere to the narrative of change laid down by the industry, is also to obscure the continuities that have existed and still exist within that industry. By implying that women were gone, the new poultry industry (large-scale managerial farming) cemented the myth of progress in the face of continuing small-scale and family-farm production. However, looking for the women reveals that the complexities already being observed by historians with reference to inter-war British agriculture, such as the adaptability of small, mixed and family farming to 'modern' methods, continue to be applicable in the post-war period, at least until Britain joined the EEC, and perhaps beyond.

[148] See D. Fitzgerald, *Every farm a factory*: *the industrial ideal in American agriculture* (2003) for a related discussion of farm labour in the USA.

[149] E. Jordan, 'The exclusion of women from industry in nineteenth-century Britain', *Comparative Studies in Society and History* 31 (1989), p. 296.

[150] 'Out of the shadows', pp. 50–1, 61.

Was Spain different? Agricultural change in Spain in a southern European perspective, 1961 to 1985*

by Ernesto Clar

Abstract

'Spain is different' has often been a way of explaining some significant and distinctive Spanish characteristics. This expression can also be applied to the agrarian changes that took place in Spain between 1960 and 1985. While the general Western trend was for cultivated acreage to decline, the Spanish countryside experienced a great expansion. This paper identifies other differences between the Spanish and the more general southern European experience. These became evident in the 25 years before Spain joined the European Economic Community (EEC) in 1986 and have marked the path Spanish agriculture has taken ever since. Throughout this process, some of the distinctive features established under the Franco dictatorship continued to reinforce the peculiarities of the agrarian transformation in Spain. Here we focus on all those changes in an endeavour to assess whether agricultural change in Spain took a different course to that of other European countries.

The English expression, 'Spain is different', became very popular in Spain in the 1960s as a way of explaining why a western European country undergoing strong economic development continued to display a range of distinctive social characteristics (different meal times, the siesta and so on) which set it apart from the European mainstream. However, the route taken by Spanish economic growth was similar to that of most Western countries, including that of their agrarian sectors. Rural exodus, extensive mechanization and the impact of high-yielding crops, among other factors, shaped not only Spanish agriculture, but also the agriculture of many other countries in Europe and elsewhere.

However, Spanish agrarian development differs in a number of respects from the general European trend. These distinctions emerged in the 25 years before Spain joined the European Economic Community (EEC) in 1986 and have marked the path Spanish agriculture has taken ever since. Moreover, some of those peculiarities were totally at odds with the direction the Spanish agrarian sector had taken before that time and were without parallel in otherwise similar southern European countries such as Italy, Portugal and Greece.

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TABLE 1. Southern Europe: area harvested in production crops, 1961–2 to 1984–5 (million ha)

	1961–2	*1984–5*	*% change*
France	13.716	14.181	3
Greece	2.677	2.449	–9
Italy	12.619	9.439	–25
Portugal	3.327	2.083	–37
Spain	14.140	16.083	14
Europe total	269.199	263.511	–2

Source: FAO statistical database.

One of the main differentiating aspects of Spanish agrarian development between 1960 and 1985 was a great expansion in acreage, which was exceptional, not only in the southern European context, but also in that of the entire continent. After the Second World War, acreage declined in most of the more developed countries of Europe and North America as a result of 'emigration from the countryside, losses to urbanization and policies designed to curb overproduction by setting aside land'.[1] Between the early 1960s and 1985 the acreage under arable and tree crops (essentially olives and grapes) shrank both in Europe as a whole (including the USSR) and in the countries in the south of the continent. However, from 1961 onwards, the acreage under arable and tree crops in Spain saw constant growth, mainly as the result of a huge reduction in fallow. Spanish cropland grew by nearly 1.8 million hectares in less than 25 years. If we compare the acreage figures for Spain with those for Italy, the largest country in southern Europe, the difference is more marked. The area harvested in Spain rose by 14 per cent, whereas in Italy it fell by 25 per cent (Table 1).

Behind this important difference in the workings of the Spanish agrarian system lies a series of significant reforms made to its economic structure, which led to substantial alterations in acreage, production and food consumption in Spain after 1960. Many of those changes are striking owing to their magnitude when compared to their nearest neighbours, which raises the question of whether the events taking place in the Spanish agrarian sector between 1960 and 1985 really were different.

After a detailed examination of the components of the great Spanish acreage expansion, we will focus on the most distinctive changes in Spanish agriculture between 1961 and 1985 (the year before Spain joined the EEC) by comparing its statistics with those of three other southern European countries (Greece, Italy and Portugal) and France. This will be done by using the data available in the FAO statistical database online (FAOSTAT).[2] We will also provide data from a range of sources when referring to Spain alone. Our aim is to assess the main changes in the Spanish agrarian sector between 1961 and 1985 in a southern European context, and to offer a number of explanations for them. Finally, we will assess the degree to which these changes continue to the present day.

[1] G. Federico, *Feeding the world. An economic history of agriculture, 1800–2000* (2005), p. 38.

[2] http://faostat.fao.org.

TABLE 2. Southern Europe: acreage change in cereals and pulses, 1961–2 to 1984–5 (1000 ha of area harvested)

	Cereals			*Pulses*		
	1961–2	*1984–5*	*% change*	*1961–2*	*1984–5*	*% change*
France	9.274	9.712	5	148	242	63
Greece	1.773	1.489	–16	260	46	–82
Italy	6.437	4.948	–23	1.071	202	–81
Portugal	1.890	972	–49	577	256	–56
Spain	7.091	7.590	7	1.112	418	–62

Source: Calculated from FAO statistical database.

I

To understand what lay behind the growth of cultivated acreage experienced by Spain, a detailed study of the composition of the arable land of the southern European countries is required. Table 2 reveals two main crops, cereals and pulses, as being responsible for the decline in acreage in Italy and Portugal. In France both cereals and pulses increased in acreage, while other crops, particularly starchy roots, tubers and fruits, experienced a more profound decline. Spain presents a mixed situation, with a significant fall in pulses, but with an increase in acreage under cereal crops of close to half a million hectares. This is more striking, given that it had decreased by more than a million hectares between 1935 (just before the Civil War) and 1960.

Apart from a greater increase in cereals, Spain shows another difference: the expansion of the area devoted to oil crops. While Spanish acreage expansion in oil crops and oil cakes for the 1961–85 period exceeds that of France by more than half a million ha (1,684,000 ha versus 1,138,000 ha), the difference compared to Italy is above 1.5 million ha. Consequently, only two types of crops (cereals and oil crops) explain the increase in acreage in Spain between 1961 and 1985. But when we break this down to the level of specific crops, we can observe that there were essentially two crops that determined the dynamics of the sector.

The first and more important of these was barley. At the beginning of the 1960s most Spanish grain land was devoted to wheat; in terms of acreage, it accounted for 56 per cent of all cereals (34 per cent of all arable and tree crops), with an acreage that was more than 2.5 times greater than that devoted to barley. Yet, less than 25 years later, the area under barley far exceeded that of wheat with an impressive expansion of more than 2.5 million ha, accounting for 56 per cent of all cereals (32 per cent of all arable and tree crops), as shown in Table 3.

This remarkable expansion in Spanish barley acreage is even more unusual if we consider the improvement in wheat yields. Starting with a yield of 0.0884 Tonnes/ha, which was even below that of barley, and an area harvested of 3,890,000 hectares in 1961, wheat productivity had overtaken that of barley by 1985 (2.608 Tonnes/ha v. 2.519) but 1.8 million hectares less land was devoted to wheat. Thus, wheat showed the intensive growth frequently associated with the agrarian period that began after the Second World War, while barley combined this with an

TABLE 3. Spain: area harvested, wheat, barley and other cereals, 1961–2 and 1984–5 (thousand ha)

	1961–2		*1984–5*		*% change, 1961–2 to 1984–5*
	ha	*%*	*ha*	*%*	
Wheat	4.077	57	2.043	27	–50
Barley	1.450	20	4.134	54	185
Other cereals[a]	1.564	22	1.416	19	–9
Total	7.091	100	7.593	100	7

Note: [a] other cereals include rice (milled equivalent), rye, maize, oats, millet, sorghum and other minor cereals not specified.
Source: Calculated from FAO statistical database.

TABLE 4. Southern Europe: composition of cereal output (per cent), 1961–62 and 1984–85 by volume

	Wheat			*Barley*			*Maize*		
	1961	*1985*	*% change*	*1961*	*1985*	*% change*	*1961*	*1985*	*% change*
France	51.3	54.3	3	24.8	20.2	–5	9.5	20.1	11
Greece	68.9	40.5	–28	10.0	13.1	3	10.3	42.8	33
Italy	63.8	49.7	–14	2.0	8.7	7	25.8	35.0	9
Portugal	30.2	29.8	0	3.7	4.9	1	44.4	41.3	–3
Spain	50.0	25.4	–25	23.7	44.8	21	12.0	13.3	1

Source: calculated from FAO statistical database.

outstanding growth in the area cultivated, which had even more impact on the expansion of output than the increase in land productivity. If the barley yield is held constant, the growth in hectares explains 44.6 per cent of the expansion in output between 1961 and 1985, whereas the improvement in land productivity (holding the 1961 extent constant) only accounts for 25.1 per cent of the total barley produced in Spain during the same period.

In terms of output, the leading role of barley marks another difference between Spain and the other four countries. A closer look at the composition of cereal output reveals the peculiarity of the Spanish case. At the beginning of the 1960s the composition of the grain grown in Spain was quite similar to that in France, with wheat to the fore and barley in second place, more than 25 per cent behind (Table 4). By the mid–1980s barley had become the leading cereal in Spain with 44.8 per cent of production by weight, a situation not seen in any other southern European country. Moreover, the impressive increase in barley output (433 per cent) accounted for 56 per cent of all of Spain's growth in grain production during the 1961–85 period. Spain's cereal expansion was the largest (183 per cent) of all five countries. In fact, barley itself accounted for a quarter of the entire increase in arable and tree crop output in Spain between those two dates.

No other arable or tree crop could match the increase in barley acreage and output in Spain. For example, the noteworthy expansion in the area under maize was only around 80,000 ha.

TABLE 5. Southern Europe: sunflower seed, by area harvested, 1961–85 (ha)

	1961	*1985*	*% change*
France	7,144	638,500	8,831
Greece	6,994	57,770	726
Italy	3,170	97,474	2,975
Portugal	2,098[a]	39,620	1,788
Spain	3,300	988,575	29,856

Note: [a] Data for 1971. FAOSTAT does not record data for earlier years.
Source: calculated from FAO statistical database.

Based on irrigation and hybrid varieties, the maize yield grew at a higher rate than that of barley, nearly matching the figures for France (and not far off those for Italy) in 1985. Such intensive growth produced a 220 per cent increase in output, little more than half the rate observed for Spanish barley. As we explain later, environmental conditions were influential in the different experiences of barley and maize in Spain. Such conditions were behind the second big Spanish crop to experience an acreage increase: sunflower seed. As mentioned, oil crops are the second major distinctive feature of Spanish acreage growth. At the beginning of the 1960s the total area harvested for sunflower seed amounted to 3300 ha, on a par with Italy and around half the area under sunflowers in both Greece and France. From that moment on, the area under sunflower seed crops grew quickly, reaching 988,500 ha in 1985. No other country had seen such an increase in acreage, not even France, where total sunflower seed production was higher (Table 5). Again, the increase in Spanish sunflower seed production was due more to the increase in the area cropped than to advances in yields.

II

The first section identified the main differences in the acreage evolution in Spain compared to its neighbours in southern Europe. We identified barley, in particular, and sunflower seed as the crops responsible for the huge expansion in acreage in Spain between the beginning of the 1960s and the mid-'80s. The question we will try to answer in this section is what lay behind this unusual crop trend in Spain, starting with barley and ending with some references to sunflower seed production.

The overwhelming increase in barley production was prompted by a new pattern of demand and a shift from food to feed grain. In barely two and a half decades the amount of barley devoted to animal feed grew spectacularly in Spain (Table 6). Barley was not the only feed grain to experience such an increase, as is shown by the parallel huge increase in maize. In fact, no other country in southern Europe showed similar growth in cereals destined for animal feed. While production in France nearly doubled between 1961 and 1985, it grew nearly fivefold in Spain.

An increase in cultivation of cereals for animal feed was not exclusive to Spain. In all five countries the percentage of feed grain over total cereal domestic supply (production + imports

TABLE 6. Southern Europe: barley, maize and total cereal for animal feed, 1961–2, 1984–5 (million tonnes)

	Barley			*Maize*			*All cereals*		
	1961	*1985*	*% change*	*1961*	*1985*	*% change*	*1961*	*1985*	*% change*
France	2.616	4.783	83	2.276	4.993	119	10.944	18.918	73
Greece	204	613	200	222	1.685	659	659	2.506	–100
Italy	651	2.298	–100	5.292	6.545	24	6.741	11.597	72
Portugal	37	86	132	289	2.097	626	392	2.39	–99
Spain	1.818	8.546	370	1.061	6.088	474	3.602	16.872	368

Note: 'all cereals' includes wheat, barley and the lesser crops listed in the note to Table 3.
Source: calculated from FAO statistical database.

TABLE 7. Southern Europe: cereals used for animal feed as a percentage of total domestic cereal production

	1961–2	*1984–5*
France	57	68
Greece	28	52
Italy	39	52
Portugal	22	60
Spain	39	72

Source: calculated from FAO statistical database, balance sheets.

– exports + or – stock variations) grew to almost 50 per cent or more between 1961 and 1985. Again, it was in Spain where that percentage reached a peak (72) surpassing even France (Table 7). Coming from a similar position to Italy in 1961, Spain ended up overtaking France, where livestock production was traditionally much more important, as a consumer of cereals. As had occurred in France, the shift from food to feed was also the result of a marked decline in the human consumption of cereal. In fact, according to FAOSTAT, the decline in wheat consumption between 1961 and 1985 in kilos per capita in Spain (which was mainly responsible for the fall in cereal consumption, a trend common to all southern European countries, with the exception of Portugal) was the largest decline in the five countries (28.5 per cent), just above that of France (27.5 per cent).

The similarity of Spain's experience to that of its northern neighbour in this reallocation from food to feed has no evident explanation. In the first half of the 1960s France presented a more developed food consumption structure with a proportion of animal products above 25 per cent (according to FAOSTAT domestic supply per capita), while the other four countries, including Spain, were slightly below 20 per cent. Yet in 1985, French livestock consumption (meat, fats, offal, eggs and milk) amounted for 388 kilos per capita, with that of Italy being 343, and Spain 271. Moreover, French livestock exports were of some importance (15 per cent of the

TABLE 8. Southern Europe: pig meat and poultry meat consumption, 1961–2 and 1984–5 (kg/per capita/per annum)

	1961–2		*1984–5*	
	Pig meat	*Poultry meat*	*Pig meat*	*Poultry meat*
France	26.0	11.1	35.2	17.2
Greece				
Italy	7.9	5.8	27.9	18.0
Portugal	9.1	2.1	17.75	10.5
Spain	8.2	3.1	37.1	21.4

Source: calculated from FAO statistical database: domestic supply, balance sheets.

TABLE 9. Southern Europe: egg consumption, 1961–2 and 1984–5 (kg/person/year)

	1961–2	*1984–5*
France	10.6	14.9
Greece	5.7	12.5
Italy	9.1	11.6
Portugal	3.3	5.5
Spain	8.3	15.4

Source: calculated from FAO statistical database, domestic supply, balance sheets.

total French meat production) during the mid-1980s, while they were still insignificant in Spain (0.7 per cent of Spanish meat production). Those differences came to determine a much higher need for feed grain in France than in Spain, and consequently, a cereal distribution between food and feed that was far from similar.

Nevertheless, the answer to this paradox is found with the group that showed the largest increase in Spanish per capita output during the studied period: meat (243 per cent). If we turn our attention to the composition of 'meat', it is easy to understand why feed grain production grew so much in Spain. Between 1961–62 and 1984–85 the strong growth in the per capita supply of poultry (590 per cent) and pig meat (352 per cent) left bovine meat (82 per cent) as the third component in terms of total Spanish meat consumption. Table 8 shows the magnitude of Spanish growth in poultry and pig meat consumption. In 1985 it lead all five countries when barely 25 years earlier the Spanish figures were far behind from those of France and much closer to those of Portugal.

Eggs were the first animal product to experience a boom in Spain. By the second half of the 1950s egg production had already expanded strongly with new intensive breeding methods. In only ten years (1961–71), Spanish egg consumption matched figures for France, and by 1985 they were higher than the other southern European countries (Table 9). With the arrival of broiler chickens from the United States in the 1960s, Spanish poultry producers concentrated more on meat, with a success similar to that of eggs, as shown above.

