

Agrarian History: Some Vistas and Pitfalls¹

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PEOPLE unacquainted with agrarian history probably think that we who study it are engaged upon very humdrum tasks. They envisage us, I imagine, as plodding both literally and metaphorically over flat and rather muddy fields, where we avoid the perils of the mountaineer, but are never blest with far-reaching views. They may even suspect that it is almost as hard for us to attain wisdom as the author of Ecclesiasticus thought it was for him "that holdeth the plough—and whose talk is of bullocks."

How different is the reality! We make our way in fact—if now I may speak altogether metaphorically—on narrow mountain paths that are beset with pitfalls, but reveal to our eyes the most entrancing scenes of distant country. One wonders indeed whether any other kind of knowledge can open up a more splendid vista of thought than is provided—to take the most obvious example—by the simple reflection that such tremendous human achievements as the cathedrals of the middle ages, the books that fill our great libraries, our orchestras and operas, the multitude of motor cars, and that most hideous of modern inventions the nation in arms maintaining the conflict of war for years on end, all depend upon the degree to which the men who till the soil and tend the livestock are able to produce food over and above what they require for their own sustenance. Perhaps only those who know how small the surplus was in the middle ages can fully appreciate the strength of the religious devotion and the will to beauty which we find reflected in the architectural glories of the twelfth and thirteenth centuries. In the simple words of an old French *chanson*,

Il n'est ni roi ni prince
Ni ducque, ni seigneur
Qui n'vive de la peine
Du pauvre laboureur.

It is not, however, of the importance of our studies, nor of their interest, that I wish to speak this morning, but of certain perils that we are liable to encounter—various ways in which pitfalls in our path may cause us to

¹ This paper was read to the December Conference of the British Agricultural History Society, 1963.

stumble in our search for truth and others in which the dazzling fascinations of distant horizons may blind us to some aspects of it, so that our account of what we learn becomes one-sided and incomplete. If some of my examples are taken from the writings of really great historians, that is not because I am wanting in reverence or gratitude for their work, but because the slips of great men are particularly instructive and provide the most powerful incentives both to carefulness and to modesty.

The Concise Oxford Dictionary tells me that one of the meanings of the word *vista* is "a long narrow view as between rows of trees"; and we know that a vista of that kind reveals some things but conceals others. The poet Yeats once said of Shakespeare's Hamlet that "he saw too great issues everywhere to play the trivial game of life." I am reminded of that when I think of the way in which attention to the greater vistas of history may prevent us from perceiving the trivial bearing of some of the facts recorded in agrarian documents.

For example we look down the vista which shows us the gradual displacement of modes of 'Natural Economy'—*Naturalwirtschaft* as the Germans call it—by 'Money Economy' (*Geldwirtschaft*), and we rightly recognize that process in the commutation of labour services on the manors of medieval England. Then perhaps we take a hasty glance at one of the early twelfth-century surveys of Burton Abbey and when we find there several cases of tenants owing a money rent instead of the services they had previously owed, we may be tempted to take this as showing that the great movement of commutation had begun very early on these estates. But, if we read on, we also find in the same survey, and on the very same manors, men who had formerly held land for a money rent which they now hold *ad opus*. It looks too as if the money rents on these estates tended to be paid by people with special occupations. At Stretton in Staffordshire a man named Ernwi holds for works land which William the Cook used to hold for a money rent, while Orm the smith pays twelve pence—or does the repairs of two ploughs—for a small holding for which his predecessor had owed works.¹ From a different part of the country we receive another warning against the possible delusiveness of the commutation vista, for in the same period to which the Burton surveys belong a certain Herbert of Gatindene gave to the church of Rochester "all his tithe *or* forty pence *or* their value in eels."²

Another type of economic vista is that which reveals some wide-ranging change such as rising prices and shows us clearly enough the general char-

¹ *Collections for a History of Staffordshire*, Wm. Salt. Soc., 1918 for 1916, pp. 219, 221, 230, 242.

² *Textus Roffensis*, ed. Hearne, 1720, pp. 176-7.

acter of its effect, say upon the prospects of the small farmer, but leads us to overlook the various personal factors which modify its action in individual cases, so that what is a disaster for many may come as an opportunity for profitable expansion to the man who has good health, an industrious wife, and a large family of sons.

