RHETM
Review of the History of Economic Thought and Methodology

Tribe, Keith. 2024. "The "English Model" of Agrarian Development: Past History, Present Historiography." *Review of the History of Economic Thought and Methodology* 1(1): 1–24. DOI: https://doi.org/10.16995/rhetm.17012

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The "English Model" of Agrarian Development: Past History, Present Historiography

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The English "Agricultural Revolution" of the later eighteenth century was widely seen at the time in Europe as the result of exemplary agricultural practice, and Arthur Young as its principal exponent. However, today economic historians disagree on both chronology and characteristics of this revolution, and the reliability of Young's voluminous writing is often questioned. The notion of an "Agricultural Revolution" itself dates only from around 1900; like the idea of an "Industrial Revolution" from which it borrowed, it is an idea that was not invoked during the period to which it refers. This disjunction between historiography and history – between the way in which events are subsequently described, and how contemporaries actually talked and wrote about their present – is overlaid by a further disjunction: while there was indeed at the time an ample European literature about the exemplary nature of English agriculture, not until the 1830s did the idea that the preceding fifty years were characterised by rapid industrial change become a commonplace. Today the mantra of "ideas in context" is broadly accepted; but which context? The context created by modern historiographies, or that of the beliefs and language and actions of historical actors?

> As Gissing remarks, Dickens nowhere describes a railway journey with anything like the enthusiasm he shows in describing journeys by stage-coach. In nearly all of his books one has a curious feeling that one is living in the first quarter of the nineteenth century, and in fact, he does tend to return to this period. *Little Dorrit*, written in the middle 'fifties, deals with the late 'twenties; *Great Expectations* (1861) is not dated, but evidently deals with the 'twenties and 'thirties. Several of the inventions and discoveries which have made the modern world possible (the electric telegraph, the breech-loading gun, india-rubber, coal gas, wood-pulp paper) first appeared in Dickens's lifetime, but he scarcely notes them in his books. (Orwell 1961 [1939], 68)

The fictional worlds constructed by Charles Dickens consistently placed his major novels in a past remote from the world in which he actually lived. Born in 1812, a few months before Napoleon Bonaparte's army invaded Russia, he died shortly before the surrender of Bonaparte's nephew to the Prussian army at Sedan on 2 September 1870. This lifetime of only 58 years extended across a tumultuous period of world history; but little of that finds its way into his narratives, forever fixed in a domestic English past. Novelists are of course free to create whatever worlds they wish, but the lost world that Dickens re-created has become imprinted in English historical memory alongside the rather different idea that, during the transition of the eighteenth into the nineteenth century, Britain underwent an economic transformation widely regarded as exemplary for the modern world. While in popular understanding these parallel narratives are kept separate, facts and fictions are also mobilised into a narrative of British development that was both unique and exemplary, creating a pathway to the modern world along which others followed.[1] As the example of Dickens shows, contemporary narratives can be disconnected from modern histories. How then are we to navigate this disjunction of past and present histories, while maintaining a historical contextualism that goes beyond intellectual history to that of political action and cultural change?

There is one instance where contemporary understanding does align with a modern, exceptionalist British history: the development of English agriculture. During the later eighteenth century this was regarded as exceptional, both domestically and across Continental Europe. A leading contributor to the developing literature was Arthur Young, nominally a farmer but one who could write as prolifically as others talked. Young completed, and then published during the early 1770s, accounts of various regional English tours, highlighting his observations of good agricultural practice. Then during the 1780s he made several tours of France, commenting adversely on what he encountered. His principal texts were translated into French and German; Young

[1] This was the theme of the opening ceremony of the 2012 London Olympic Games.

became recognised among his European contemporaries as the leading exponent of an "English model" of agricultural development.

But Young began writing long before the French Revolution, and it would be another hundred years before historians began to argue over the nature and timing of an "Agricultural Revolution" in Britain. For the idea of an "agricultural revolution" was first formulated only by analogy with that of an "industrial revolution", and it took until the 1880s for this latter idea to enter public circulation as a way of thinking about Britain and the world. The phrase had first been used in 1837 by Adolphe Blanqui, drawing an explicit analogy with the French Revolution (1837, 209; see also Tribe 1981, 101). While in 1845 Friedrich Engels linked "the invention of the steam-engine and of machinery for working cotton" to the term, *The Condition of the Working Class in England* was not published in English until 1887, three years after the posthumous publication of Arnold Toynbee's 1881–82 Oxford lecture course as part of his *Lectures on the Industrial Revolution in England* (1884).[2] Toynbee's text initiated a chronology for an "Industrial Revolution" that was quickly accepted.[3] Hence the term appears to have entered general circulation as a key organising concept of British economic history more than one hundred years after the events to which it was linked, recognition and analysis of this *décalage* being the subject of my 1981 essay.