These changes were the result of an international phenomenon that took place with particular vigour in Spain: the rise of intensive livestock farming. Chickens and pigs were the pioneers in the Fordist model of breeding, based on systems of intensive feeding. This new intensive model, developed in the US in the 1920s and brought to Europe after the Second World War, was the result of an industrial process that applied advances in genetics and animal nutrition, and took advantage of improved consumer purchasing power to turn previously high-value foodstuffs into products of mass consumption.[3]

Crops such as barley and maize played an important role in intensive feeding systems. Their importance is clearly evident when the composition of animal feedstuffs in the 1970s is considered. Barley accounted for nearly half of the ration in the pig rearing stage, reaching 63.7 per cent in the fattening stage, and 47.8 per cent just before slaughter. Maize was more important for broiler chickens, reaching 54.2 per cent of feed composition in the last stage of rearing. Barley and maize were equally important in the diet of laying hens. Thus, all three main intensively produced livestock products (pork, chicken and eggs) required significant amounts of barley and maize as feed.[4]

Obviously the relationship between the growth in feed grain production and the rise in meat and egg consumption does not hold if those animal products were substantially imported. However, that was not the case in Spain at that time. The proportion of domestic consumption supplied by domestic producers was very close to parity both in 1961–62 and in 1984–85 (Table 10). Spain was self-sufficient in the first feed grain, barley, during the mid-1980s but had to rely heavily on maize imports until it became necessary to increase its domestic supply.

Apart from maize, soya beans were the other product that Spain had to import in substantial quantities in order to develop its intensive livestock production. Given the crucial role of soya in the feed rations for pigs and broiler chickens, none of the five countries analysed could avoid a rapid growth in soya bean imports during the period. Nevertheless, Spain was the country in which soya bean imports grew most strongly in the 1970s, when from 1975 onwards it became the largest importer of the five (Table 11). However, soya beans were not the only oilseed product used in feed portions during that period. Sunflower seed came to be used as a substitute for soya in Spain on many occasions, particularly after the USA launched an international soya embargo in 1973. Spain had become the leading southern European producer of oil crops by 1985, in both production and domestic supply. While sunflower seed was the main oil crop in terms of domestic supply, soya beans dominated through imports. As we observed in the case of barley, the huge expansion in sunflower seed output in Spain was the result of acreage increase rather than any increase in output per acre. According to FAOSTAT, Spanish sunflower seed yields were below those of France, Italy and Greece in 1961–2, and in spite of some improvement, Spain still obtained only half the yield of France and Italy in 1985 (10,089 hg/ha versus 20,454 in Italy and 21,554 in France).

[3] D. Goodman and M. Redclift, *Refashioning nature: food, ecology and culture* (1991); H. Friedman, 'Changes in the international division of labor: agri-food complexes and export agriculture', in W. H. Friedland *et al.* (eds), *Towards a new political economy of agriculture* (1991), pp. 3–18.

[4] For an example of the rations used by Spanish feeding firms, see M. Ocaña *et al.*, *Estudio económico de la producción de cebada en España para su empleo en alimentación animal* (1971).

TABLE 10. Spain: production, trade and domestic supply of selected products, Spain (1,000 tonnes)

	Production	*Import*	*Export*	*Domestic supply*	*Production as % of domestic supply*
Pig meat					
1961–2	242	11	0	253	95.8
1984–5	1409	21	4	1423	99.0
% change	482	91		462	3.2
Poultry meat					
1961–2	96	0	0	96	100.0
1984–5	802	24	4	822	97.6
% change	735			756	2.4
Eggs					
1961–2	269	1	1	269	100.0
1984–5	643	1	4	647	99.4
% change	139	0	300	141	0.6
Barley					
1961–2	1953	242	1	2183	89.5
1984–5	10,039	127	477	9,872	101.7
% change	414	91	47.600	352	12.2

Source: FAO statistical database and own calculations.

TABLE 11. Southern Europe: soya bean imports selected years, 1961–85 (tonnes)

	1961	*1965*	*1971*	*1975*	*1981*	*1985*
France	112,165	283,483	468,868	490,126	761,082	600,004
Greece	197	36	10	11,610	97,874	100,001
Italy	204,646	387,201	838,230	1,225,600	1,321,075	1,505,175
Portugal	0	0	44,624	74,525	340,543	881,833
Spain	15,790	198,100	683,675	1,662,395	3,034,360	2,220,945

Source: Calculated from FAO statistical database.

Initially, in a country where the household oil was invariably olive oil, this rapid growth served no other purpose than that of feeding animals. In the second half of the 1950s, by far the most important oil crop farmed in Spain was cottonseed, used for feeding ruminants. Given the expected increase in Spanish demand for meat, a specific recommendation was made by the 1966 FAO Spanish Agrarian Situation Report that soya substitutes should be sought. The speed of the shift from cottonseed to sunflower seed reflected the new direction taken in livestock farming in Spain in the 1960s. But this new direction also brought unexpected consequences in other fields. The huge increase in sunflower production affected the Spanish oil market, paving

TABLE 12. Southern Europe: domestic supply of sunflower and olive oil (kg/per capita/per annum)

	1961			*1985*		
	Sunflower oil	*Olive oil*	*Sunflower as % of Olive oil*	*Sunflower oil*	*Olive oil*	*Sunflower as % of Olive oil*
France						
Greece	0.2	14.6	1.4	2.7	19.9	13.6
Italy	0.7	9.5	7.4	2.2	11.0	20.0
Portugal	0.0	6.3	0.0	5.9	4.1	143.9
Spain	0.2	8.3	2.4	8.0	10.5	76.2

Source: Own calculation from FAO statistical database.

the way for a product cheaper than olive oil: sunflower oil, whose consumption reached three quarters of the total quantity of olive oil consumed in Spain by 1984–5. Neither Italy nor Greece, both with higher per capita olive oil consumption than Spain, saw a similar trend (Table 12).

If, in barely two and a half decades, Spain had shifted from being a country focusing on typically Mediterranean production (wheat, olives and grapes), with a limited presence of livestock in both production and consumption, to become a country where intensive livestock farming emerged as a major force, producing the reorientation of a number of its main crops, this was clearly the result of the implementation of a livestock farming model that exploited the few virtues of the Spanish countryside. Crops without better alternatives in a dry climate, such as barley and sunflowers, encountered strong complementarity with 'landless' livestock farms where chickens and pigs were raised. Specifically, pig farming also found in the cold and dry climate of much of the country an ideal environment for the development of ham and cold meat production, and it was able to take advantage of strong domestic demand. Thus, despite starting with such poor results in around 1960, Spain became one of the leading exponents of intensive poultry and pig farming in Europe in terms of both production and consumption. Why then did chicken and pork make such inroads in Spain so quickly and with such strength? The reasons for this can naturally be found in factors of supply and demand, which were in part determined by political calculation. However, there were also profound social and economic reasons.[5]

III

The shift into livestock farming in Spain that started in the 1960s, and the effect this had on both crops and the nation's diet, are even more striking when the process is seen from a historical perspective. After the crisis that affected transhumance in the eighteenth century, Spain had turned to wheat farming, which reduced the area of land for pasture. This was

[5] E. Clar, 'A world of entrepreneurs: the establishment of international agribusiness during the Spanish pork and poultry boom, 1950–2000', *Agricultural Hist.*, 48 (2010), pp. 176–94. For a history of the traditional Spanish agrarian structure, see J. Simpson, *Spanish Agriculture: the long siesta, 1765–1965* (1995).

reflected in the Spanish diet, with its strong cereal base and low consumption of animal products, except in areas close to the Atlantic (Galicia, Asturias, the Basque Country and Cantabria), whose wet climate encouraged cattle production, and large cities such as Madrid and Barcelona. Even though consumption of animal products was traditionally low, the period after the Spanish Civil War (1936–9) saw a further marked fall. Meat consumption is estimated at an average of approximately 24 kg per person per year in 1931–5 but it had fallen to 13.5 kg by 1950–4.[6] The post-war difficulties faced by the population, with low income levels and rationing of basic foodstuffs until 1951, and the drive by the government for the expansion of cereal food crops (mainly wheat and rye) at the expense of feed crops (barley and oats) had a negative effect on both livestock production and consumption. A comparison of Spain with its neighbours shows this situation quite clearly, particularly the low levels of meat consumption when compared to Italy and Portugal.[7]

The degree of hunger and deprivation in Spain between the start of the Civil War and the early 1950s and the presence of an increasingly widespread black market in foodstuffs certainly had an influence on the rapid growth in demand for animal protein thereafter. Compared to the gradual change in dietary trends in the first three decades of the twentieth century (incorporating more animal products in place of cereal), the 1960s saw a rapid and intense shift in eating habits. The remarkable change in the Spanish diet that took place in the 1960s needs to be understood in the context of the scarcity of certain foodstuffs during the period immediately preceding that decade: the recent memory of post-war hunger and scarcity was replaced by a trend towards surfeit when improved markets and incomes made it possible. The new diet conferred social prestige. It might even be justified for health reasons although it tended to cause obesity. Even Spanish comic strips from the period reflected this preoccupation with food in the popular character of Carpanta, a tramp who was always hungry and had a recurring dream in the form of a roast chicken.[8]

The establishment of mass consumption in 1960s Spain, during its period of strong economic growth (the so-called 'Spanish Miracle'), and the appearance of an expanding middle class with higher levels of income, had much to do with the rising demand for meat. Naturally, this phenomenon was common to many Western countries during this period, including those of southern Europe. Nonetheless, the effect of income growth on the consumption of meat, especially that of pork and chicken, was more remarkable in Spain than in other neighbouring countries, even those that grew more rapidly between 1961 and 1985 (Table 13). Consequently, the greater increase in demand for meat in Spain is not only to be explained by the improvement in income levels in the population alone, but by additional factors that applied specifically to Spain.

A new middle class emerged from the great exodus from the country to urban areas. It is calculated that in the 1960s alone more than two million Spaniards moved to the city from the

[6] S. Piquero and E. López, 'El consumo de pescado en España' in *XI Congreso de Historia Agraria* (2005), pp. 1–25.

[7] M. Bekele *et al.*, *Estudios de la FAO sobre los alimentos y la población* (Rome, 1976).

[8] See a summary of the difficulties in Spain during the 1940s in E. Clar and V. Pinilla, 'The contribution of agriculture to Spanish economic development, 1870–1973', in P. Lains and V. Pinilla, *Agriculture and economic development in Europe since 1870* (2009), pp. 319–22.

TABLE 13. Southern Europe: income elasticity in the per capita consumption of meat and the per capita consumption of pig and poultry meat between 1961–2 and 1984–5

	Income growth	*Meat consumption increase*	*Elasticity*	*Poultry meat consumption increase*	*Elasticity*
France					
Greece	166.3	216.9	1.30	460.5	2.77
Italy	112.2	140.5	1.25	235.0	2.10
Portugal	152.4	112.5	0.74	152.2	1.00
Spain	147.8	242.1	1.64	417.7	2.83

Source: increase in per capita income taken from Agnes Maddison, *The world economy, 1820–1992* (1995), own calculation; increase in per capita meat consumption (%) and per capita pork and poultry consumption (%): FAOSTAT, own elaboration.

TABLE 14. Spain: consumption of livestock products, 1964–65 (per cent of total food consumption)

	Urban	*Rural*
Beef and veal	8.0	3.2
Pork, ham and sausages	6.9	8.6
Chicken, rabbit and game	4.2	2.7
Total Meat	24.3	19.8
Eggs	6.1	6.3
Milk, cheese and butter	8.9	11.0

Source: Instituto Nacional de Estadística, *Encuesta de Presupuestos Familiares, 1964–65* (1965).

countryside. However, until that time, any growth in the urban population had been reflected in greater consumption not of pork or chicken but of beef and, more particularly, veal. This partly explains why meat consumption in Spain was so low, given that veal tended to be seen as a luxury and its price was subject to large fluctuations. However, rural emigrants were generally unaccustomed to eating either beef or veal. On the contrary, meat consumption in the Spanish countryside was heavily biased towards pork and its derivatives, although meat consumption was much greater in urban areas than in rural ones. The difference in chicken consumption was less than with beef and veal, and the consumption of eggs was practically the same in both the cities and the countryside (Table 14).[9]

Therefore, considering that growing urbanization in Spain in the 1960s and '70s was caused by rural emigration, the main virtue of intensive chicken and pig farming was that it cornered

[9] L. Leal, J. Leguina, J. M. Naredo and L. Tarrafeta, *La agricultura en el desarrollo capitalista español, 1940–1970* (1975); A. Langreo, 'La articulación del sistema agroalimentario: agricultura', in *Lecturas sobre el sistema agroalimentario en España* (1985) and J. A. Segrelles, *La ganadería avícola y porcina en España. Del aprovechamiento tradicional al industrializado* (1993), pp. 291 and 318–21.

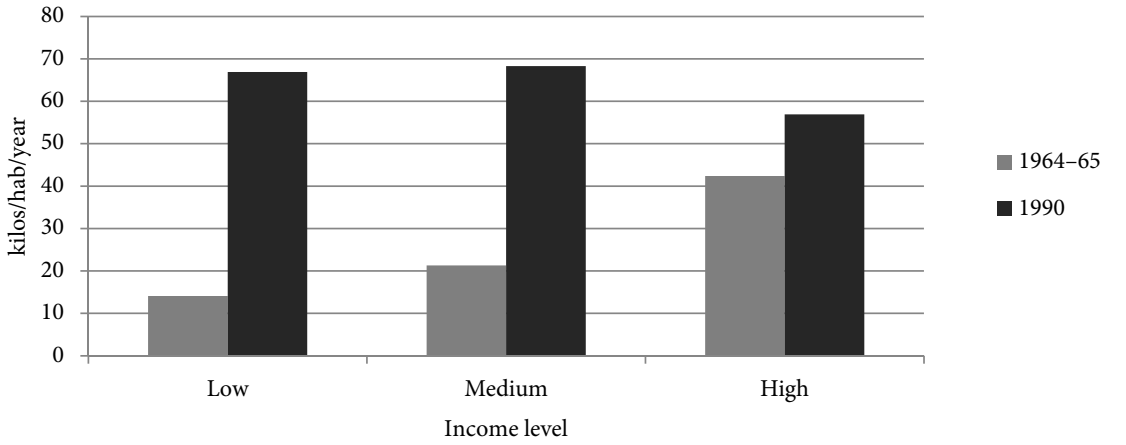


FIGURE 1. Meat consumption by income level in Spain, 1964–65 and 1990

Source: calculated from INE, *Encuestas de Presupuestos Familiares.*

the new demand for meat. The emigrants initially earned low wages but these rose over time. They found that of the animal products available in the market, the most affordable were the ones they had also eaten in their places of origin (pork and eggs in particular). A comparison of meat consumption in Spain according to income before and after chicken and, to a larger extent, pork flooded the market is a good reflection of this development. In the mid-'60s there was still a considerable gap between the amount consumed by the high-income classes and the rest. Twenty-five years later, the lower classes were consuming almost as much meat as the middle classes, and both were consuming meat more than the classes with the highest incomes (Figure 1).

The new intensive livestock farming systems that had been in place since the 1960s made chicken and pork available at lower prices than those of veal and beef; in addition, the prices of the former performed better over time (Table 15). The greater ability of new breeds to produce meat at lower feed ratios, and the industrial-scale production that offered a large number of products and sub-products to be prepared for sale in the supermarkets that were beginning to proliferate in Spain allowed the market to be flooded more easily. This was reflected in the higher price elasticity for the consumption of veal and beef in Spain between 1958 and 1971 (1.6) compared to that of chicken (1.1) and pork (1.0).[10]

IV

There is little doubt that what lay behind the superior competitiveness of the intensive livestock farms was the introduction of new hybrid varieties of chickens and pigs with great productive capacity when used in an industrial production system. However, the superiority of the new livestock farming technology (genetics, feed and facilities) exported by US multinationals after

[10] R. Soria, M. Rodríguez and J. Ruiz, 'El consumo de carnes en España. Un análisis por series cronológicas', *Revista de Estudios Agrosociales* 97 (1976), pp. 7–37.