Some of the vistas which are liable to entrance and mislead us are not primarily economic. And the peril of these can be illustrated from the work of a great pioneer in agrarian history, whose memory we all cherish—my old friend and one-time colleague in the Workers Educational Association, Professor Tawney. Tawney was nothing if not a man of vision. He was profoundly influenced by his awareness of great moral and religious issues and I think there can be little doubt that his concentration upon such issues somewhat distorted the perspectives of the historical picture painted in his famous book, *The Agrarian Problem of the Sixteenth Century*—which, we should remember, was written when he was little more than thirty years of age. He seems to have approached his subject in the light of a general conception of the sixteenth century as an age which witnessed a fundamental change in human beliefs and standards of behaviour. Protestantism, Individualism, and Capitalism were taking the place of the religious, moral, and economic standards of the middle ages. Now the Tudor governments were certainly the first to recognize depopulating enclosures as a problem calling for drastic action, but Tawney writes as if the problem itself was virtually a new one in that age. He speaks more than once of “the agrarian *revolution* of the sixteenth century,” and though he quotes Hales’s assertion that “the chief destruccion of Townes and decaye of houses was before the beginning of the reigne of Kynge Henry the Seventh,” he describes it as a “strange statement” and says “it may well have been a curt summary of the impression produced by a century of gradual consolidation and piecemeal enclosures carried out by the smaller cultivators.”¹ Tawney was admirably scrupulous in reporting any facts he had observed which made against his general conception. He quotes what Sir Thomas More said about enclosing abbots. He notes that no prominent ecclesiastic appears to have made any protest before the Reformation comparable to that made by the Protestant Latimer afterwards. But he evidently thought such facts could be explained without altering the general perspectives of the history. “Cobbett,” he says, “and those who follow Cobbett in representing the economic evils of the sixteenth century as the fruit of the religious changes, err in linking as parent and child movements which were rather brother and sister, twin aspects of the individualism which seems inseparable from any swift increase in

¹ R. H. Tawney, *The Agrarian Problem of the Sixteenth Century*, 1912, pp. 15, 402, 166-7.

riches.”¹ I don’t suppose Tawney intended the chronological implications of the word “twin” to be taken quite literally, but he certainly regarded the agrarian and religious changes as roughly contemporaneous manifestations of a new individualist spirit.

Some of us have always felt dissatisfied with this view. Nearly fifty years ago Lipson, though ludicrously sceptical about the assertions of John Rous, repudiated Tawney’s attempt to explain away the precise statement of Hales and called attention to some early fifteenth-century evidence which tended to support it.² More recently the researches of Dr Hoskins and Professor Beresford have made it pretty certain that Tawney’s chronology was radically wrong. In Beresford’s judgement the evidence “points to a period between 1440 and 1520 as that in which the main flood of depopulation took place.”³

Even if it was only in the middle of the fifteenth century that a real movement of enclosure for sheep-farming got under way, that is far too early for the hypothesis of a fraternal relation between that movement and the Reformation to be at all acceptable. But further, while Tawney was thus misled by the fascinations of his ethical vista, his history was also distorted by the fact that his chronological vista was much too short. More than once he told me in conversation that “he didn’t know a thing” about the Middle Ages. That of course was excessive modesty. But he could hardly have written as he did if he had been aware of certain hard facts of medieval history. It may be that the actions which caused suffering among the peasants in the twelfth and thirteenth centuries were caused mainly by encroachments upon their common pastures rather than by the conversion of arable to grass, but after all the enclosure of common pastures was one of the things complained of in the sixteenth century, and Tawney was primarily interested not in the technical aspects of change, but in the oppression of humble folk by high-handed and self-seeking actions on the part of the rich and powerful. And the medieval evidence is remarkable. Tawney would have been surprised, I think, if he had known that the words of Ovid which were adapted towards the end of the sixteenth century by an anti-enclosure poet in the line “The grasse grows greene where litle Troy did stand” had actually been quoted in the twelfth century by Walter Map in his diatribe against the Cistercians and their clearances—*Nunc seges est ubi Troia fuit*.⁴ No doubt the word *seges* was understood by Map as meaning corn, not grass. But of course there was

¹ *Ibid.*, p. 382. ² E. Lipson, *Economic History of England: The Middle Ages*, 1915, pp. 125–7.

³ M. Beresford, *The Lost Villages of England*, 1954, p. 166.

⁴ Tawney and Power, *Tudor Economic Documents*, III, p. 80; Walter Map, *De Nugis Curialium*, ed. M. R. James, *Anecdota Oxoniensia* (Medieval and Modern Series), XIV, p. 45.

plenty of large-scale sheep-farming in the middle ages. The abbey of Ely had some 9,000 sheep on its demesne farms in 1086; the central flock of the abbey of Crowland numbered more than 8,000 in 1314; between 1284 and 1306 an abbot of Gloucester increased the abbey's sheep until they numbered 10,000 and he was able to sell 46 sacks of wool in a single year.¹

I mustn't weary you with details; but I doubt if the weight of the medieval evidence is generally appreciated. Before the end of the twelfth century we read of peasants being uprooted not only at Revesby in Lincolnshire, but at Bruern in Oxfordshire, at Accrington in Lancashire, and at Witham in Somerset. At Revesby and at Witham they were certainly offered holdings elsewhere, but a majority at Revesby and some of those at Witham chose the alternative of freedom. At Accrington the reaction was violent: the grange which the Abbot of Kirkstall had erected was burnt down and the *conversi* were murdered. Half a century later there was further trouble there, nine men having thrown down a hedge which they said had deprived them of their pasture rights.²

In 1222 Pope Honorius III ordered an enquiry into the conduct of the monks of Holm Cultram in Cumberland because the bishop of Glasgow had complained that they had "usurped parochial churches in his diocese and made them into granges and chapels, expelling the clergy and the tenantry." In 1246 the four sons of the parson of Blackburn in Lancashire were charged with burning a Cistercian grange at Staining, and the state of popular feeling is shown by the fact that forty other persons were accused of sheltering them after they had done this. In 1254 fifty-seven people threw down the enclosure at Wilden Grange and a crowd about eighty strong combined to destroy that at Fawdington Grange. That was in Yorkshire: both places were granges of Byland Abbey. Then in 1284 Archbishop Peckham wrote to the king urging that a Cistercian abbey which it was proposed to plant in the diocese of St Asaph, where there were already four such abbeys, should instead be established in the diocese of Bangor, in which there was no Cistercian house. Peckham told the king that the bishop of St Asaph and his chapter and the parson of the place which was suggested as a site for the abbey, and many other persons too, viewed the threatened advent of the white monks with

¹ E. Miller: *The Abbey and Bishopric of Ely*, 1951, p. 41; F. M. Page in *Economic History* (Supplement to *Economic Journal*), 1920, p. 611; *Hist. et Cart. Monasterii Gloucestriae*, Rolls Series, I, p. 39.

² Foundation Charter of Revesby in *Facsimiles of Early Charters*, Northants Record Soc., 1930, ed. Stenton, pp. 2-4; *Decretales Gregorii IX* lib. 3, tit. 30 c. 3 (in *Corpus Juris Canonici*, ed. Friedberg, II, cols 556-7); *Monasticon Anglicanum*, v, pp. 528, 531; Whitaker, *History of Whalley* (4th edition), II, p. 286; *Coucher Book of Kirkstall*, Thoresby Soc., 1896, p. 21; *Magna Vita S. Hugonis*, Rolls Series, pp. 68-70.

horror, for, good men though they may be, they are "the hardest neighbours that prelates and parsons could have" because where they set foot "they destroy villages" and take away tithes.¹

The sense of grievance was by no means confined to monastic enclosures. A meadow at Somersham in Huntingdonshire is said to have been "unjustly" enclosed some time between 1216-30. This deprived the abbey of Ramsey and its tenants of common pasture—the offender being apparently the bishop of Ely. In 1221 nineteen men were charged with casting down a bank at Yardley in Worcestershire which they said impaired their common rights. The bank had been made by a certain Thomas of Swanhurst. A few years later, at Nottingham, five men—one of them a reeve—were charged with illegally destroying a bank at a place called *Pesenhall*, which I have not been able to identify. Apparently this bank had been made by one William, son of Osbert, and the accused were acquitted because their common rights were injured by it. Then in 1258 or 1259 a court of law ordered that an enclosure of thirty acres which the bishop-elect of Winchester had made at or near Baughurst in Hampshire should be thrown down because it did not leave the plaintiff sufficient pasture. No doubt this decision was taken in accordance with the Statute of Merton, but that, we must remember, only protected free tenants; and from the last decade of the century we read of concerted attacks upon enclosures that had seemingly been made by laymen at Dillworth and Chipping in Lancashire and at Lyddlinch in Dorset.² Even more significant as incidental evidence, both of the extent of the enclosure movement and of popular opposition to it, are the words of the statute known as Westminster II which was enacted in 1285. "And since," we read, "it sometimes happens that one having the right to approve has raised a bank or hedge, and some persons by night or at some other time when they do not think their deed will be known, have thrown down the bank or hedge and it cannot be known, by verdict of the assize or jury, who threw down the bank or hedge, *and the men of the neighbouring townships are not willing to indict those guilty of such a deed*, the townships near adjoining shall be distrained to raise the bank or hedge at their own expense and make good the loss."³

¹ *Register and Records of Holm Cultram*, Cumberland and Westmorland Antiquarian Soc. (Record Series) 1929, pp. 53-4; *Lancashire Assize Rolls*, Lancs. and Cheshire Record Soc., XLVII, pp. 91-4 and XLIX, p. 282; *Yorkshire Inquisitions*, Yorks. Archaeological and Topographical Assoc., Record Series, 1892 for 1891, I, pp. 38-40; *Registrum Ep. J. Peckham*, Rolls Series, II, pp. 726-7, 769-70.