TABLE 15. Spain: meat price evolution, 1960–1970 (expressed a ratio of prices in pesetas/kg)

	Poultry/beef	*Pig meat/beef*	*Poultry/cow*	*Pig meat/cow*
1960	92	74	119	96
1961	85	81	116	111
1962	80	80	105	106
1963	66	72	96	105
1964	65	66	83	85
1965	54	71	74	98
1966	50	61	71	85
1967	45	55	67	83
1968	49	60	72	89
1969	43	58	66	91
1970	41	54	62	83

Note: beef includes veal and calves.
Source: R. Soria, M. Rodríguez and J. Ruiz, 'El consumo de carnes en España. Un análisis por series cronológicas', *Revista de Estudios Agrosociales* 97 (1976), pp. 7–37.

the Second World War was especially marked in the case of Spain, as a consequence of the weakness in its livestock sector. The scarcity of food in the post-war period was a stimulus to the expansion of wheat at the expense of pastures and the production of fodder, which harmed the more traditional forms of extensive livestock farming (cattle and sheep). The Spanish meat industry in the 1950s showed noticeable weakness, with very high production costs that were reflected in the equally high cost of products.[11]

The country was neither self-sufficient in veal and beef, even at low levels of per capita consumption, nor in the foodstuffs needed to produce them. Given this situation, which was the same for the entire Spanish food industry, the widespread adoption of foreign technology and industrial processes in the 1950s had a significant impact. The introduction by the multinationals of transnational feed-livestock complex industries in Spain replicated the systems present in many other Western countries at the time, but their influence was much greater given the weak competition from traditional production and absence of large Spanish food companies. Consequently, the demand driven by the improving incomes of Spain's population was exploited by industrial-scale intensive livestock operations, which achieved a significant reduction in the production cost per calorie. Their supply of products with uniform quality flooded the market. While this experience mirrored that of the US and Great Britain, it differed in that supermarkets and large-scale retailers played almost no role in Spain, with local entrepreneurs in alliance with transnational companies becoming the main drivers of change.[12]

[11] E. Clar, 'La soberanía del industrial. Industrias del complejo pienso-ganadero e implantación del modelo de consumo fordista en España, 1960–1975', *Revista de Historia Industrial* 36 (2008), pp. 133–65.

[12] For the British example see A. Godley and B. Williams, 'Democratizing luxury and the contentious "invention of the technological chicken" in Britain', *Business History Rev.* 83 (2009), pp. 267–90. By contrast, for Spain, see Clar, 'World of entrepreneurs'.

Throughout this process, the policies of the government under General Franco were also a determining factor. For example, foreign capital enjoyed important advantages when establishing local subsidiaries, given that government authorization was not required for investments of less than 50 per cent of total capital until 1973. This eased the way for penetration by multinationals, particularly in the food sector. Moreover, legislation did not regulate the contracts between companies and livestock farmers (as was the case in France from 1964), enhancing the power of large companies to set conditions and to control output, prices and the market.[13]

More specifically, the policies of Franco's regime were even more decisive in relation to animal feed. The 1953 economic and military agreements between the United States and Spain, which drew Spain out of international isolation (although it did not join the United Nations until 1955) led to the import of substantial quantities of surplus American soya and maize, channelled by American multinational feed companies. Restricted before that time, soya bean imports were further liberalized in 1962, giving soya commercial advantages over other oil crops. And if this were not enough, the government undertook to purchase the seed oil milled in Spain at international market prices, which encouraged greater investment by multinationals in Spain, and explains why Spain became an importer of soya beans, as seen in the previous section. The facilities offered by the government gave the feed supply industries a key role in the development of large-scale intensive livestock farming, particularly chicken farming, the effect of which was transferred to the Spanish diet. The participation of multinationals enabled them to obtain feed at prices that were among the cheapest for products made by Spanish feed factories.[14]

The advantages given to large multinational companies were an aspect of a deliberate policy of increasing the output of affordable livestock products for the Spanish people. The FAO report on the state of Spanish agriculture of 1966 advanced the notion that only the cheaper meat offered by intensive livestock farming could satisfy the growing demand for meat, given the impossibility of using traditional production methods to double the output of beef and veal products in a short time frame. However, fluctuations in the world price of soya and other ingredients of animal feed could lead to significant increases in the price of those meat products. As a result, the FAO report proposed that locally produced feed should form 60 per cent of the whole, to lower the cost of feeding animals. To achieve this, steps should be taken to encourage the replacement of wheat with barley. The report stressed the need for turning wheat land over to animal feed grains, which required a change in the Spanish government's policy of giving preferential support for grain. It was desirable that there should be a correction in the wheat/feed grain price ratio.[15]

Franco's government implemented these proposals and encouraged strong growth in the internal production of feed grains, particularly barley. Among the government's main

[13] Langreo, 'La articulación del sistema agroalimentario: agricultura', pp. 37–66; Segrelles, *La ganadería avícola,* pp. 219 and 318–21.

[14] Segrelles, *La Ganadería avícola,* pp. 154, 168–169, 283 and 291; A. Langreo, *El ganado porcino y las casas de piensos en la Comunidad Valenciana. Sus fórmulas de coordinación y su desarrollo histórico* (1990), pp. 15 and 81; L. Viladomiu, 'La inserción de España en el complejo soja mundial', *Agricultura y Sociedad* 34 (1985), pp. 151–77.

[15] BIRD and FAO, *El desarrollo de la agricultura en España* (1967), pp. 198–202 and 206–207; also pp. 16–18 and 199.

short- and medium-term goals in its Second Development Plan (1968–71) were the reduction of wheat surpluses, control of the agrarian trade deficit, and the promotion of greater livestock self-sufficiency both for outputs and, especially, inputs. The official wheat price (the price at which the government-controlled National Wheat Board purchased the harvest from producers) was frozen between the 1966–7 and 1971–2 seasons, while the guaranteed price for barley rose. The dry climate found in most of Spain permitted the interchangeability of barley and wheat, which was why the ratio between their prices was such an important element for farmers' decision-making. The government also reduced the advantages given to wheat (subsidies, bonuses, loans to wheat growers) to place it on an equal basis with other grains.[16]

The effect was almost immediate and the result spectacular. The acreage under wheat in Spain in 1965 was some 4,254,000 ha, with output of 4,715,000 tonnes, while barley acreage was 1,374,000 ha, with an output of 1,891,000 tonnes. By 1975 the acreage under wheat had fallen to 2,661,000 ha, while that of barley had grown to 3,262,000 ha; and although wheat output was steady at 4,302,000 tonnes, barley output had hit 6,728,000 tonnes.[17] Barley output went from supplying 75 per cent of domestic demand in the mid-'60s to exceeding 100 per cent at the end of the decade. As sunflower cultivation could readily be alternated with wheat in the country's drier areas, it too saw a massive increase in the area devoted to its cultivation. At the same time Franco's government also sought to reduce Spain's degree of dependence on imported maize. However, the need for irrigation to grow maize in most of the country made a large-scale import substitution project unfeasible.[18]

The introduction of improved sunflower varieties in the south was hastened by the need to replace soya in animal feed rations. Although soya bean imports continued to grow in quantity and importance throughout this period, the domestic market for oilseeds was liberalized and their production was subsidized through the national development plan that was started in 1971. As milling companies had already been replacing sunflower seed with soya whenever the price of the former rose, the changeover was not difficult. The enormous growth in sunflower production, closely linked to poultry output, was also driven by strong government stimulus. It unbalanced the entire Spanish oil market, creating an 'oil lake' that harmed the traditional consumption of olive oil, given that sunflower oil was the cheaper product. This explains the strong inroads made by sunflower oil into the Spanish diet that we described in the previous section. The greater competitiveness of sunflowers is explained not only by the employment of modern technology and the greater ease of supply than with soya, but it was also as a result of higher productivity in the sector. It would not take long for sunflower oil production to form an oversized subsector in which a small number of companies competed intensely with each other.[19]

[16] E. Clar, 'De la subordinación al cereal al cereal subordinado. Historia y balance de un intento de autosuficiencia ganadera, 1967–1972', *Historia Agraria* 37 (2005), pp. 513–44.

[17] C. Barciela, J. Giraldez, GEHR and I. López, 'Sector Agrario y Pesca', in A. Carreras and X. Tafunell (coords): *Estadísticas históricas de España: siglos XIX y XX* (2005), pp. 301 and 308; Segrelles, *La ganadería avícola,* p. 150.

[18] Clar, 'De la subordinación'. pp. 534–7. To appreciate the importance of irrigation in maize production, see the case of Zaragoza in V. Pinilla, 'The development of irrigated agriculture in twentieth-century Spain: a case study of the Ebro basin', *AgHR* 54 (2005), p. 135

[19] Segrelles, *La Ganadería avícola*, p. 150; C. Tió, *La política de aceites comestibles en la España del siglo XX* (1982), p. 210.

In summary, Spain experienced a rapid and strong expansion in its livestock sector and in the products related to it: soya beans, sunflower seed and feed grains, of which the last two underwent an increase in acreage on a scale sufficient to explain the distinctive development of the Spanish agrarian sector between 1960 and 1985. As in other countries, the application of important technological innovations (the introduction of new livestock varieties with improved feed conversion ratios into meat) as part of an increasingly industrialized economy was heavily reflected in their agrarian output and diet. However, the series of distinct economic and political factors mentioned explain why the case of Spain presented significant quantitative and qualitative differences, at least prior to its joining the European Community. The rapid installation of those livestock operations could not have taken place on such a scale had it not been for the large animal feed-livestock companies arriving in a market where there were no significant food industries. The ability to offer cheap meat to a population with growing incomes guaranteed a rapid transition to a model of production and consumption that was heavily geared towards livestock. This was understood by Franco's government, which chose to facilitate the conquest of the Spanish market by those livestock operations, while stimulating domestic feed production. The same government that had overprotected wheat farming since 1940, harming the development of the livestock sector, made a 180-degree turn in the 1960s by encouraging barley and maize production, while it imported soya beans in huge quantities. Spain's existence as a dictatorship, outside the EEC, enabled such policies to be implemented, despite the failure of the returns from such a strong acreage expansion in barley and sunflowers to justify them. For these aspects alone it can be said that 'Spain was different', even though it conformed to the broad Western model of agrarian transformation that characterized the third quarter of the twentieth century.

V

In its broad shape, the agrarian structure established in the 1970s and 1980s has been maintained, albeit with slight changes in emphasis: a reduction in the weight given to cereal (particularly owing to the retreat of wheat farming) and an increase in that given to meat, resulting from the advances made in both chicken and pig farming (Table 16). Since 1985 the sector that has proved to be the most successful is that of pork production, with pork meat becoming one of the leading agrarian products in kilos per capita. In terms of total animal output, the primacy of pork in 1985 (48.2 per cent) was consolidated further during the following two decades to reach 59.3 per cent in 2005.

The magnitude of Spain's success in pig production has led to the country becoming one of the leading producers per capita. Comparison with some of the western countries with the largest meat output is evidence of the scale of growth in Spain, both for meat in general and for pork in particular, given that Spain started from a very low base (see Table 17). The importance of pork is also reflected in the establishment of a strong pork meat export trade after 1985, a development permitted by Spain's admission to the European Union. Pork accounted for three quarters of Spain's meat exports in 2005, having grown from 21,000 tonnes to over a million tonnes in the space of 20 years.

As with barley and sunflower production, the success of pig production is the result of a

TABLE 16. Spain: domestic supply distribution in Spain, 1985 and 2005 (per cent)

	1984–85	*2004–05*		*1984–85*	*2004–05*
Vegetable products	73.7	71.9	Animal products	26.3	28.1
Wheat	9.6	8.4	Bovine meat	1.1	1.5
All cereals	10.3	9.4	Pig meat	3.6	5.6
Potatoes	10.6	7.1	Poultry	2.1	2.6
All vegetables	16.4	15.4	All meat	7.6	10.5
Fruits	9.0	9.8	Eggs	1.5	1.4
Alcoholic Beverages	10.7	11.4	Milk	17.4	16.5

Source: FAO statistical database and own calculations.

TABLE 17. Five western countries: meat, poultry meat and pig meat domestic supply (kg/per capita), 2004–5

	Poultry meat	*Pig meat*	*All meat*
France	22.7	34.6	92.1
Germany	14.8	54.4	84.1
UK	30.9	26.2	84.6
USA	51.5	29.4	123.9
Spain	27.1	57.5	108.1

Source: FAO statistical database.

series of favourable natural factors. Apart from the native Iberian breed that is raised in a specific natural environment (mainly the mixture of cork oak woods and pasturelands known as *dehesa*, with acorns as the main food source), white pig breeds found an ideal place for their development in inland provinces such as Soria and Teruel with their cold and dry climates. There they are raised mainly for ham and cold meat products, but also for pork. This, together with the traditional presence of pork in the diet of much of the country and the large variety of pork products consumed in Spain, has strengthened the position of pork as the main Spanish meat product. This has also been consolidated by the presence of large meat production companies with the capacity to compete in export markets.

As for the feed that keeps the livestock sector (mainly pork and, to a lesser extent, chicken) growing, soya bean imports had grown slightly between 1985 and 2005. The importance of barley, the main locally produced product, had diminished somewhat, while that of maize had remained constant and that of wheat had grown significantly. Despite the decrease in the amount of barley used for feed, the amount of cereal destined for this use continued to grow in Spain, with an increase in the total proportion of grain used to make animal feed. Another of the basic differences between the period immediately before Spain's entry into the EEC and 2005 is the increase in the quantity of imported feed used in animal feedstuffs; this particularly affected wheat and barley, the latter to a lesser degree (Table 18). There is no doubt

TABLE 18. Spain: feed domestic supply, 1984–85 and 2004–05

	1000 tonnes		*Feed use / total domestic supply (%)*		*Total imports / total domestic supply (%)*	
	1985	*2005*	*1985*	*2005*	*1985*	*2005*
Cereal	16,872	21,833	72.1	85.2	17.6	47.8
Wheat	1,479	6,250	25.7	59.4	3.4	59.3
Barley	8,546	6,948	86.6	82.3	1.3	16.0
Maize	6,088	6,989	90.8	85.3	49.1	44.8

Source: FAO statistical database and own calculations.

that Spain becoming subject to the Common Agricultural Policy (CAP) was a decisive factor in its opening the door to cereal imports. Nevertheless, the percentage of imported barley in domestic consumption did not grow much in Spain, so the strength of the domestic supply of barley that was consolidated in 1961–85 seems to have continued in different circumstances.

The experience of sunflower oilseed in Spanish agriculture since the 1960s has been similar. Domestic output has fallen and been replaced by greater foreign supply. While the percentage of imports over domestic supply was negligible (0.3 per cent) in 1985, almost half (48.1 per cent) of the sunflower seed consumed in Spain in 2005 was imported, with internal output falling by 40 per cent (from one million tonnes to six hundred thousand tonnes). Poor sunflower seed yields in Spain (55 per cent of Greek, 41 per cent of Italian and 39 per cent of French yields) led the sector to become more open to imports when Spain came under the CAP. Nonetheless, sunflower seed continues to be the most important oilseed in Spain, not owing so much to its use as feed, but to it being the basis of sunflower oil, the second most consumed oil in Spain, which has over time kept its position close to olive oil.

Logically, all of these changes have contributed to the increase in the harvested acreage, the great Spanish peculiarity that we spoke of at the start of this article. Barley decreased by almost one million hectares between 1985 and 2005, although there is still twice the area under barley than there was in 1961. This loss of barley resulted in the decline of cereals as a whole for an equivalent surface area. Likewise, sunflower seed acreage was reduced by close to 364,000 hectares between 1985 and 2005, leaving a harvested area of approximately 634,000 hectares. All of this was responsible for a significant decrease in the harvested area, although the most relevant aspect is that barley continues to be the crop with the largest harvested area in Spain, whereas the sunflower seed crop is the fifth (Table 19).

VI

This article has analysed a series of changes from the 1960s onwards that produced a profound agrarian reorientation of Spain. From a form of agriculture centred on Mediterranean arable, with a great emphasis on wheat and tree crops (olives and grapes), Spain quickly shifted to livestock farming, which massively increased the demand for feed grains and oil seeds such as sunflower.

TABLE 19. Spain: area harvested of selected arable and tree crops, 2004–05 (ha)

	Area harvested	*%*
Barley	3,167,440	21.9
Olives	2,465,015	17.0
Wheat	2,224,570	15.4
Grapes	1,166,020	8.1
Sunflower seed	634,168	4.4
Almonds	624,030	4.3
Total	14,462,840	100.0

Source: FAO statistical database and own calculations.