² *Cartularium Monasterii de Rameseia*, Rolls Series, I, p. 283; *Rolls of the Justices in Eyre*, Selden Soc., 53, No. 928; *Placitorum Abbreviatio*, p. 103, col. 1; Whitaker, *History of Whalley*, II, p. 468; *Dorset Inquisitiones Post Mortem*, ed. E. A. Fry, 1916, p. 59.

³ Stat. Westminster II, c. 46.

One can think too of other non-economic vistas which have misled or are liable to mislead agrarian historians. There is what one might call the 'racial vista', which, for example, deluded Meitzen into supposing that the *Einzelhof*, or isolated settlement, is almost everywhere a Celtic characteristic in contrast to the nucleated village which he took to be Germanic. Meitzen appears to ignore the influence of geographical and topographical factors upon the form of settlement; and in Westphalia, where he judged the prevalence of scattered homesteads to be a survival of Celtic tradition, he was led to an imaginary and very fanciful reconstruction of the history as a means of explaining the nucleated villages of a particular district—the *Hellweg*—where a comparatively level terrain seems the obvious reason for their presence. He also overlooked the evidence which, there and elsewhere, often shows that the isolated farmsteads are comparatively modern creations.¹ More recently, I am inclined to think that Mr Jolliffe, in arguing for widespread Jutish influence in parts of southern England, is a little prone to take as marks of racial, or rather tribal, peculiarity customs which are more readily explicable as a response to the prevalence of woodland.²

The geographical vista can also prove delusively fascinating. Gonner, for example, exaggerated the geographical factor in the chronological development of enclosures in this country.³ Certainly, historians, faced with the unchanging conditions of physical geography, can easily pay too little attention to the various circumstances that make them potent in some places or in certain periods, but nullify their influence in others. The issue is over-simplified if we take market prices as the only other factor to be considered. Prices and soil conditions may favour enclosure in two adjoining villages; but in one of them it may come quickly because all the land belongs to a single landlord who is an enterprising man and can afford the initial expense of the change, while in the other it may be delayed through the failure of several landlords to reach agreement. Again, to take a medieval example, in a district suitable for wool production, specialization in sheep-farming may be possible, to a certain degree, for a manorial lord who possesses other manors suitable for corn-growing, but not for the lord of a single manor. In general, difficulties of transport in the middle ages prevented much differentiation of agricultural practice in accordance with differences of soil and climate. Fundamentally too we must remember that at all times it is not geographical

¹ Dopsch, *Grundlagen der Europäischen Kulturentwicklung*, Second Edition, 1923, I, pp. 290–2; cf. Vinogradoff, *Growth of the Manor*, 1905, pp. 16 and 91 note 20.

² J. E. A. Jolliffe, *Pre-Feudal England: The Jutes*, 1933, *passim*.

³ E. C. K. Gonner, *Common Land and Inclosure*, 1912, *passim*: cf. Vinogradoff's criticism in *Oxford Studies in Social and Legal History*, v, 1916, p. vii.

conditions which affect the use to which land is put, but man's knowledge of the opportunities they present and his ability to take advantage of them. The same applies to the vista of general movements of prices and their effect upon, say, the decision of a manorial lord to let his demesne on lease. Such decisions depend not upon the actual movements of prices but upon the degree to which contemporaries are aware of them. As Professor Duby points out, an agricultural employer in the middle ages would be immediately conscious of a rise in wage-rates, but is not very likely to perceive a general trend in grain prices, because under medieval conditions those prices vary so much from month to month and from place to place.¹

But I must leave the subject of vistas and consider the pitfalls, though I confess that my metaphors are getting a little mixed and that the distinction between them is becoming rather blurred. However, the pitfalls do seem divisible into fairly definite classes.

There is first the danger of not appreciating to the full the limited relevance of many agrarian records or of failing to give sufficient consideration to the circumstances of their appearance. Duby makes the suggestive observation that early medieval inventories like the *Polyptiques* of the Carolingian age only include the holdings of such peasants as were dependent upon the landlord whose estates were being surveyed, and that there may well have been others who were independent and of whom we know nothing.² When, again, we read of rad-knights or riding-men in Domesday, we should do wrong if we supposed that that was all they were. In that admirable book, Professor and Mrs Gras's monograph on the village of Crawley in Hampshire, there is a curious slip which sprang from failure to appreciate the exact scope of a medieval manorial account. We are told that at Crawley the lord—who was the bishop of Winchester—"paid no tithes on grain but he did on cattle, sheep, swine, wool, and cheese."³ Of course the fact is that tithe sheaves were taken in the field, and that the reeves' account only deals with the remaining nine-tenths of the grain, but naturally mentions the tithe on the animal products because it was he who made the payment in their case. To take a more important example, there can be little doubt, I think, that the sudden appearance of an eloquent literature of complaint about depopulating enclosures in the early Tudor age has been wrongly taken as an indication that the evil was a new one at that time. Historians

¹ Georges Duby, *L'Economie Rurale et la Vie des Campagnes dans l'Occident Médiéval*, Paris, 1962, pp. 584-5.