Whilst the passing of time has resulted in some reduction of acreage, in accordance with growth of a less expansive agriculture than that which occurred in Spain between 1961 and 1985, in large measure the agricultural variations that took place in that period have been consolidated. The Spanish diet has reflected these changes in a particularly intense manner. The main outcome highlighted in a study of the Spanish nutritional transition since 1960 was the greater calorie intake, the consequence of high consumption of fats. The result of this has been to distance the Spanish diet from its Mediterranean origins as it approaches more northern models.[20]

The force with which those agrarian changes occurred have left their mark on the Spanish agriculture and economy. Although Spain's membership of the European Union has attenuated some of its peculiarities, such as the huge acreage expansion, the distinctive features of that process still remain. Meanwhile, Spain has become one of the world's main producers and consumers of pork, a situation that could not have been foreseen in 1960. This exemplifies how the transnational agribusiness model developed after the Second World War was able to transform rapidly an agrarian sector such as the one existing in Spain.

The sum of very different factors turned a country with insignificant meat production and consumption into a great producer and consumer of meat in less than three decades, and redirected its agriculture to support this new trend. The benefits provided by government to multinational feed producers connected to a series of local producers enabled an expansion of the products from intensive livestock farming. Franco's government also paved the way for large-scale imports of soya beans, whilst it changed its policies for the protection of wheat production to encourage the shift to feed cereals, assisted by the easy substitution of barley for wheat. The abundance of dry-land farming areas enabled the rapid expansion of barley and sunflowers to take place without making use of fallow, whereas the huge expansion in irrigation, brought about by the obsession of Franco's government with the construction of dams and reservoirs, led to some increases in maize and alfalfa crops. All of these changes in supply encountered sufficient demand in the Spanish market as a result of mass internal

[20] L.A. Moreno, A. Sarriá and B. M. Popkin, 'The nutrition transition in Spain: a European mediterranean country', *European J. Clinical Nutrition* 56 (2005), pp. 992–1003.

rural-urban emigration and improving per capita income which, starting in 1960, was directed towards those new products of intensive livestock farming. Spanish meat and dairy companies cornered a market with barely any imports, regardless of the restrictions imposed by coming under the CAP, growing quickly in both size and importance.

Even allowing for the reservations that have been expressed (mainly from the perspective of eating habits that have shifted away from the healthy Mediterranean diet), this virtuous production and business cycle was one of the few projects undertaken under Franco that can be considered successful and whose effects are still very evident today. The dictatorship took all the necessary initiatives designed to enable Spaniards to eat cheap protein produced in Spain with inputs (with the exception of soya and a large proportion of maize) from Spanish agriculture. However, this combination of factors was also possible as a result of the actual characteristics of the Spanish countryside (soil and climate) and to the familiarity that emigrants from the country had with pork. It remains questionable whether this re-orientation of agriculture could have been achieved so quickly in a democratic Spain, and whether its speed and thoroughness should be seen an aspect of the totalitarian regime of the Franco years. It is perhaps this political context that enabled Spain's trajectory of agricultural development in the third quarter of the twentieth century to be different.

Book Reviews

Britain and Ireland

SUSAN OOSTHUIZEN, *Tradition and transformation in Anglo-Saxon England. Archaeology, common rights and landscape* (Debates in Archaeology, Bloomsbury Academic, 2013). xii + 251 pp., 12 figs. £55.

This book joins a series of recent studies that have sought to explore the origins of landscapes characterized by open fields, and in particular asked why they became the dominant form of land management in England's 'central province' but not elsewhere. In the past, archaeologists and historians have tried to explain this in terms of a variety of factors, such as population density, the nature of lordship, the natural environment, and the character of landscape and society in the early medieval period (just before the villages and open fields were created).

Oosthuizen's study is a development of the latter approach, setting out to explore the possibility that there was long-term continuity from prehistory through to the early medieval period in the collective structures of managing grazing in what she refers to as a 'common pool resource'. The book begins cautiously. Having made the simple observation that there are similarities in the physical characteristics of areas of permanent pasture in the late prehistoric and Romano-British periods and areas that in the later medieval period are known to have been commons, Oosthuizen correctly notes that '[t]his is a long way … from establishing the proposition that prehistoric and Romano-British cultivators utilised and managed their grazing lands in the same ways as their medieval successors' (p. 29).

Unfortunately it is not long before this caution is abandoned and it is suggested that 'the collective management of pastoral landscapes under common rights may represent a continuous tradition from prehistoric into early medieval England and after' (p. 42) and that 'it follows, then, that if at least some prehistoric and Roman arable was laid out in open fields subdivided between a number of cultivators, then they were probably managed within a CPrR [common property regime, i.e. a collective institution that governed common pasture and open fields]' (p. 78). These are bold claims, that both pasture and arable were managed collectively in the late prehistoric and Roman periods, and that the collective arrangements in the medieval period show continuity from the late prehistoric and Roman periods. A closer inspection of the evidence presented does not convince this reviewer.

It certainly was true that there were extensive areas of permanent pasture during the late prehistoric and Roman periods – this is well known – but that these pastures were grazed communally in a continuous tradition from the prehistoric through to the medieval period is to my mind unproven. There is simply no evidence that the complex customary arrangements documented in the medieval period existed in these undocumented prehistoric times, and the potentially important alternative of hefting – that does not even appear in the index – is considered in just a single line (p. 34). Then on p. 77 we are told that there is evidence for Roman strip fields, but without sufficient critical assessment of the primary data for what is only a small number of sites. Indeed, a closer examination of detailed published reports reveals that what are indeed long, narrow Romano-British fields cannot have been open fields with the regulated common grazing that was so characteristic of the Midland system (at Royston Grange, for example, the fields are defined by substantial walls, and on the Gwent Levels by wide and deep water-filled ditches). There are other cases where details are simply incorrect, and the referencing wrong. In Figure 4, for example, we are told that a sub-circular open field at South Brent in Somerset is documented in a late seventh-century charter but this is simply not true: the estate is indeed documented at that date, but not the open field (to compound this error, the reference given in the caption is incorrect, and is for an interim note on excavations at a totally different place in Somerset that makes no reference to South Brent). On p. 76 we are told that there were 'sizeable curvilinear Roman fields on the Gwent Levels … subdivided by narrow ditches into long narrow strips': the reference ('Rippon 1996'), however, does not appear

in the bibliography, but this reviewer can be confident in saying that curvilinear fields on the Gwent Levels (a reclaimed coastal marshland) are in fact medieval and are separated from the Romano-British landscape below by a thick layer of sterile alluvium (as is clearly explained in my *Gwent Levels* [1996]).

In summary, the idea that there were extensive permanent pastures in Roman Britain is well known. How these pastures were managed is, however, impossible to say without documentary records but communal regulation is one possibility. That there was a 'continuous tradition' from the prehistoric through to the medieval period is, in the mind of this reviewer, unproven (and unprovable), and the idea that there were open arable fields in Roman Britain is simply not supported by the extensive published evidence, which instead suggests that fields in this period were small enclosures defined by banks, walls and ditches. Overall, this book presents a novel hypothesis, but has not marshalled sufficient convincing evidence.

STEPHEN RIPPON
University of Exeter

JAMES DAVIS, *Medieval market morality. Life, law and ethics in the English marketplace, 1200–1500* (Cambridge University Press, 2011). 514 pp., 29 figs., 17 tabs. £65.

In recent years, there has been a sad tendency, chiefly among cliometricians, to approach various topics in economic history through the prism of anachronistic econometric models. Such an approach means a painful sacrifice of the historical context, which, in many cases, is dismissed altogether. The current book is an important reminder that complex themes in economic history cannot be fully appreciated unless broader historical and philosophical contexts are considered. James Davis's *Medieval market mortality* is a first-rate study of a highly important, yet somewhat understudied topic. Broadly speaking, this book looks at the impact of various medieval concepts and commandments, as shaped by theological writings, on market regulation and activities in late medieval England.

The book comprises four (very) long, yet straightforward, chapters. Chapter 1 deals with contemporary perceptions of and attitudes towards retail traders. The generic coverage of sources is truly impressive: they range from literary texts, through theological writings and sermons, to works of visual art. Davis finds that petty traders were regarded as greedy and somewhat sinful elements within the society, who tended to profit from their trade by abusing and deceiving their clients. Such behaviour was most damaging to the common good of the community and stood in a sharp contradiction to social and religious morals of those days. The cunning and deceitful nature of traders, sometimes bordering on the deadly sin of avarice, prompted the community and the authorities to treat them with suspicion, which is reflected in the writings of late medieval philosophers and theologians. Just as for other sinners, the only way to salvation for greedy traders was repentance (achieved through restitution of gained goods and generous donations to the Church).

Chapter 2 looks at a set of laws and regulations enacted to restrain and control traders. Such legislation was passed on both the macro-level (royal statutes) and the micro-level (borough ordinances, guild regulations), and included a series of mechanisms to ensure relatively fair trade. These included regulations of public marketplaces, trade on Sunday, public order and sanitation, weights and measures, coinage, bargaining, credit, prices, usury and, naturally, the ubiquitous Assize of Bread and Ale. The discussion of the latter occupies 15 pages (pp. 233–48) and it provides a most authoritative treatment of the subject. Instead of focusing on the contents of the original Assize, Davis discusses its changing character across space and time. In all cases, trading legislation is to be understood not only in broader socio-political and economic perspective, but also in the context of religious and moral norms and views of those days.

Chapter 3 studies the behaviour of market traders within a local context of Suffolk (one of the most commercialized and 'market-ized' counties in England), focusing on three market loci: the small market towns of Newmarket and Clare and the borough market of Ipswich. Particular attention is given to the implementation of the Assize of Bread and Ale and other regulations on trading transgressors. As Davis shows, in many cases local authorities were caught in the dichotomy between the duty to penalize blatant transgressors and the practical need to let the perpetrators of minor frauds off without penalties. It should be borne in mind that urban markets were controlled and regulated by the town elites, consisting, *inter alia*, of merchants and producers. This, in turn, may explain their lenience towards petty transgressors, to ensure that business went on as usual. This fact reflects the gap between the theological, moralist and legal basis of market morality and its actual implementation.

A much shorter and less detailed Chapter 4 considers the continuity of market morality into the early modern period. Here, Davis draws upon the works of Keith Wrightson and E. P. Thompson, stressing the renewed and elevated concerns about trade, greed and market

morality in the Tudor and early Stuart eras. Following Thompson, Davis places the criticism towards market traders in socio-economic reality of the early modern period, marked not only by social mobility and stratification, population growth, and the rise of consumerism, but also by impoverishment and outbreaks of famine. These changes brought about a harsh response from some Anglican preachers and moral philosophers, who stressed the immoral side of market activities. Chapter 4 is followed by a short conclusion, nicely wrapping up the main points of the book.

There is no doubt that this book has many merits. First, it is impressively interdisciplinary in its nature, incorporating a wide array of sources and perspectives, literary, statistical, legal and visual alike. Second, despite its potential to have been restricted to the narrow realm of numbers and figures, the monograph is imbued with human and cultural dimensions: thus, we are not only told how many amercements and ale-regrating offences were committed at Newmarket in the early fourteenth century, but we are also told how the same transgressions were perceived, theologically and legally. This connection between purely economic and cultural factors, studied so well by Davis, will undoubtedly set new scholarly standards. Third, the monograph is based not only on a solid bibliography of secondary works, but also on a fair number of unpublished archival sources, deriving from 15 different repositories (14 in England and the Huntingdon Library in San Marino, California).

Any shortcomings are minor and they in no way detract from the excellent quality of the book. For instance, Avner Greif is curiously misspelled throughout the book as 'Avner Grief'; chapter 2 focuses primarily on the urban environment, and one wonders what the situation was on rural manorial markets; in chapter 3, one might wish to see a geographic comparison with other regions in England (it is unfortunate that the local case studies were restricted to Suffolk). All the same, this is an unquestionably first-rate contribution to scholarship and, as such, the author is to be lauded on his achievement.

PHILIP SLAVIN
University of Kent

TOM WILLIAMSON, ROBERT LIDDIARD and TRACEY PARTIDA (eds), *Champion. The making and unmaking of the English Midland village* (Liverpool University Press, 2013). xii + 250 pp., 11 figs, 68 illus. £70.

Academic ideas come in and out of fashion, and this important study by Williamson, Liddiard and Partida represents a major challenge to orthodox thinking with regard to the origins of villages and open fields. In particular it makes the case for a return to environmentally deterministic explanations for past human behaviour. This book is one of a pair resulting from a major AHRC-funded project, which have mapped the landscape of Northamptonshire in remarkable detail in *c.*1300 and *c.*1770. The other book – Tracey Partida, David Hall, and Glenn Foard, *An Atlas of Northamptonshire: the medieval and early-modern landscape* (Oxford, Oxbow Books, 2013) – contains detailed maps that reconstruct the open fields and other land uses at these two dates, and a discussion that broadly adheres to the now established view of how this landscape evolved. Williamson *et al.*'s *Champion. The making and unmaking of the English Midland village*, in contrast, presents a radically different hypothesis.

Northamptonshire was chosen due to its excellent source material – archaeological, cartographic, and documentary – but in particular because of the remarkably detailed and extensive research by David Hall, who had reconstructed the layout of the county's open fields on a series of Ordnance Survey 1:10,560 maps. In the AHRC project those sheets, along with a variety of other source material, were digitized in GIS and this allowed the series of illustrations in these two volumes to be prepared. These landscape reconstructions are a truly outstanding piece of scholarship. The introduction to *Champion* includes an extremely useful historiography and description of the project's methodology. In Chapter 2 'Structures of Landscape' one gets a flavour of the underlying philosophy of this book with great emphasis placed upon geology, soils, climate, and topography and the rejection of 'vague "social" explanations for regional variations in settlement and field systems' (p. 44). This approach of challenging orthodoxy continues when considering the evidence for landscape character before the creation of open fields. The traditional 'Northamptonshire model' is that several scattered farmsteads and hamlets associated with Early to Middle Saxon pottery were replaced around the eighth to tenth centuries by a single nucleated village (i.e. a process of nucleation). Williamson *et al.* present a series of statistics to challenge this (p. 57), suggesting that in 51 per cent of parishes there are no known sites associated with Early to Middle Saxon pottery, and in 28 per cent of parishes there is just one. This data would indeed appear to suggest that the widely accepted 'Northamptonshire model' for settlement nucleation only appears to work in the remaining *c.*20 per cent of parishes, although to make this case additional information is required, most notably the

percentage of each parish that has actually been field-walked, and the technique of field-walking that was used (which varies from grid-walking, which should have detected every site, through to widely spaced line-walking, which is bound to have missed some sites). If, for example, only 25 per cent of the parish was walked in a systematic way, and just one site associated with Early to Middle Saxon pottery was found (the remaining areas being pasture, woodland, and under modern settlement, or only walked in an unsystematic way), then statistically there are probably four sites associated with Early to Middle Saxon pottery in each parish. The Williamson *et al.* hypothesis, that there was no process of settlement nucleation is, therefore, unproven, considering the data presented and the way it is used.

In addition to rejecting nucleation as the process behind village origins, Williamson *et al.* also set out to shatter various other long-held views about champion landscapes. They argue that in Northamptonshire most open fields only attained their maximum extent and regular form in the post-Conquest period. They reject the idea that large numbers of villages were created through conscious planning, arguing instead that most were created through gradual growth from relatively small Saxon cores, that areas with a regular layout result from the spreading of villages across the strips of earlier open fields, and that elsewhere village plans were shaped by the underlying geology. The assertion that 'physical geography was thus the principal determinant of settlement form' will certainly raise eyebrows, but the evidence here is well presented and well argued. Another distinctive contribution of this book is in mapping the likely extent of all the major land use types (arable, permanent pasture, meadow, woodland, and heath) across the whole of Northamptonshire (Plate 38), although to understand the key conclusion – the extent and significance of non-arable land use even in this, one of the most 'champion' landscapes in England – one should look through the more detailed maps in the *Atlas of Northamptonshire: the medieval and early-modern landscape*.

Overall, this is a book that stimulates a huge range of emotions: surprise (as many traditional ideas are challenged), contemplation (as the implications of Williamson *et al.*'s hypotheses are profound), but also some frustration (as, in places, the evidence base and use of statistics should have been stronger). *Champion* has to be read alongside the *Atlas*, but together they form an important and thought-provoking piece of scholarship.

STEPHEN RIPPON
University of Exeter

RICHARD BRITNELL, CLAIRE ETTY and ANDY KING (eds), *The Black Book of Hexham. A northern monastic estate in 1379 with additional documents, ca. 1113–1536* (Hexham Local History Society, 2011). x + 299 pp. £18 p/b available from the Treasurer, Dotland Farm Cottage, Hexham, Northumberland, NE46 2JY.

The Black Book of Hexham is a rental of the lands belonging to Hexham Priory, dating from 1379. However, it contains more detailed information than one would expect from a simple rental, and consequently the editors rightly decided that the manuscript could be likened much more to an estate survey, providing extensive details about properties, estate assets and individual holdings. As such it offers a detailed and fascinating snapshot into an ecclesiastical estate of the late fourteenth century.

The whereabouts of the original manuscript are currently not known, and the editors worked instead with an edited version, which represented a mere transcript of the original, in abbreviated Latin, which was published in 1864–5. In addition, some extracts from the Black Book prepared around 1841 were deposited in the Northumberland Record Office. The editors of the current volume, commissioned by the Local History Society of Hexham, had the unenviable task of reconciling the invariable discrepancies between the surviving transcriptions. Considering these challenges, a thoughtful and careful edition of the Black Book of Hexham, now fully translated, has been crafted.

Useful maps illustrate the locations of the far-flung properties of the Abbey, which together made up what was called Hexhamshire, an estate encompassing properties across a number of Northern counties, including Northumberland and Yorkshire. The book contains a very helpful glossary of English words. There is also a detailed list of properties acquired by Hexham, as well as a gazetteer listing properties mentioned with National Grid references. The introduction is clearly structured, with subheadings describing in detail the estates of the Augustinian Abbey and the editorial process.

The Black Book itself is a treasure trove of evidence for a whole variety of matters pertaining to the daily running of an estate as well as the individual manors. The documents provide fascinating insights into the economy of the estates of Hexham and their social structures. It contains information about tenurial structures and lord-tenant relationships. It shows for example that even at this late stage, when other lords were starting to abandon their attempts to enforce suit at mill, Hexham's lord still noted that tenants owed suit of the lord's water mill at Hexham, or they had to face a

penalty of the forfeiture of 'a horse with a saddle', no less, 'to the lord' (p. 35). The documents also contain details of acreages held, rent and service obligations. There is information about a myriad agricultural activities and by-industries such as brewing. Very close and detailed information about the location of tenements and fields, with many identified by fieldnames, will also be of interest to landscape historians. The Black Book also describes rights of common, and provides details of the demesne lands.

In addition to the main survey, the editors have very helpfully included further documents relating to the estate, such as charters and royal commissions. As an interesting point of comparison to the fourteenth-century Black Book, the survey of the Hexham estates conducted at the time of the Dissolution is also provided.

Such editions of primary sources are very welcome as teaching tools for undergraduate or postgraduate students, but also of great interest to the general reader and to researchers. At £18 the paperback also represents excellent value for money. Overall this is one of the best ones I have seen. It is very user-friendly, carefully researched and executed, and contains a fascinating collection of documents.

MIRIAM MÜLLER
University of Birmingham

CHRISTOPHER DYER, *A country merchant, 1495–1520. Trading and farming at the end of the middle ages* (Oxford University Press, 2012). xiv + 256 pp., 32 figs., 24 tabs. £65.

Christopher Dyer's latest book is partly biography and partly regional history. It charts the life and fortunes of John Heritage, a prosperous yeoman farmer who became a small-scale wool merchant in the late fifteenth and early sixteenth centuries. While rehearsing the key moments in Heritage's life, it also narrates the history of a number of small towns and villages in Gloucestershire and Warwickshire where Heritage lived and traded. The book's primary concern is to establish whether or not Heritage and his contemporaries lived through an era of dramatic change and therefore exemplified the kind of new social and economic order that has often been postulated in the secondary literature.

Dyer's answer to the question is somewhat equivocal. As he notes, it is certainly possible to see in John Heritage some of the transformative forces that have led generations of historians to differentiate the medieval from the early modern world. Heritage was an innovative famer who embraced enclosure, actively engrossed the holdings of neighbours and fellow villages, farmed on an ambitious scale and rejected traditional methods of open-field agriculture. He sold his familial holding without apparent compunction, left his native village to start a career in trade, and interacted with a network of entrepreneurs that extended to several counties as well as London. Perhaps most significantly, he kept track of many of his business transactions in a personal account book-cum-notebook, which provides the principal source for a reconstruction of his life. He seems to embody the emergent forces of individualism, capitalism, and social mobility that were transforming the social and economic traditions of previous centuries and ushering in a dynamic new world.

While documenting some of the contours of this new world, Dyer also suggests that the legacy of the past was much more substantial than a straightforward biographical approach might suggest. The world around Heritage was unquestionably changing, but the change was neither particularly fast nor inordinately extensive. The urban and rural communities of the period look very much like their precursors in the fourteenth and fifteenth centuries. Likewise, although enclosure and a heightened emphasis on pastoral agriculture can be found in some villages, in many others agrarian practices were still largely based on traditional open-field husbandry. Heritage's suppliers and customers were largely peasant farmers with value systems deeply rooted in traditional forms of piety and communal engagement. Nor had the social tensions of the medieval world faded from the scene. Lordly power still circumscribed many features of peasant life and communities were still dominated by elite groups of local landholders, much as they had been for centuries. Very often, Dyer contends, the change that can be observed in the early sixteenth century was a by-product of the severe depopulation that followed the Black Death, not the result of new mindsets or cultural ruptures that took hold during Heritage's lifetime.

In addition to addressing grand historical narratives of change and continuity, the book also functions effectively in conveying new empirical facts about the early sixteenth century. Particularly valuable material can be found in the description in Chapter 4 of how Heritage ran his wool-trading business. Heritage produced wool on his own lands and had dealings with some members of the gentry, but his main suppliers came from the ranks of the peasantry. Entries relating to purchases and subsequent payments make up the bulk of the account book. Dyer is able to use these entries to recreate a peripatetic country merchant's business techniques in considerable detail, including such matters as how Heritage handled wool of varying quality, how he dealt with liquidity problems caused by the period's shortage of coin, where he found suppliers,

and how he turned an assortment of small acquisitions into the sacks that made their way into international commerce. Historians are not afforded many opportunities to reconstruct rural commerce in such depth and Dyer has made the most of his archival discovery.

Throughout his long and distinguished career, Dyer's work has been characterized by clear presentation of arguments and accessible prose, and this book is no exception. The publisher has sought to broaden the book's appeal to a general readership by including a large number of photographs of places discussed in the text and providing other useful ancillary material. Biography and agrarian history have traditionally not been closely associated with each other, but in the right hands their juxtaposition can produce something that is both informative and elegant, as Dyer's book clearly demonstrates.

JAMES MASSCHAELE
Rutgers University

STUART A. RAYMOND, *The wills of our ancestors. A guide for family and local historians* (Pen & Sword Family History, 2012). 199 pp., 32 illus., 1 map. £12.99.

This useful volume has been published as part of Pen & Sword's series for researchers in family and community history. The volume combines the history of probate jurisdictions, with a discussion of the various kinds of probate records, and then provides a guide to searching and accessing these materials in the various national, regional and local repositories into which they have been organized.

The study begins with a discussion of the origins of wills, the probate process and a description of the various ecclesiastical probate jurisdictions. The latter can be very complex, and baffling to the newcomer, as are the patterns of usage by testators, so chapter 2 provides a simplified, but very helpful, overview of these. As Raymond notes, any local study is likely to involve the necessity of delving into the minutiae of sub-county ecclesiastical peculiars and other jurisdictions, and testators' propensity not to act in entirely predictable ways! However, this introduction highlights these potential pitfalls.

Raymond then moves on to considering other kinds of probate documents, notably the probate inventory, but also sometimes neglected documents, such as probate administrations, accounts and probate litigation. For many testators, all that survives is the administration bond, recorded in the bishop or archdeacon's probate registers, and, as Margaret Spufford showed more than 20 years ago, to build up a realistic picture of net worth, the probate inventory (the moveable assets transferred to the executors) should really always be read alongside the probate account (the liabilities on the estate at the time of decease).

The discussion of probate repositories is very helpful, particularly the introduction to the Prerogative Courts of Canterbury and York, in the National Archives and the Borthwick Institute. These discussions are illustrated with screen-shots of the electronic catalogues for such institutions. While these are very helpful to the newcomer, the danger is that Web sites and electronic catalogues can change with tremendous rapidity, rendering these descriptions obsolete. No doubt, Pen & Sword have factored this into their plans for a series of updated editions!

As noted, these volumes are aimed at new researchers and a non-professional market. For more experienced family and community historians, as well as academics, their strength lies in offering a handy and comprehensive gathering of information, which can be recommended as a guide to the novice. As such, they remain good value and deserve a place on many a shelf.

HENRY FRENCH
University of Exeter

JOHN HARE, JEAN MORRIN and STAN WAIGHT (eds), *The Victoria History of Hampshire: Mapledurwell* (Victoria County History Publications, Institute of Historical Research, University of London, 2012). 85pp., 28 illus. and maps. £7.

The familiar 'red book' volumes of the *Victoria County History* (VCH) were the product of an ambitious scheme started in 1899 to 'trace the domestic history of the English Counties back to the earliest times' and to include 'all those factors which tell of the progress of England from primitive beginnings to a large and successful empire'. With this rousing aim, Volume I, for Hampshire and the Isle of Wight, was the first to be published in 1900. It focused on natural history and pre-Domesday history for the whole county. Four subsequent volumes covered additional general topics and then individual manor and church histories for every parish in the county. The series was completed with an index in 1914. Progress elsewhere was patchy, and only some dozen counties were ever completed. The whole VCH undertaking continued slowly throughout the twentieth century, and since 1933 work has been co-ordinated by the Institute of Historical Research. A grant in 2005 from the Heritage Lottery Fund provided added impetus, and county groups now focus either on researching parishes not previously covered, or – as in Hampshire – rewriting and updating those published a century ago.

In the twenty-first century there are perhaps questions to be asked of the VCH in general about its

intended audience; the nature of its product; and thus its modern function. Particularly around the Millennium there was a rush of parish histories developed by local communities; some of which are now on Web sites where they can be regularly updated and modified. Such sites can make use of a wider range of visual and audio material and be readily accessible to international users. Inevitably the content and standard of scholarship is variable, but the British Library has since 2004 been selectively archiving those sites which it judges to be representative of British social history and cultural heritage, and which have 'scholarly research value'. It is not clear how this activity might link to the VCH.

Meanwhile, this history of Mapledurwell represents a first publication from the New Victoria History of Hampshire group, which draws upon contributions from both professional historians and local volunteers. Their research is focusing initially upon updating the Basingstoke area, where 1960s overspill expansion produced more change during the previous century than in other areas of the county. As a result, this slim volume represents not so much an 'update' as a completely new parish history. In the original VCH, general topics were covered in county-wide chapters, in which Mapledurwell was given a passing mention for its watercress beds, chalk pits and school. Then, its individual parish entry in Volume IV included only post-Domesday lordship with heraldry; half a page on the church, advowson and tithes; and a few sentences about a charity. In this new book, all aspects of the parish and manorial history are described in chapters covering the history of settlement and population; economic, social, and religious history. There is much scholarly research included, and the work is attractively presented with photographs and map reproductions.

The task of co-ordinating and editing work provided by a wide variety of contributors is notoriously difficult and somewhat thankless. Overlaps, repetition and imbalance of historical detail are bound to occur, and parts of the Mapledurwell volume suffer accordingly. If further parish histories in this series are to follow, they would benefit from a heavier editing hand to reorder some of the content and tighten the narrative. For example, the first chapter on settlement and population embarks upon the history of settlement and buildings before it deals with the inhabitants who created them. When it reaches 'land ownership' it covers only the landlords and one major freeholder, and relegates the copyholders to the later chapter on economic history. The copyholders are needed in the first chapter as they formed the majority in the village from the fourteenth century onwards, and without them the sub-sections on dwellings, population statistics, and manorial courts are confusing. A similar issue arises in the final chapter about religious life which places the thirteenth-century church at the end, so that it is preceded, rather than followed, by all subsequent religious developments such as the Reformation and the arrival of non-conformity. The reproduction of several of the maps needs revisiting as they are far too small to be read and the list of illustrations at the front would benefit from page numbers. Finally, if it is intended to attract a general audience for the book, then a short glossary would clarify terms such as 'demesne', or 'reversion', and that 'moor' in Hampshire refers to marshy riversides and not to heather-clad hillsides. These issues need to be addressed for future publications in the Hampshire series, but the appearance of this first publication is nevertheless to be applauded.

JULIET GAYTON
University of Exeter

PETER LEACH (ed.), *The account books of Richard Wigglesworth of Conistone and his sons, 1683–1719* (North Yorkshire County Record Office Publications, 2012). 56 pp., 3 figs, £6.00; ELAINE JOYNES, *Parliamentary enclosure in Carlton in Coverdale. Theory, practice and outcomes* (North Yorkshire County Record Office Publications, 2012). 28 pp., 4 figs. £6.00.

In these straitened times few record offices have anything that might be called a publications programme, and yet here are two new publications from Northallerton. My old colleague Peter Leach, fresh from his labours revising Pevsner's Yorkshire West Riding North volume, publishes the late seventeenth-century account books of Richard Wigglesworth of Conistone in upper Wharfedale. The re-emergence of these manuscripts is very welcome. They were briefly discussed by Arthur Raistrick in his *Old Yorkshire Dales* (1967). I tried – and failed – to track them down some years ago. Leach's edition is very welcome as showing exactly what Raistrick saw, and for showing how much more there is in them to be exploited. He provides a full introduction, a detailed tabulation of the contents and a full transcript of what are evidently tatty and not always legible manuscripts. (One would have welcomed a photograph of a single page.)

These are not straightforward accounts. Indeed, to call them accounts perhaps flatters them. There are bits of accounts, memoranda about farming, hirings of servants, building costs and township matters including draft township accounts, together with the ubiquitous recipes for animal medicines and notes of cows bulled. Moreover, the books were used after

Richard Wigglesworth's death in 1703 by his sons for their own memoranda through to about 1719. Leach's elaborate tabulation of the contents of the volume sorts all this out. A helpful introduction outlines the contents and identifies some of the people mentioned. For this writer at least there is an element of closure: a mystery is resolved, and Leach offers a definitive account and transcript of an enigmatic document which I and others can get down and exploit.

Production standards are much higher in Dr Joynes's volume, which has been properly set where Dr Leach's looks as though it has been set from the author's camera-ready copy, with a much-too-small typeface employed for the introduction. Carleton in Coverdale is, in a sense, only just over the hill from Conistone: certainly one may assume a broadly similar economy and society. There is a more direct similarity in that the manorial rights were bought out by the tenants, albeit at very different moments. This is a businesslike volume, which looks at the parliamentary enclosure of the stinted Carleton West Pasture and the higher and unstinted Carlton Moor between 1808 and 1815. There appears to be no body of documentation explaining why then, or even why at all, merely the award of 1815. A few bits of estate correspondence of the Chaytor family are cited, but, when one comes to a promising section entitled 'the advocates of enclosure', we have extracts from the usual advocates, Young, Marshall, Tuke. Hence we have no special insights here except for some throwaway comments that William Chaytor was interested in acquiring high moorland for its value as grouse shooting. The layout of roads, allocation of land and subsequent history of the allotments are all traced. Dr Joynes ends by calling for other 'similar detailed studies of parliamentary enclosure in other Dales townships. It seems to me that the local historian has a valuable service to perform in comparing the broad-brush picture with what actually happened on the ground'. I entirely agree, but historians need better documentation that is on view here to come up with compelling explanations as to why it was thought worth building all those long straight walls, which now stand largely derelict.

R. W. HOYLE
University of Reading

JON STOBART, *Sugar and spice. Grocers and groceries in provincial England, 1650–1830* (Oxford, 2012). xiii + 303 pp., 48 tabs., 8 figs. £65.

Just over a hundred years ago, *The practical grocer: a manual and guide for the grocer, the provision merchant and allied trades* was published in four volumes. It is interesting to compare the approach of its contributors with that of Jon Stobart in his *Sugar and spice*. Although the treatment of grocery and grocers in the two works is very different, the groceries themselves have changed surprisingly little; hardly any have disappeared, with only some – not so many as one might think – added. *The practical grocer* includes authoritative articles on a wide range of products that any scholar working on the topic would be unwise to ignore. Like Stobart, it puts tea at the forefront of grocery, followed by other hot drinks and sugar. However, where *The practical grocer* sees these goods as established – and classless – Stobart explores how they morphed from novelty to part of how polite society presented itself. Largely because of a lack of evidence, he is weakest on the uptake of tea among the poor.