² *Ibid.*, p. 91.

³ N. and E. Gras, *The Economic and Social History of an English Village*, Harvard Economic Studies, 1930, p. 206.

have overlooked the fact that there was little opportunity for successful pamphleteering until printing presses became more frequent and a strong Tudor government able to take action was in power. John Rous's early invective remained in manuscript. True, there is a footnote in Tawney's book referring to these very points; but I hope I shall not be committing an indiscretion if I reveal the fact that that footnote was not in the original draft of the book, but was inserted after I had read that draft and raised these very matters as objections to Tawney's argument.¹ I don't think he ever gave them as much weight as I believe they deserve. To take another point, what seems a perfectly plain statement in a medieval document may conceal a hidden trap. This is well illustrated by the account rolls of Crawley. These accounts contain a section headed *Defectus* and there record rents for which the reeve was not answerable, because for some reason they had ceased to be payable. In the year 1448-9 this section begins *In defectu redditus (terre) Willelmi le Straunge tracte in dominicum per annum duo solidi*. Two shillings rent are not chargeable to the reeve because Le Straunge's land has been incorporated in the demesne. Several cases of the same kind follow. One is at once interested and rather surprised to find the demesne being increased in the middle of the fifteenth century. But then one turns to the roll for 1356-7, and, behold, the same facts are repeated there. Now 1356 is only a few years after the Black Death, so it looks as if that was the explanation. These people were surely victims of the pestilence, for whose holdings no fresh tenants had been found. But before we jump to that conclusion, we turn back another century to the account for 1256-7, and there we find that the lands of these men—three of them—had already been taken into the demesne. In fact an allowance of rent because Strong's land had been thus absorbed is recorded in the earliest roll of all—that for 1208-9. There is a slight difference in the spelling of Strong's name, but the rent—two shillings—is the same. What is reported in the middle of the fifteenth century as if it were a recent event had in fact happened at least 240 years earlier. If the earlier rolls had not been preserved we might have come to some very wrong conclusions.²

Secondly, linguistic pitfalls have caused many to stumble. Those who have perceived the fantastic character of many of his statistical assumptions will not be surprised that Professor J. C. Russell was beaten by what I used to tell pupils was the 'fool's mate' of Domesday studies. He quotes the famous instructions to the Domesday commissioners with its words *quot carrucae in dominio, quot hominum*, but overlooks the genitive case of *hominum* and its contrast to the nominative of the following words *quot villani*, and so

¹ *Op. cit.*, p. 166 footnote; cf. Beresford, *op. cit.*, p. 150.

² N. and E. Gras, *op. cit.*, pp. 476, 278, 214, 188.

translates *quot hominum* as "How many men."¹ More shocking is the way in which two good historians—Mr Bennett, and Kosminsky—have, with serious consequences, misinterpreted a passage in the Hundred Rolls through a simple failure to appreciate the sense of a reflexive pronoun. The passage in question is one which tells us that at Chalgrove in Oxfordshire a villein named William—the typical villein whose services are described in detail—must present his sons at the manorial court and can there choose one of them *ut sibi serviat* while the others may serve the lord, if the lord wants them and they are willing. Both Bennett and Kosminsky say that the chosen son had to serve not his father, but the lord. The error is made still worse by Duby who says that the lord did the choosing.² It is, however, only fair to the memory of a distinguished historian to add that, when Kosminsky saw a review in which I called attention to his error on this matter, he wrote to me from Moscow and said, "I thank you very much for noticing my mistakes. Your observations are quite just and I shall profit by them." To take another case, my own revered master, Vinogradoff—of whom it was said *In vino veritas*—made linguistic mistakes about two entries in Domesday Book. The first is a real howler. Domesday tells us that there were 61 villages dependent upon Preston in Lancashire and goes on to say: *Ex his xvi a paucis incoluntur* and that the rest are waste. Vinogradoff actually took the preposition *a* to be an abbreviation of the word *acrae* and asserted that "only sixteen acres were still cultivated."³ His other mistake is very pardonable. He failed to perceive that Domesday in its account of Leominster uses the word *dominium* in two distinct senses—on the one hand for the manorial demesne or home farm, and on the other hand for the whole manor less the subinfeudated portions of it. The arithmetic involved makes this quite certain.⁴ A further example is provided by the late Miss Neilson. In her introduction to the Terrier of Fleet she discussed an action which was brought in 1295 by the prior of Spalding against some men who had destroyed an enclosure that he had made in the fen, and she says "the defendants claimed that the prior had enclosed as much as 2000 acres." But if you look at the Latin text you will see she had failed to notice that the critical verbs are in the subjunctive mood. It was in fact only asserted that the prior had enclosed about a hundred acres; but the defendants contended that this was more than he

¹ J. C. Russell, *British Medieval Population*, University of New Mexico Press, 1948, p. 36.