Stobart's concentration on such a limited range of groceries is a pity, as it directs too much attention towards new imported goods and away from innovative changes in existing home production. Mustard, for example, was formerly sold mainly as the seed but, after the late 1720s, it was also found in the shops as the refined and more-or-less branded 'Durham mustard'. The home manufacture of soap developed on a quasi-industrial scale so making it available to a broad market, replacing for many the less satisfactory lye. Simultaneously, developments in making candles enabled virtually all to abandon the malodorous rush light.

George Dodd's *Days in the factories* published in 1843, not much more than a decade after the end of Stobart's chosen period, shows how rapidly the industrialization of groceries progressed during the latter part of his period. Dodd included a chapter entitled 'A day in a sugar refinery' and another at a 'Soap and candle manufactory', as well as similar chapters on the large-scale production of tobacco and vinegar. The manufacture and processing of these groceries in what Dodd perceived as quasi-factory conditions must have had considerable effects on how these products were marketed and consumed in the early nineteenth century. None of these innovations are explored.

Apart from this relatively minor quibble, Stobart has produced a masterly synthesis of existing research, pursuing such themes as the old against the new in marketing practices, consumers' perceptions of luxury against comfort and convenience, and the importance of polite sociability both in the home and the shop. Whilst former findings were sometimes based on limited evidence, Stobart has backed his conclusions with solid data covering what groceries were in the shops (and both where and when), before passing on to how they were deployed in recipe books and in personalized bills of fare. In the process he has investigated

the production and consumption of a few groceries in early modern England from, as it were, 'the cradle to the grave'. There has been no such work in the literature of retailing and consumption, and it will be valued accordingly.

Having recommended *Sugar and spice* wholeheartedly for what it does cover, I must take issue with aspects of its methodology. Too many of his illustrative examples are taken as given in secondary sources and then not always accurately. For example, Samuel Finney's *History of Wilmslow* is not quoted from the original but from T. S. Ashton's *Economic history* (1955, pp. 214–6), Stobart claims Finney was a cotton dealer (p. 93), which he was not, and implies that Finney's industrial workers were barely distinguishable from workhouse inhabitants, except for being in work, whereas they were much more comfortably circumstanced. The old woman depicted in the 'Cottage Interior' by the genre painter, William Redmore Bigg, was not poor by the standards of the day, having among her possessions a warming-pan and a comfortable chair, with arms. Nor is it clear her loaf was of white bread, though other sources suggest it probably was. Stobart extrapolates too much (p. 273). Incidentally, Stobart neither references the picture nor indexes the painter. There are too many such minor slips, which should perhaps have been picked up by the editor.

Enough of minor criticisms. Accepting that it focuses too narrowly on some types of grocery, *Sugar and spice* fills a gap in the literature. It deserves to be widely read and I am only sorry I did not see a copy before my own text went to the publishers.

NANCY COX
University of Wolverhampton

TIM GATES (ed.), *'The Great Trial'. A Swaledale lead mining dispute in the court of Exchequer, 1705–1708*, Yorkshire Archaeological Society Record Series, CLXII (Boydell Press, 2012). lv + 429 pp., 6 figs. £50.

Anyone who has ever wrestled with a set of Exchequer depositions in the National Archives is likely to approach this volume with a healthy degree of respect. Deciphering hundreds of undifferentiated rows of scribal hand, written on now-very-grubby table-cloth-sized sheets of parchment, each seemingly with a mind of its own, is a test for the patience as well as the eyesight. In exploring the records of the dispute over the Swaledale lead mines between Reginald Marriott and Thomas, Lord Wharton, Tim Gates has read, transcribed and edited two complete Exchequer cases between the parties, incorporating a total of 317 depositions by witnesses, involving over 1500 answers to individual questions posed between 1705 and 1707. In addition, because of his desire to reproduce the full cause papers, Gates has transcribed a further 34 affidavits made on behalf of the parties. This has required the analysis and transcription of 65 different components, beginning with the initial bills of complaint, encompassing the answers, affidavits, orders for a commission to hear the evidence, agreement of the interrogatories, depositions of witnesses, reports and exceptions made by each side to evidence, and the final decrees. These occupy 386 close-printed pages, and must amount to somewhere in the region of 200,000 words.

The case itself was a characteristic Exchequer complaint. Reginald Marriott had been granted a Crown lease of the lead mines of Grinton Whitaside and Harkerside in Swaledale in 1696. In 1705, the Whig grandee, Thomas Lord Wharton organized a ride of the bounds of his claim, to ensure that Marriott did not encroach across the moors between Harkerside and West Grinton, by 'proving' these boundaries before a series of local witnesses. A few days later, Wharton ordered the digging of lead mines on his side of the moors, to prevent Marriott encroaching. As Gates explains, Wharton was motivated to defend his claim because the price of lead had ballooned between 1702 and 1705, making such efforts (and the vast expense of this extensive litigation) worthwhile. However, as the price of lead subsided after 1708, so did Wharton's interest in this case. The case turned on the always slippery issue of manorial boundaries across moorlands, and the status of the lease title granted to Marriott. The nature of the evidence collected about these rights sometimes seems to confirm Mark Twain's definition of a mine as 'a hole in the ground surrounded by liars', but the testimony of many of the miners, and their wives and children illustrates the existence of a more thoroughly proletarian mining community than that described by Andy Wood in the Peak District.

The one unusual feature was that at the end of the equity proceedings in Exchequer, the decree pronounced that the matter should be resolved by a trial at common law, involving a jury of Yorkshire freeholders, rather than a determination by the Exchequer barons. This may have been because such a determination of the case was thought to carry greater local assent than a decision made in Westminster. As Gates shows, this opened up the case to a degree of undue influence, and there is evidence to suggest that Marriott tried to induce at least one of the jurors with an attractive offer of a lead smelting mill in the area. Wharton's side attempted to retaliate by introducing a new bill of exceptions just as the jury were due to deliver their verdict. In the end, the jury decided on

behalf of Marriott and the Crown's lease. Although this was challenged in law and on the ground by Wharton's party, the declining price of lead quickly reduced the value of this prize.

This amounts to a fascinating and extremely well-documented case, although it is by no means exceptional in size or detail within the annals of the Exchequer in the eighteenth century. This study will be of interest to at least three distinct readerships. The first will be those interested in the history of Swaledale, who will find nuggets of information on life, livelihoods and landscape in the area in this period that will not have turned up elsewhere. That said, even the most ardent enthusiast for the history of Yorkshire might struggle to climb to the summit of this mountain of evidence. The second will be researchers and students of economic, social and landscape history, particularly those interested in understanding the shifting allegiances and perspectives within competing communities and their clientage relationships. The voluminous evidence available in this study will allow the subtle intricacies of these connections to be reconstructed by further painstaking research. The third will be those who wish to familiarize themselves with the workings of the Exchequer court, and who will not find a better 'worked example' available in print. Perhaps the only regret is that such a vast body of evidence is not readily accessible (and word-searchable) online.

This point raises one further issue. The publication of such a large and detailed volume is a remarkable testimony to the Yorkshire Archaeological Society's commitment to local records and their history. The publication values, editorial standards, glossaries and footnotes reflect the continual refinement of standards over the century-and-a-half since the foundation of this county history society and its many peers. One wonders what will become of such endeavours in the era of open access, when electronic publication ought to become easier, but when the charges that help fund such activities will disappear. Hopefully, heroic endeavours like this one will continue, done as they are for love of the subject, rather than in the hope of financial reward. As long as they do, we will certainly all become richer as a consequence.

HENRY FRENCH
University of Exeter

ARTHUR MCGREGOR, *Animal encounters. Human and animal interaction in Britain from the Norman Conquest to World War One* (Reaktion Books, 2012). 512 pp., 161 illus. £40.

Arthur McGregor – who describes himself as an archaeologist by training, who worked with animal finds, and as a boy grew up on a livestock farm – was a senior curator at the Ashmolean Museum, Oxford. He has expertise in the culture of collecting and experience in working with material culture. All of this experience is brought to bear in what turns out to be a book of considerable scope. It is meant to be a lightweight text aimed at the general reader; he apologizes in the introduction for the lack of footnotes and sets out to simply tell the story of human-animal interaction in Britain from 1066 to 1914–18. However, there is more to the book than this might suggest. This is a very well-researched popular history indeed, as demonstrated by its lengthy bibliography: it is a popular history with complexity and depth.

Recognizing its multidisciplinarity, McGregor has set out to write an accessible account that draws on the subject matter, though not the theory, of the emerging field of animal studies. As suggested in its title, *Animal encounters* covers all the possible facets of human-animal interaction, for the period. It tackles the use of animals for sport, food, and power, and its chapters are largely thematic, apart from the first, which is entitled 'The ubiquitous horse'. Adopting a multidisciplinary approach allows McGregor to address topics normally confined to one or another subset of history; for example, with a nod to environmental history he considers the impact of cold winters to be just as significant for animals as their experience of human handling, as well as for humans themselves in the form of famine caused by short growing seasons and wet summers. The very broad sweep of time selected also allows him to see patterns emerging beyond the normal ranges of periodization, so that we see how rabbits, which were once fit for kings, being scarce and husbanded in warrens, eventually, by the nineteenth century, become poor man's meat as their numbers grew.

The book does not privilege its animal subjects. As noted, it is about the uses to which they have been put by humans and the relationship between humans and animals, rather than the animals in and of themselves. However, within each chapter, a very wide range of animals are represented; apart from horses and rabbits, the list includes pigeons, deer, badgers, cockerels, falcons, mules and donkeys, bees, fish, swans, and farmed animals, as seen in agricultural, pastoral, proto-industrial and urban contexts. Agriculture is treated as significant for its impact on the domesticates discussed – oxen, Longhorns, sheep etc. – but also on wild populations of other animals, such as migrating birds. In the process of capturing such a diverse set of narrative over such a broad sweep of time, we might expect human history to fall by the wayside, but this too is present in the form of drovers, breeders, and park

keepers, not just kings. And, the human, agricultural history is astute and well informed.

Beautifully illustrated, this is a rich text that penetrates its subject with deceptive ease. In it our own story is reflected back to us through the lens of the animals that we have worked with, both kindly and unkindly, since the Norman Conquest. This is a truly mesmerizing account.

KAREN SAYER
Leeds Trinity University

B. J. DAVEY and R. C. WHEELER (eds), *The country justice and the case of the Blackamoor's Head: the practice of law in Lincolnshire, 1787–1838*, Lincoln Record Society, 102 (Boydell Press, Woodbridge, 2012). 187 pp., 12 illus. £30.

The Lincoln Record Society publishes volumes in which the major part of each book is devoted to an edition of the text of an original document, accompanied by brief introductory notes. This latest is a book in two parts, each illustrating a different aspect of the dispensing of local justice in late eighteenth- and early nineteenth-century Lincolnshire.

The first, edited by Brian Davey, reproduces the justice books of Thomas Dixon (1729–98), which he kept between 1787 and 1798. Dixon was a tenant farmer from Riby near Grimsby, who sat on the magistrates' bench and was the only Lincolnshire JP to leave any record of his justice work done outside the usual sessions. His three notebooks, kept in the Lincolnshire Archives, chronicle those cases on which he sat alone, often in his own house, dispensing summary justice whenever possible. Cases include petty theft, assault and fathering bastard children, with sentences ranging from a public whipping in front of the courthouse to transportation. The introduction explains the legal background to summary justice in the late eighteenth century, with biographical notes on Thomas Dixon and his career as a magistrate. There is a section on the type of offences he heard, including 'master and servant' cases, which he frequently encountered. In addition to the contents of the notebooks, Davey has added relevant extracts from other sources, including the local press, Lindsey Quarter Sessions minutes and accounts of parish officers. The magistracy of Lincolnshire has already been examined in the context of local government in south Lincolnshire (Kesteven) by Joan Thirsk and nineteenth-century Lincolnshire rural society and county government by R. J. Olney. Dixon's notebooks are unique of their type in Lincolnshire and rare in the rest of the country, and, with Davey's contextualization, we have a valuable primary source made more widely accessible.

The same applies to the second part of the volume, edited by Rob Wheeler, which reproduces the text of papers in a case from 1838 of mutual indebtedness between business partners, Benjamin Hart Thorold of Harmston and John Catton from the Lincoln area. One of Thorold's financial schemes to get himself out of debt was to take advantage of the recently passed Beerhouse Act of 1830 to resurrect a former inn on his estate as a beer house called the Blackamoor's Head and to install Catton, a local stonemason, as manager. Catton was, amongst other things, to sell the ale that Thorold tried to brew, but the arrangement ran into difficulties and an absence of accounts between the two parties caused a dispute. Each took the other to court in the Queen's Bench and the papers reproduced here recount the proceedings of an arbitration held locally in Lincolnshire. They include statements by the parties and witnesses, the arbitrator's brief, a summary of the evidence, and various bills and receipts. These are interesting enough in demonstrating the legal processes in such a case, but the incidental detail of their content throws a fascinating light on a number of socio-economic themes. They touch on social relations between the gentry and tradesmen, the establishment of a beer house in the early years after the Beer House Act, improvements to the River Witham as seen through the eyes of the bankers who provided the labour, and the Scotland-to-London cattle-droving trade, which made use of Thorold's premises for overnight accommodation. The introductory paragraphs to both parts of this volume and the texts of the documents provide a fascinating insight into how the law was administered at a relatively informal, local level in a rural county in the early stages of industrialization.

WENDY J. ATKIN
Lincoln

PETER ATKINS (ed.), *Animal cities. Beastly urban histories* (Ashgate, 2012). xiii + 279 pp., 23 figs, 11 tabs., £65.

This edited collection consists of three essays by the editor, in addition to his introduction, with further contributions from Paul Laxton, Sabine Barles, Takashi Ito, Andrea Gaynor and Philip Howell. It focuses on the use of animals – including livestock, fowl, and dogs – and animal histories within modern urban environs, and the conceptualization of animals, animal products and behaviours in the city as, variously, polluting, dangerous, nuisances or valuable commodities. The particular urban contexts in question include Paris, Edinburgh, London, and the Australian suburbs. Highly theorized, the book draws on the most recent debates within animals studies and makes the case

that the city provides just as rich and complex a history of human-animal interaction as the countryside, if a neglected one.

The contributors are drawn from geography, environmental history, history of technology, and as noted in the preface, the emergent 'animal turn' has affected all of these fields along with sociology and anthropology. Atkins himself is very well known for his work on the shifting definitions and battles over the meaning of milk within food history. However, urban history as yet remains perhaps the least touched within the field of history as a whole, and this collection begins as the corrective to that. As Hilda Kean – who is cited in the collection, though along with other authors not indexed – argued in *Animal rights* (1998), functional animals such as cattle were readily visible in towns and cities, not just in the countryside. In the early nineteenth century, chickens, children's author Mrs Lee observed in 1853, were 'such every-day objects, extending even to London cellars, that they are not thought worthy of observation'. Witnessing cruelty to working animals such as horses, Kean has argued, allowed campaigners to argue for reform, and permitted prosecutions to take place within an emerging legislative framework that aimed to prevent such rough treatment. Observation in this respect, of both humans and animals, lead to new practices when it came to the handling of those animals that remained in the cities, which has been seen as part and parcel of the emergence of modernity. There is then a dominant narrative that suggests the animals were summarily removed and the city cleaned up for human consumption. Certainly, local statutes were often put in place in cities like Leeds to do away with pigs. Before this, as A. B. Reach writing for the *Morning Chronicle* in 1849, observed of Leeds:

> I have plodded by the half hour through the streets in which the undisturbed mud lay in wreaths from wall to wall; and across open spaces, over-looked by houses all round in which the pigs, wandering from this central oasis, seemed to be roaming through what was only a large sty.

For Reach this was about cholera, but the 'history of the flu', Donna Harraway argues 'is unimaginable without the concept of the co-evolution of humans, pigs, fowls and viruses'.

What is perhaps most striking, however, is that, by the end of the collection, the issues raised and the stories told pool together to make us begin to think about the larger issue of the traffic in animals, people, products and ideas between town and country – even about the micro-organisms that exist in the soil of both spaces – beyond the argument of the continuing significance of the (non-human) animal in the city itself. Atkins's chapter on the 'charmed circle' of dung makes these continuities particularly clear, and it is worth remembering that human waste also formed part of this flow. All fertilizing substances were caught up in the wider thrust for 'improvement': when writing about the 200 milkmen of Birmingham, the larger of these setting great store in saving the dung from the 1000 head of cattle housed in the town, James Caird expressed great aggravation about the waste of human town sewage under the new sanitary systems emerging at this time. There was considerable traffic between town and country, not just in the fat of the land, but also in urban waste of all descriptions.