² *Rotuli Hundredorum*, II, p. 768; H. S. Bennett, *Life on the English Manor*, 1937, p. 184; E. A. Kosminsky, *Studies in the Agrarian History of England*, ed. R. H. Hilton, 1956, pp. 292-3; Duby, *op. cit.*, p. 448.

³ Vinogradoff, *English Society in the Eleventh Century*, 1908, p. 295.

⁴ *Ibid.*, pp. 313-14; cf. *Econ. Hist. Rev.*, Second Series, vii, 1954, pp. 67 *et seq.*

needed for drying the peat he had an undisputed right to dig, and that, if he could thus enclose more than that at his pleasure, it would follow that he *could* enclose a thousand or two thousand acres.¹ Apart from actual misunderstandings, inexact translation is a real pitfall. Duby, in translating a charter of Offa the king of Mercia—or rather Miss Whitelock's English translation of it—renders the 'hides' of her version (*manentes* in the original) as "*ménages de paysans*," which may be right, but implies an absence of manorial demesne in the lands granted, which the text does not really compel us to suppose.² Then I have seen *animalia* translated as "ploughing-oxen." Very likely they were that, but the word 'beasts' would have preserved the indefiniteness of the original. And to take *ociosa animalia* for ploughing oxen, as Professor Postan does in regard to a Glastonbury document, seems to be quite indefensible.³ Nor must one forget the trap in which inexperienced students sometimes get caught through using a dictionary of classical Latin, so that they are led to take *siligo* as meaning not rye, but 'fine white wheat'. It was not, however, a dictionary, but a wild guess, which led one student, in a thesis I once examined, to render *siligo* as silage! And I am tempted to cite one linguistic blunder which does not belong to agrarian history at all, because it has a rather comic flavour. In 1183 the archbishop of Canterbury in a letter summoned the proctors of the dean and chapter of Lichfield to meet him *ad viri Galilei* in Caen. The editor of the Register in which this occurs—himself a clerical dignitary—interpreted this as "at the sign of the Man of Galilee." It does not seem to have struck him as a bit odd that the archbishop should hold an important meeting in a pub or that the lack of any reference to a time of meeting would seem to imply that the primate was spending most of his time there. In fact, as Charles Johnson pointed out, *ad Viri Galilei* means 'on Ascension Day'—for the *Introit* for that day is "Ye men of Galilee, why stand ye gazing up to Heaven?"⁴

I suppose we are all sufficiently rural to avoid agricultural pitfalls. But one very distinguished historian managed to combine a linguistic and an agricultural howler by translating *jumenta et sequela eorum* as oxen and their offspring—or perhaps he said bullocks. I won't reveal the name of the writer who did that, for I've not been able to find the reference and my memory may deceive me. Then in the late H. E. Salter's edition of the Eynsham Cartulary

¹ N. Neilson, *A Terrier of Fleet*, British Academy Records of Social and Economic History, IV, 1920, pp. xxix, 164–5.

² Duby, *op. cit.*, p. 309.

³ *Econ. Hist. Rev.*, Second Series, v, p. 361; cf. VIII, p. 355, IX, pp. 106–7 footnote and p. 110 footnote 4.

⁴ *English Hist. Rev.*, XLII, 1927, p. 276, in a review of *The Great Register of Lichfield*, ed. H. E. Savage, Wm. Salt Soc. Collections, 1926 (for 1924), with reference to document 366.

the word *tramasium* is explained as 'corn cut green' though the document on which he is commenting describes it as measured in bushels and quarters.¹ Another agricultural blunder occurs in Professor Homans's admirable volume on *The English Villagers of the Thirteenth Century*. He is discussing different kinds of ploughs. He points out that the *araire*, in contrast to the *caruca*, can be drawn by a very small team—even a single ox or horse—and so "can be turned easily." But then he goes on to say, "Accordingly the *araire* is adapted to cross-plowing, first drawing the furrows in one direction and then at right angles across them, and so encouraged a régime of squarish fields." Evidently he didn't understand that cross-ploughing doesn't start until the first ploughing is completed!²

Finally, we have the treacherous pitfalls that attend the use of statistics. Blunders often occur through the employment of statistical methods where a little common sense would show them to be inapplicable. The most striking examples that I know are provided by a Frenchman and an American—the late André Déléage and Prof. J. C. Russell of the University of New Mexico. In his gigantic book upon the early agrarian history of Burgundy, Déléage makes an attempt to discover the area of some woodland on an estate in the Côte d'Or belonging to the cathedral of Autun—woodland which is described in a tenth-century survey as enough to fatten 2,000 pigs. He cites two entries in the early ninth-century *Polyptique* of St Germain des Prés, one of which mentions a wood 70 *bunuaria* in extent in which 100 pigs could be fattened, and the other four woods containing 12 *bunuaria* in all which would fatten 50 pigs. He then combines these figures—82 *bunuaria* feeding 150 pigs—and from that calculates the area of the woods which would feed 2,000 pigs in Burgundy. It is really ludicrous. The figures supplied by the *Polyptique* show that the pig-feeding capacity of some woods can be nearly three times as great in relation to their area as that of others. Yet Déléage assumes that woods are so nearly uniform in this matter that one can discover the size of other woods by taking the average of these two figures.³ In another part of his book the same author cites some evidence suggesting that twelve *bunuaria* was the customary size of the *mansus* or regular holding in Brabant. He then says one can recognize this 12-*bunuaria* holding in Hainault where some surveys reveal holdings whose average size was 12½ *bunuaria*. But the figures from which he obtains this average are 5, 7, 9, 15, 15, 16, and 20! Ob-

¹ *Oxford Historical Soc.*, 1907-8, I, p. 8, note 3.

² *Op. cit.*, Harvard Univ. Press, 1942, p. 43.

³ André Déléage, *La Vie Rurale en Bourgogne jusqu'au Début du Onzième Siècle*, Macon, 1941, p. 1212. The figure 10 in the sixth line is a misprint for 70, as is shown by the arithmetic: cf. the text of the *Polyptique* (ed. Longnon, 1886), p. 98.

viously an average of such radically different figures is quite without meaning.¹

I turn to the lamentable case of Professor J. C. Russell. Take first his amazing attempt to estimate the rural population, for the date of Domesday, in those northern counties which were not included in the Domesday survey. Multiplying the numbers he obtained from Ellis by 3·5 which he reckons to be the number of persons per household, he takes the average number of rural persons per square mile in the three counties of Cheshire, Lancashire, and Yorkshire taken together and impresses the careless reader by calculating this average to three places of decimals. He then applies this figure—3·928 per square mile—to each of the four unsurveyed counties, but throws in an imagined figure of a thousand persons for what he calls “the borough of Durham.” Ordinary common sense would suggest that devastated Yorkshire was not very suitable for inclusion in his sample, and that the very various physical geography of the four northern counties makes it extremely unlikely that the ratio of rural population to area was the same in each. But apart from all that, Russell has fallen into the same statistical trap that Déléage fell into in trying to estimate the area of woodland for a thousand swine in Burgundy. Russell reached his average figure of 3·928 by combining the figures for Cheshire, where the average was over seven, with those for Yorkshire and Lancashire taken together, which give an average less than half that of Cheshire. As the evidence of Domesday shows this large difference between the two areas, it is surely ridiculous to suggest that the average of their combined figures will give us a worth-while estimate of the population for each of the counties for which that evidence is not available. But Russell’s faith in averages has carried him to an even greater height of absurdity. On page 313 he gives a table showing what he takes to be the number of persons per square mile in 1086 in every county in England, and in this table he makes that number identical not only in the four northern counties but also in Lancashire, Yorkshire, and Cheshire, though that is in flat contradiction to the figures he has himself supplied from the Domesday evidence on page 53.²

Another example of Russell’s deplorable statistical methods is provided by his attempt to ascertain the proportion of the population that was omitted from the Domesday figures. He takes a sample of entries from each county and on this basis calculates the ratio of recorded population to hides or carucates in that county. Then, if there is any indication in a Domesday entry of the presence of unnumbered persons, he exhibits the difference between the

¹ *Ibid.*, p. 343 and p. 1093 for the figure 7 omitted from the text.

² *Op. cit.*, pp. 52-4, 312-13.

numbers that are recorded and those which would, on his reckoning, correspond to the hidation. It is hard to imagine anything more absurd than the assumption that there was in each county a constant ratio between hides or carucates and the population; and, in fact, of the ten cases he cites of entries that mention unnumbered persons additional to those recorded, there are two where his method provides a total considerably less than that actually recorded. Incidentally, the inadequacy of the elaborate sampling process he adopts seems to be indicated by the fact that he gives 3·5 as the average number of persons per hide in Cheshire and 4·2 as the figure for Bedfordshire, whereas if we take the total figures as reckoned by Maitland we find that the ratio was much higher in Cheshire than it was in Bedfordshire. One wonders why Russell did not choose plough-teams rather than assessment units for comparison with the numbers of recorded persons. Though there can have been no close correspondence between teams and population, the ratios between them are probably a good deal nearer to normality than those between the population figures and the hides, carucates, or sulungs. And at least the sharp contradictions that one finds between these two ratios in some cases is a further reason for distrusting calculations based on the latter. Russell gives 4·2 for the average number of persons per assessment unit in Bedfordshire and 2·3 as the corresponding figure for Middlesex. Maitland's figures for persons per plough-team are almost the exact opposite—4·2 for Middlesex and 2·8 for Bedfordshire.¹