KAREN SAYER
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JONATHAN BELL and MERVYN WATSON, *Rooted in the soil. A history of cottage gardens and allotments in Ireland since 1750* (Four Courts Press, 2012). 224 pp., 43 figs., 19 illus. £22.45.

When I reviewed the previous book by the same authors, which was a more wide-ranging Irish agricultural history (*AgHR* 57 [2009], pp. 147–8), I suggested that they had filled a gap by producing a work about the day-to-day business of farming itself rather than the outcomes of farming, which are often of more interest to agricultural and economic historians. Here, I think they have done it again, but this time in the more rarefied 'do-it-yourself' world of cottage gardens and allotments. This is a slimmer volume, as dictated by the narrower, specialist nature of the subject, but proportionately it is as lavishly illustrated as their previous work. The skills developed by these two retired curators of Ulster Folk and Transport Museum oozes from every page.

For nearly half of the period covered by the book, the subsistence grower in Ireland was a different person to the labourer and others in town and country, who are the subject of the English allotment story. In Ireland he was often more closely associated with the soil for his entire income. It makes the events of the mid-1840s yet more tragic because so often the potato was the main crop being grown. More generally that class of person – known in Ireland as a cottar – rented a cottage and a plot of one or two acres but paid for it at least partly in labour services rather than wholly in monetary rent. They and their families were tied more aggressively to the land both by their work and their need for sustenance. If they grew anything else but potatoes, or raised animals on their plots, it was as often as not to sell on so that they could buy the other necessities of life. The dependence of the Irish cottar on subsistence

cultivation was so much greater than the reliance of the English day labourer on his allotment. The Famine was more or less the final nail in the coffin of this mode of subsistence.

Chapter 1 is devoted to a brief discussion of this cottar system and serves as a reminder that Ireland was different. The remainder of the book becomes a more familiar history of the garden and allotment movement, including a focus on early debates about the efficacy of providing wage labourers with the plots of land, which might – while providing subsistence – divert their attention away from their duties to their masters. But, as in England, there was a tide of opinion from the early nineteenth century in favour of developing allotment gardens or cottage gardens. This is well illustrated in this book with precise references to actual examples of both the debate and the outcome. The rural cottage garden movement developed during the nineteenth century but, with the urban growth of Dublin, Belfast and Cork, the urban allotment movement also developed – especially perhaps from the 1890s – and with it came the development of local produce-growing societies. The outbreak of the First World War accentuated this with government-led leaflets and advice on how best to supplement food sources in times of national shortage. The year 1917 was coined by some as 'the year of allotments' (p. 76). Success brings problems, in this case a shortage of land to extend allotments further, and demands for an Allotment Act.

Ireland was in turmoil for much of the next decade but in 1926 legislation was passed allowing local authorities to compulsorily purchase land for subsequent letting on a small scale. Similarly in Northern Ireland an allotment bill proposed putting the regulation of small plots onto a more official basis. It is from the 1930s and this political intervention that the authors are able to give some measurements of change in what has previously has been an enjoyable but largely anecdotal story. The allotment movement took off, accentuated as it was by the pressures of the European war from 1939. Running in parallel with this otherwise chronological story there are chapters on agricultural education at the grass roots and school level, and the role of women and of gardening education in general. Agricultural historians in general will seize upon one or more of the three appendixes to this book, especially the second one, which is more or less a seed catalogue for the 1860s, as provided by Edmondson and Brothers of Dublin. Altogether this is an interesting travelogue through a relatively unknown aspect of Irish agricultural history.

MICHAEL TURNER
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Europe and elsewhere

PAUL BRASSLEY, YVES SEGER and LEEN VAN MOLLE (eds), *War, agriculture, and food. Rural Europe from the 1930s to the 1950s* (Routledge, 2012). xviii + 268pp., 21 figs., 13 tabs. £80.

The offspring of conferences held in Lisbon and Louvain, this volume seeks to examine the ways in which the Second World War challenged and changed the nature of post-war European farming and the outlook of its practitioners. In a series of chapters rich in statistical detail, a number of authors consider such issues as capital investment, productivity, mechanization and the development of agricultural institutions in various eastern and western European countries. In most cases the War represented a basic discontinuity, in the sense that normal trading conditions were interrupted while state intervention often precipitated fundamental changes both in production patterns and attitudes towards farming itself. Studies of individual national experiences, including Spain, Hungary, Denmark, Ireland, Sweden and Switzerland, follow in the wake of fine essays by Paul Brassley and John Martin, and Ernst Langthaler, dealing respectively with international trade and the role of state control in Britain, and Nazi-occupied Austria. If the significance of state control in Britain should not be overemphasized, institutional change under National Socialism substantially re-ordered farming in Austria with considerable benefit for post-war development. In Germany herself, a very different rural world obtained. Walther Darre's *Blut und Boden* ideology cherished the notion of a traditional peasantry and, while the German state was able to exploit occupied territories for food, the peasants enjoyed stable prices and guaranteed markets. For them, as Gesine Gerhard observes, the war represented an interlude from the pressures of modernization and mechanization rather than the accelerator of change. Wholesale transformation would be a post-war phenomenon.

State intervention, of course, was a basic leitmotif of farming in many European countries throughout the war and during the early post-war decades. In an essay complementing his previous studies of state intervention and control in Britain, Brian Short considers the various means whereby the County War Agricultural Executive Committees exercised their extensive powers. Like them or loathe them, the farming community had no option but to collaborate with 'Warag' plans and instructions for the duration of the war and the following decade. Short shows how the social makeup of 'Warag' committees reinforced class solidarity and highlighted carefully orchestrated

social divisions. The appointment of local landowners (or, in the case of Wales, prominent figures in the Nonconformist fold) left little doubt in most people's minds that traditional ('natural'?) leaders remained very much in the driving seat. Whatever evils might befall the land, the rural status quo would remain intact and social change in the countryside would have to await the post-war influx of affluent townsfolk.

The war, of course, was a major driver of change, establishing in most countries the idea that government should accept a degree of responsibility for national food supplies and rural policies. The same conflict somewhat modified the overall public perception of farmers as a class. In France, for example, Edouard Lynch notes that the unwillingness of farmers to comply with stringent food directives led to deep distrust of the rural community by the urban working classes. As the black market in food expanded into the post-war years, distrust evolved into hatred as French people perceived the farming world to have profited from the wartime emergency. Many English farmers too were thought to have had a 'good war' in the sense that wartime surpluses were believed to have boosted their standard of living. But, once the dust had settled, the war was over and government propaganda assimilated, the British public came to appreciate the importance of farmers to the war effort on the home front. In her chapter on the image of the farmer, Clare Griffiths highlights the growing credibility of farmers among the urban public, which intensified as the industry became more forward-looking and entrepreneurial in the post-war decades. Farming was now a key element in the economy and, as governments strove to nudge the country towards self-sufficiency in food, the farmer enjoyed growing political influence.

The editors have assembled a distinguished body of contributors who have painted a compelling canvass of a farming world on the cusp of almost unprecedented change. If the volume contains few brave new insights, it offers a valuable overview of the wartime and early post-war agricultural world, along with detailed considerations of the experiences of individual countries, which will be appreciated by students of those economies. Apart from a photo of a self-satisfied and well-dressed English farmer looking ruminatively over a gate, and some poorly reproduced offerings in Carin Martin's chapter on Sweden, the book is innocent of illustrations. Given its alarming price and the richness of wartime photographic archive material one might reasonably have expected a few action pictures to illustrate the well-composed text.

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PATRIK OLSSON, *Ömse sidor om vägen. Allén och landskapet i Skåne 1700–1900* (The Royal Swedish Academy of Agriculture and Forestry, 2012). 307 pp., 129 illus. 350 Kr.

Patrik Olsson opens his study of avenues, or tree-lined roads (in Swedish, *alléer*), in Scania, the most southern part of Sweden, during the eighteenth and nineteenth centuries, with the remark that an avenue is both culture and nature, an object created by man and a carrier of symbolic meanings, while at the same time being a living organism. This interplay between man and nature is at the heart of both human geography, the field to which Olsson's thesis belongs, and agricultural history. The study touches upon a number of central issues about how to study a landscape, people's perceptions of it, and its development through time.

To understand why people have planted trees in straight lines on both sides of the road, Olsson has looked at maps, mainly, as well as paintings and photographs. Many of them are shown to the reader: the book contains more than 100 illustrations. This is not only a treat for the eyes; it presents the sources, too, and the interplay between text and image is superb. Throughout three empirical chapters – on estate landscape, on landscapes surrounding towns, and on the landscapes of villages – the author guides us from one avenue to the next or, rather, between different systems of avenues. The avenue is used as a tool for understanding the landscape as a whole. At the same time, Olsson emphasizes that an avenue cannot be understood properly without reference to its surroundings. A border between the infields and the outlands of a manor, for example, or the link between a town and a summer farm owned by one of its burghers, explain the starting point of an avenue. This interdependence between part and whole directs the investigation.

Maps are great for studying the history of a landscape, but not without problems. Olsson's survey makes it clear that many maps (and paintings) include projected elements as well as actual ones. They might, therefore, show avenues that were never there. Other maps leave out avenues that existed, because it was not important to register them. Olsson stresses, therefore, the importance of knowing the purpose of a map, but, too often, the purpose is not known. Moreover, while a map shows what was (or was intended to be) done, it does not really say why. In the images studied, Olsson finds more and more of a geometric landscape. Roads and borders were straightened out and trees were planted to mark these lines. To account for this, Olsson links to ideas held in many parts of Europe – and described by earlier research – about

nature, pruned and ordered, as beautiful. Referring to Emily Brady, Olsson describes a dialectical relationship between the practical and aesthetical functions of the avenue. Lopping is the prime example. To cut branches of trees had the double effect of enhancing the beauty of the landscape and providing people with leaves and wood. The latter was important in Scania, where large areas lacked trees.

More of the reasoning behind avenues is found in scientific dissertations, journals and travellers' accounts, which Olsson cites, but could have used to a greater extent. It is also evident in a campaign, launched by an eighteenth-century governor, to make peasants plant trees alongside the roads. Peasants seem to have been reluctant to plant avenues and most of the trees that were planted disappeared shortly thereafter, partly because they were cut down by people who, in a woodless environment, needed wood. Although Olsson initially remarks that different people experience landscape in different ways, this perspective is largely absent from the analysis. The travellers' accounts he cites – as well as maps – express the views of the upper class. In maps from the nineteenth century, Olsson discerns an expansion of avenues around estates, which tells of an expansion of the landlord's domination over the landscape. This is very interesting. But, to the peasant who, in this process, had lost his land, did the lines of trees represent beauty, or oppression? What about encroachments?

The history of a landscape is not only the result of the interplay between human intentions and natural constraints. It is also the result of social conflicts. Adding sources where conflict is more evident – court records, for example – would broaden our understanding of how people have perceived the landscape. There is more to be learnt about avenues. Patrik Olsson has provided us with a good foundation.

JONAS LINDSTRÖM
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DIONICIO NODÍN VALDÉS, *Organized agriculture and the labour movement before the UFW, Puerto Rico, Hawai'i, California* (University of Texas Press, 2011). 328 pp., 4 illus., 1 map. £41.

Dionicio Nodín Valdés has written an important book examining the labour movements that emerged in three different areas colonized by the United States in the nineteenth and early twentieth century: Hawaii, and Puerto Rico, and California. He places those movements in the context of the global capitalist economy and US imperial policies and designs. Valdés privileges the economic and military aspects of the US conquest but makes clear that it was facilitated – sometimes unevenly – by political machinations operating out of Washington, D.C. His focus is on the consequences for agricultural labourers, some of them newly made into labourers by virtue of the economic transformations that followed US dominion. Attentive to racial and ethnic factors that arose as new Anglo-American elites established or, in the case of Hawaii, furthered their economic dominance of their respective areas, Valdés captures the complicated and sometimes contradictory designs of employers and the concerted and sometimes successful efforts of agricultural labourers to represent their own interests. In placing the struggle of labourers in the context of the power their employers were able to muster – economic, military, and political – Valdés has revealed just how remarkable were their successes. By the time the United Farm Workers coalesced in the mid twentieth century, agricultural labourers in California, Hawaii and Puerto Rico had won and lost many battles and came to the UFW with considerable experience.

Similar economic and imperial motivations inspired the incursions into California, Hawaii, and Puerto Rico, but the United States confronted different cultures and economies in the three regions. In California, the first to fall to the imperial power of the US, a few Spanish elites operated ranchos and only a small Anglo-American presence existed. Although small landowners enjoyed little presence in California at the time, neither did the labourers there suffer the kind of oppression that would emerge later. In Hawaii, in contrast, Anglo-American sugar planters had not only established a dominant position, they were already well into the process of undermining the authority of the Hawaiian monarchy and the independence of native Hawaii labourers. The importation of Asians provided needed labour but created communities founded on ethnic and racial similarities that would work against domination of the labour force. The Puerto Rican situation differs in two important respects. Anglo-Americans had virtually no presence there until after colonization. A small landowning peasantry existed and enjoyed a certain level of prosperity and independence. The arrival of the Anglo-Americans and the sugar industry would change everything. Regardless of the differences between the three areas, the colonizers, backed by the economic, military, and political authority of the United States, presented a formidable challenge, transforming the agricultural landscape and often repelling concerted efforts of agricultural labourers to assert their interests.

In Puerto Rico, as the sugar economy developed and expanded and the independence of farmers fell in the process, an affiliate of the American Federation of Labour – the Federación Libre de Trabrajdores (the Federación) – emerged and by 1918, less than two

decades after conquest, created a democratic workers movement. By the late 1930s, the Federación became too closely connected to employer groups, however, making way for the surprisingly rapid rise of a rival union, the CIO-backed Confederación General de Trabajadores. Valdés suggests that the focus on a certain hero of this new union, Luis Munoz Marin, obscures a 'complex story involving the interaction of political and labour leaders with agricultural workers and their organizations' (p. 61). Affiliation with the United Packinghouse Workers of American both facilitated and compromised their efforts, and factionalism within the Confederation emerged in the context of the modernization of agriculture. One faction embraced the new political/economic order and its leaders enjoyed increased prestige and rewards. Another faction eschewed such cooperation and forcefully represented the interests of agricultural labourers. For their efforts, their leaders faced harassment and imprisonment.

Unionism in Hawaii was much more successful, owing to a combination of complex forces. Although the precipitous decline of the native population necessitated the importation of labourers from elsewhere, particularly Asians, the location of Hawaii made importation a costly enterprise. No significant labour surplus developed there. Companies made some efforts to counter unionism, but were not as hostile as those on the mainland. A crucial factor in the success of union activism was inherent in the plantation paternalism that existed on the island. The creation of small but ethnically and racially cohesive communities of workers isolated by distance from one another made for the recognition of interests in common and attachment to union activities, particularly with the Longshore Union. Not only did workers there secure meaningful improvements in their standard of living, the Longshore Union was able to influence decisions made during the period of modernization and mechanization that worked to their long term benefit.

Valdés' treatment of California is particularly illuminating. He traces the evolution of the farm labour movement there from its origins in the Southern Tenant Farmers Union to its reformulation in California as the National Farm Labor Union. He examines the failed action against DiGiorgio and the abilities of farm corporations to exploit divisions within the farm labour force. Taking on the arguments made by historians, Valdés challenges the notion that the movement itself was flawed and argues, instead, that the inability of farm workers to succeed there was the result of a failure of democracy. California became the 'Sahara of trade unionism' (p. 230), he argues, because of the collusion between the state and agricultural concerns whose interests they served. His argument is strengthened by the comparative perspective, rendering *Organized agriculture and the labour movement before the UFW* a book that will change the way historians understand the farm labour movement not only in California, Puerto Rico, and Hawaii, but also elsewhere.

JEANNIE WHAYNE
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British Agricultural History Society Winter Conference 2012 'Science and Knowledge in Agriculture'

by Liz Scott

This promised to be an interesting day and did not disappoint. Four papers were presented to conference exploring science and knowledge in agriculture from the medieval era into the twenty first century.

Entitled 'Manuring as art and science in the Middle Ages', the opening paper was presented by Dr. Richard Jones (Leicester University). Beginning with the literary contribution, Dr. Jones argued that the ideas of Roman agronomists, Cato, Varro and Columella strongly influenced sixteenth century publications on husbandry; but most farming lore was passed down orally from father to son. It was therefore difficult to assess how scholarly advice percolated into and influenced the practice of peasant farmers. Manuring was clearly taken seriously during the medieval period, even if it is more difficult to ascertain how it was being applied. Evidence of its importance is found in a rich vocabulary of terms, from sources such as Coroners' Rolls reporting deaths associated with dung heaps, while disputes over location and obstruction of the Kings highway appear in manorial court rolls.

Archaeology offers a more solid foundation. Dating broken pottery shards found in ploughed-up soil provides evidence of manuring practices. Findings support a tendency to deposit manure in areas close to its source. There was an intensification of manuring activity over the post-Conquest centuries with far more pottery getting into the soil from the mid-thirteenth century. Peasant farmers were making specific choices on how to best utilize a finite manuring stock. There is evidence that higher status households followed manuring practices found in literature. But peasant farmers developed their own language of names, places, colours, and textures that stood apart from scholastic notions of elemental principles. Noting that Romano-British farmsteads showed archaeological evidence of pottery deposits peasant farmers could have observed a correlation between pottery deposits and fertility on previously manured locations.

The second paper of the day, entitled 'Theoretician or gentleman enthusiast? Sir Hugh Plat and agriculture', was presented by Dr Malcolm Thick. Plat trained as a lawyer but had wide ranging interests including alchemy, medicine, cookery, distilling, military technology, agriculture and horticulture. The nature of fertility was a mystery in Plat's time, the late Elizabethan and Jacobean era. Plat's treatise *Diverse new sorts of soyle not yet brought into a publique use,* relied heavily on the works of continental alchemical scholars such as Palissy and Paracelsus. Plat concluded that to avoid exhaustion soil required salts of which there were many. Setting up a number of experiments on the production of marl and manure (in a manner anticipating Bacon), Plat conducted small-scale field trials in his garden at Bethnal Green. In addition he collected and collated facts about industrial and agricultural techniques from a wide variety of people producing what Dr Thick described as a 'histories of trades'. Studying the technology in everyday use by artisans was important, perhaps more important that the sophisticated experiments of enquiring gentlemen. Plat left no great body of theory and was not particularly recognized by his contemporaries. It was after his death when he gained posthumous recognition from the 'Hartlib circle' of the 1640s and 1650s. He was a doer not a thinker, one who dug the footings (of knowledge); a man who could be described as a proto-scientist.

The third paper of the day, presented by Professor David Moon (York University), brought the conference into the nineteenth and twentieth centuries. In a paper entitled 'Dry farming in Russia and North America: a case of transmission or simultaneous invention?',

Professor Moon set out to discuss science and knowledge in agriculture by focusing on a particular agricultural technique – dry farming – how it was invented, the role of agricultural scientists, and the transmission of knowledge. Hardy Webster Campbell was the greatest exponent of dry farming on the Great Plains but there was controversy and debate over the various methods suggested for this environment, including Campbell's. In Russia, where dry farming was also established, government and agricultural scientists were becoming increasingly concerned at the threat to their grain exports from the growth in grain production in the USA. From the 1860s, American and Russian governments exchanged official information and documents, including official publications on agriculture. In 1907 the provincial council of Ekaterinoslav (today's Ukraine) set up an agricultural agency in Minneapolis, USA.

This brought Professor Moon to consider whether or not the parallel emergence of dry farming developed independently a case of near simultaneous invention, or had some common origins or roots in the exchange of information. Agricultural settlers in both regions came from backgrounds familiar with western European farming, and it was these backgrounds that led Professor Moon to consider the case for transmission of dry farming techniques. He concluded arable farming took off on the steppes in the first half of the nineteenth century before the American settlements. But among the pioneers were the Mennonites many of whom emigrated to the USA, settling in the Great Plains taking with them their knowledge, taxonomy, experience and seeds.

In the final paper of the day, 'Science, dairy farming, and the bovine mastitis problem in Britain, *c*.1925–80', Dr Abigail Woods (Imperial College) introduced conference to the world of the dairy cow. Following a brief overview of mastitis, a prevalent and costly problem, Dr Woods presented three distinct biological and social framings of the condition.

The first, *Streptococcus agalactiae*, originally managed by vets and farmers, had very little input from scientists. Factors contributing to mastitis rates were thought to include poor milking techniques, bad hygiene, chilling or injury to the udder, flies, and hot summer weather. The standard approach for dealing with mastitis in the 1930s was to separate the infected cow from the rest of the herd along with a regime of penicillin. By 1952, *Streptococcus agalactiae* was on the wane but another germ, *Staphylococcus aureus* was in its ascendency. Reference was made by scientists, vets and farmers to the post-war government drive to increase food production and the consequent changes in agricultural production, including dairying. The prevalence of the new germ was attributed to factors including machine milking, separate dairies, loose housing for cows, and selective breeding. A mastitis awareness campaign in 1972 provided advice based on research and field trial outcomes. As a management plan for the control of mastitis was being implemented nationally, so a new form of mastitis rose to prominence. Caused particularly by coliform bacteria and *Streptococcus uberis*, it was associated with acute clinical symptoms, which often occurred around calving time and could end in death. Vets and scientists pointed to a range of possible causes: intensive dairy farming; hereditary factors including breeding regimes; increase in herd sizes and cross infection.

Dr Woods concluded that scientists made limited progress in controlling or eradicating mastitis although therapies may have managed to shore up cattle health in the face of ongoing threats. Alternatively, interventions may have enabled the disease to assume new manifestations. A selected approach to mastitis enabled scientists to avoid bigger questions about the sustainability or morality of intensive farming, or of meeting the immediate needs of farmers.

So ended a constructive day offering delegates an opportunity to listen to high quality papers, share and transmit ideas and to catch up with friends and colleagues. With thanks to Dr Paul Warde for organizing the event.

British Agricultural History Society Spring Conference 2013

by Jane Rowling

Askham Bryan College, near York, played host to another successful Spring Conference for the Society this year. Once again Dr Nicola Verdon organized a fantastic event, and managed to arrange a few sunny spells for us after an overwhelmingly wintery spring so far. The conference was well attended, with speakers on a wide range of topics, from medieval farm names in the Pennines to twentieth-century technical change in agriculture in south-west England, providing something of interest for everyone.

Monday's session began in the afternoon with a fascinating paper by Dr Philip Slavin from McGill University, Montreal, chaired by Prof. Christopher Dyer. The paper, titled 'Warfare, ecocide and economic development in the early fourteenth-century British Isles' explored the effects of both environmental and anthropogenic factors in the creation of subsistence crises, particularly during the unrest in northern England and Scotland throughout the reign of Edward I. Basing his research on tithe records, manorial accounts, and other textual sources, as well as detailed analysis of weather patterns, Dr Slavin painted a picture of a famine initiated by environmental factors in the form of extreme weather patterns, such as three back-to-back years of torrential rain in 1315–17, but exacerbated by the human factor of fourteenth-century warfare. This manifested particularly in acts of ecocide and zoocide, which devastated the landscape and had serious long-term economic consequences. The paper pointed to the fact that the patterns of environmental change and economic crises observed here were similar to those surrounding the origins of the First and Second Crusades, and the Nine Years War.

Following dinner, Dr Paul Brassley and Prof. Michael Winter (University of Exeter) presented a paper based on the Farm Management Survey in south-west England, entitled 'Technical change in agriculture 1935 to 1985: the evidence from south-west England'. The University of Exeter's collection of almost 5000 Investigation Officers' field books, supported by extensive oral history work among surviving farmers, provided the main source material for this work. The session, chaired by Prof. Alun Howkins, explained the technical changes made by farmers in the South West, why these changes were made, and why change could not happen until the post-war period, as well as demonstrating Dr Brassley's prodigious memory for his source material. The majority of dairy farmers picked up by the study made the same kinds of technical changes, but at different times across the period 1935–85, leading to an industry characterized by specialization and intensification. The extent to which this was due to agricultural policy was debateable; the increase in grant aid was certainly an important factor, but, we learned, the change to artificial insemination instead of natural breeding allowed dairy farms to move from traditional breeds to higher-yielding, more specialized Friesian cattle; improvements in farm machinery in the post-war era allowed farmers to produce nutritious silage in a less labour-intensive way; and improvements in parlour design alongside electrification and relatively cheap fuel meant that farm buildings could become bigger and more specialized. We saw the consequences of this in the sudden decrease in numbers of pigs and poultry in the mid–1960s and 1970s, as capital constraints forced farms to 'get big or get out' to remain viable as businesses. The delegates were keen to know more about this research, and questions covered topics including farm building improvement and conversion, the effect of types of tenure on technical change, and to what extent the patterns explored here could be observed on a national scale.

Tuesday saw Prof. Richard Hoyle chairing a very interesting new researchers' session, with a focus on early modern rural England. Three papers were

presented during this session: John Gaisford from Birkbeck, University of London, on 'Enterprise in the Countryside: west Wiltshire, 1550 to 1600'; Juliet Gayton from the University of Exeter on 'Funds for farming? Rural copyholders and mortgages in Hampshire, 1645 to 1750'; and Irene Haycock from the University of Cambridge on 'Agrarian change and early industrial development in Staffordshire: parish case studies, 1650 to 1750'. First, John Gaisford took us to sixteenth-century west Wiltshire, to focus on entrepreneurial clothiers who achieved success in a period previously characterized as one of trade stagnation and decline. Using the individual examples of Thomas Webb and Edward Horton, the paper identified business enterprise as a key factor in explaining the economic changes which took place in Elizabethan west Wiltshire. This research trajectory has a great deal of potential for the future, and Mr Gaisford noted that key questions might include topics such as the impact of rich clothiers in west Wiltshire, the potential for conflict with the agrarian gentry, and the management of settlement patterns in relation to the fulling trade.

This was followed by Juliet Gayton, speaking on the subject of mortgages in the early modern period. Mortgages have previously been studied in medieval documents, but very little work has been done on the experiences of later customary tenants. The paper examined the effect of changes in usury laws on the rural credit system, in addition to looking at the impact of different types of customary tenure upon what tenants could do with their land. The research indicated that the mortgage was a key part of early modern rural life, involving borrowers and lenders right across the social scale. Surprisingly, few professional or non-local money-lenders could be found, with the vast majority of lenders living within ten miles of the borrower. This is clearly a fertile area for research, and the delegates were keen to know more, asking questions particularly about the evidence that mortgaging was a regular and accepted feature of early modern rural life, and does not appear to have been reserved for crisis management.

The final new researcher paper was Irene Haycock's study of Staffordshire parishes, concentrating on the representativeness of probate records as sources. The paper compared the parishes of Kingswinford and Trentham, using probate inventories, wills, burial records, hearth tax listings, and prerogative and consistory court records to conclude that the probate records over-represent agriculture as an occupation. The data extracted from all the sources together demonstrate that early modern Staffordshire was characterized by significant changes within parishes across the period. It also showed differences between parishes, which could be attributed to the county's mineral distribution, and the influence of wealthy families, like the inhabitants of Trentham Hall. The use of statistical evidence in this paper, showing the different representations of the two parishes produced by different sources, very clearly demonstrated both the advantages and limitations of inventories as historical sources, and proved very interesting.

The New Researchers Session was followed by Prof. Joyce Burnette, from Wabash University, Indiana, presenting a paper on her work with farm accounts. The session, titled 'The farm labourer: a quantitative portrait, 1740 to 1850', was chaired by Dr Nicola Verdon. The paper analysed the wages, and employment patterns of late eighteenth- and early nineteenth-century day labourers to show the effects of age, gender, season, location, farm ownership type, farm output type, and whether labour was regular or seasonal on the incomes and lives of labourers, and the amount of labour on the farm. A series of graphs and charts clearly demonstrated the enormous differences these factors could have upon rural labour, and the use of interdisciplinary techniques made for a thought-provoking and thorough interrogation of the account book data. For example, despite the higher harvest premiums in south-east England, the North appeared to have a more seasonal wage pattern. This was explained through the ideas of elastic and inelastic supply, borrowed from economics. The work produce d a great deal of interest among the delegates, and questions included the possibility of further disaggregation of the data and the visibility of imported harvest labour, as well as comments on the great variety of regional differences, and the fluidity of occupations and ideas of work.

Tuesday afternoon was dedicated to the field trip to Coulton Mill, Hovingham, near Pickering. The old mill, with attached house and a number of small outbuildings has recently been the subject of a *Restoration Home* programme for BBC2, and a follow-up programme was being filmed during our visit. The two-storey barn in which we were treated to a presentation on the restoration project and the history of the area had recently been re-roofed in the traditional lath and plaster, and had been filled with hay bales for seating. Natural England, which has been heavily involved with the restoration under the higher level stewardship scheme, plans to preserve the mill's unusual waterwheel, but sadly not to return it to working condition, as this would necessitate almost complete replacement of the mechanism. The talk covered the first mentions of the mill in medieval documents, and traced its development, placed in the wider context of Yorkshire's

monastic lands, into the twenty-first century, through its abandonment, dereliction, and purchase by the family currently residing in the house. We were able to look around the buildings, and follow the watercourse back into the surrounding woodlands, and an enjoyable visit was further improved by a mention of tea and biscuits, which prompted a polite but determined rush in the direction of the kitchen, and the gallon teapot which Heather, our hostess, produced. The day concluded with the Society's Annual General Meeting, drinks reception, and Annual Dinner.

Wednesday began a paper by Professor Michael Turner (University of Hull), 'The hidden history of "yeoman" survival in the twentieth century', chaired by John Broad. The paper used Prof. Robert Allen's use of the word 'yeoman' as a springboard for discussion, and revealed that the main sources, copyhold enfranchisements from the period 1841–1957, are far more extensive than previously thought, with around 5000 enfranchisements having been discovered in local archives in Yorkshire alone. This is especially significant as the county's enfranchisements are barely represented in the more visible sources in the National Archives and the British Parliamentary Papers. This hints at an enormous amount of hitherto unseen evidence regarding later copyhold agreements. More surprising still, Prof. Turner revealed that, despite the supposed ending of copyhold enfranchisements in 1925, he has uncovered them taking place until as late as 1962. Furthermore, from 9500 personnel across 7800 enfranchisements, six per cent, or 115 individuals, identified themselves as 'yeoman'. Beside Allen's suggestion that yeomen were copyholders of inheritance, copyholders for lives, and holders of leases for lives, this paper offered compelling evidence for the survival of the 'yeoman' into the twentieth century.

Dr Nicola Whyte chaired the next paper, Prof. Henry French (University of Exeter) speaking on the subject of 'No way back: poor relief and the agrarian labouring poor in England, 1760 to 1834: a case study'. This paper, based on the village of Terling in Essex, addressed the questions of how much money people received in poor relief, how this changed over time, why this change occurred, and what this poor relief was for. Traditional methods of calculating the amount of poor relief given, by determining total expenditure per head from weekly pension amounts, are limited by the fact that they fail to include all recipients of relief, and the question of whether the social profile of recipients of weekly pensions differs from that of recipients of occasional relief. Instead, Prof. French has taken into account all weekly allowances, occasional payments, and additional payments in Terling, analysing over 143,000 payments to 1498 recipients, and matching payments to people to create a weekly breakdown of poor relief. This investigation revealed that poor relief was essential to able-bodied, working-age households, however, environmental and economic changes left the previously most independent social group, young, able-bodied, unmarried people, depending increasingly heavily upon relief from the parish. There was also evidence that women received relief much earlier in their lives than men, and that towards the latter part of the period, men began to attract higher amounts of relief, whilst households headed by women received significantly less from the parish.

The final paper of the conference was 'The medieval origins of south Pennine farms: the evidence from names', given by Prof. David Hey (of Dronfield Woodhouse), and chaired by Prof. John Chartres. The paper focused on Prof. Hey's native township of Thurlstone in the parish of Penistone. At first glance the evidence appears to suggest that this area, like many others in the South Pennines, has eighteenth- and nineteenth-century origins. However, the rebuilding of sites and the standardization of place-names over time and various editions of maps is potentially obscuring a much longer history. The evidence from farm names, supported by documentary evidence, landscape history, and archaeology indicates the area has much earlier origins, rooted in the medieval period. The paper was illustrated by photographs of the area under study, its farms, and its archaeological features. The questions and comments from the delegates focused on the evidence of regional variation provided by this paper, and there was a lively discussion about the consistencies and contrasts with other localities, and the possible reasons for these.

Prof. Chartres then took the opportunity to express thanks, on behalf of all the delegates, to Dr Nicola Verdon for a stimulating, enjoyable, and successful conference.

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