The employment of Domesday statistics is certainly a tricky business demanding both common sense and critical acumen. But the later part of Russell's book seems to me even more misleading than the chapters concerned with Domesday material. I am thinking especially of those sections of it which are devoted to the expectation of life at different periods. I must confess at once that I have utterly failed to understand a good deal of what I read there. But if the statistical calculations are quite mystifying in their extreme elaboration, there can be no mistaking the fact that they are employed with an extraordinary lack of common sense. It is true that the difficulties of interpreting the material are often discussed at considerable length, but hypotheses and conjectures are generally forthcoming to brush them aside. And though the chief obstacle to research in this field is obviously the scantiness of the evidence and the fact that it is almost entirely limited to the upper classes of the population, the reader is hardly ever given any information about the number of cases comprised in the data for different periods. Moreover, though I am a mere layman in statistical science, the conclusions offered us seem to me to be in themselves sufficient to discredit the whole

¹ *Ibid.*, pp. 39-41; cf. Maitland, *Domesday Book and Beyond*, 1907 edn., pp. 400-3.

process of investigation by which they have been reached. For example, we are asked to believe that the expectation of life at birth was 31.08 years between 1276 and 1300 but only 20.21 years for those born between 1376 and 1400, and yet that a person who had attained thirty years had a slightly better expectation in the later period than in the earlier. Then we are told that "before 1276"—whatever that means—expectation at birth was 35.28 years, which is considerably better than the figures given for any subsequent medieval period.¹ Again, in spite of the fact that the tables containing these figures show large variations between the different periods of twenty-five years to which they relate, we are actually offered an elaborate table indicating what professes to be the expectation of life for the children of English kings, though this is based upon the history of the offspring of all the kings from the Conqueror to Henry VII.² Not only so. After some apology for the smallness of the evidence available—unaccompanied, however, by any information as to what in fact that evidence amounts to—Russell has thought it worth while to print a table of about a hundred figures designed to show the expectation of life in Roman Britain. From this it would appear that anyone born at any time during the four centuries of Roman rule would enjoy an expectation of life of 30.3 years and that anyone who during that period was fortunate enough to have attained an age of between 87 and 91 years could still look forward to a prospect of 2.5 more years of life.³

I am sorry to have worried you with so much detail in exposing the unreliable nature of Russell's book and I am sorry that I have felt obliged to pass such a severe judgement upon an author who has obviously spent a great deal of time and taken a vast amount of trouble in pursuing these investigations. But his book is the classic example of the pitfall presented by statistical ingenuity unchecked by common sense. Moreover it is itself an instance of a slightly different sort of pitfall. I mean the pitfall of taking for granted the conclusions of a writer if they are exhibited as the results of an impressive-looking mass of figures and diagrams which we find it difficult or even impossible to understand. I am shocked to find that Russell's book is often quoted as if it were authoritative, and am reminded of a remark made—I think in 1813—by Robert Hamilton in a criticism of governmental finance: "A complicated system may perplex and mislead, but it can never ameliorate."

In conclusion, just a word about one very simple statistical pitfall. There seems to be a tendency for young students and novices in research to employ

¹ *Ibid.*, p. 374. Tables 13.4 and 8.11. But I fail to see how these figures can be reconciled with those given in some of the other tables.

² *Ibid.*, pp. 178–80.

³ *Ibid.*, pp. 372–3.

the device of the *median* where it is inappropriate. The word 'median' sounds a bit *recherché* and high-brow and may seem more likely to impress examiners than the humdrum average. Of course there are cases where it can be a very useful means of exhibiting the significance of a series of numerical data—for example with stock exchange prices where you have a large number of transactions at prices differing only in a very slight degree from one another. But in some agrarian matters the median can be quite misleading. Take a simplified hypothetical case. Suppose one is investigating the scale of agricultural holdings in two villages, in each of which they fall into two nearly equal groups—say *nine* 30-acre holdings and *eleven* 5-acre holdings in the one and in the other *eleven* 30-acre holdings and *nine* 5-acre holdings. Obviously the tenurial conditions in these two villages are almost identical. But the median would indicate a sharp contrast between them—being five acres in the first case and thirty acres in the second.

I apologize for keeping you so long and still more for appearing before you in the disgusting role of a fault-finder. But the cause of truth must be served; and I'm afraid it's always easier to see—or think one sees—the notes in other people's eyes than the beam in one's own. But in this afternoon's discussion you will be able to redress the balance.

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