The chronology and leading events of this "Industrial Revolution" have since enjoyed relative stability, placed between the 1760s and the 1830s; modern historians might still argue over the exact causes of Britain's industrial revolution, but they largely adhere to a common periodisation.[4] However, while the notion of an English "Agricultural Revolution" was first mooted in the early twentieth century, there is still no broadly-accepted consensus on when an agricultural revolution occurred and what its leading features were. It has been variously placed between the later sixteenth and the early nineteenth centuries. While the chronology of the "English model" associated with the work of Arthur Young coincides largely with the popular chronology of the Industrial Revolution, some modern historians discount Young's work and arguments

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[2] See my account of the tangled publishing history of this volume in *Constructing Economic Science* (2022, 200, fn. 16).

[3] William Cunningham's *Growth of English Industry and Commerce* (1882) was the first survey of English economic history, beginning before the Romans with the English tribes but ending as the 'industrial system' "came to establish its position as a more independent factor" (387) during the eighteenth century. Cunningham makes no reference to an "Industrial Revolution" in this context; instead he refers to the introduction of the spinning mule as "marking most clearly the development of the factory system" (397).

[4] The timeframe of the "industrial revolution" has been extended back to the early seventeenth century by a shift of focus to "industriousness" initiated by Jan de Vries (1994), especially page 251 for the point made here about the chronologies of Industrial and Agricultural Revolutions. Criticism of this idea is the subject of a substantial review essay by Alexis D. Litvine (2014).

and dismiss the idea that significant changes in agricultural practice took place during his lifetime. The "Agricultural Revolution", its nature and timing, has remained a controversial matter in recent English economic history; and increasingly sophisticated use has been made of mainframe and personal computers to revisit many of the key points of disagreement. Examining the idea of a specifically English model of agrarian development demands that we take into account modern historical scholarship, given the lack of agreement among modern scholars. In contrast, there is today no great scholarly controversy about the nature and timing of an English Industrial Revolution, or its role as the initiator of a process of industrialisation that had, by the later nineteenth century, already outrun its progenitor. Popular consciousness still cleaves to the "wave of gadgets" that Engels listed in 1845, together with their inventors, as the prime marker of this process.[5] Comprehensive mechanisation came so late to British agriculture – from the mid-twentieth century[6] – that there is no such tangible and obvious trace for the main factors underlying its transformation from the mid-eighteenth to the later nineteenth centuries.

We can see this problem at work in the account of a contemporary: Jean-Baptiste Say's *De l'Angleterre et des anglais*, written up after his tour of Britain in 1814, which lasted from 19 September until his return to Paris on 31 December.[7] This was a commission he had solicited from the provisional government, funded by the Ministry of Agriculture, Commerce, and Arts and Manufactures. The memorandum that he wrote for the Ministry is lost; but for my purposes here the log of his travels (2020b) is more revealing of what he saw than the essay he published in January 1815 (2020a). Unusual for a foreign visitor at the time, Say was fluent in English, having spent 1785 and 1786 in Croydon (now part of South London) studying commercial practice in two offices: one trading with the Caribbean, and one with India. In 1801 he contributed to the formation of a Society for the Encouragement of National Industry, and then in 1805 he established a substantial spinning mill at Auchy, where in 1807 he had the first

[5] On 23 December 2010, BBC Radio 4 broadcast an episode of Melvyn Bragg's "In Our Time" devoted to "The Industrial Revolution". The format brings together a small panel of specialists for a conversation about a historical topic. On this occasion one of the guests, Pat Hudson, criticised the focus upon inventors and their machines, as an understanding of industrialisation as little more than a "wave of gadgets". Bragg was evidently unfamiliar with this common characterisation; an unusually heated argument followed about the significance of "great inventors" and the machines they invented. Subsequent listener response showed near universal popular condemnation of Hudson, and strong support for Bragg.

[6] Collins emphasises that there was little connection between mechanisation and agricultural economic growth in Britain before the twentieth century (Collins 1969, 453). A general review of agricultural mechanisation in Britain dates the introduction of reapers and binders from the early 1900s, with tractors as a significant power source first in mid-century – in 1938 there were 856,713 draught farm-horses in Britain (Long 1963, 20).

[7] For a general overview see Alcouffe and Le Bris (2022), especially page 403 for the link to the points made above.

hydraulic motor in Northern France installed. In a surviving letter, written in mid-October 1814 to the Director General of the Ministry, he reported being especially struck in England by the growth of foreign trade and the associated harbour works; he believed the cause of its flourishing overseas trade to be the absence of any export duties, and noted a national debate on the Corn Laws turning on free trade versus protection. In general he argued that economic activity was weighed down by all kinds of taxes and charges, which in turn promoted innovation in products and processes as a means of avoiding them (Steiner and Tiran 2020, 314–15).

In the essay itself Say opens with a general review of the postwar position of Britain, making liberal use of Colquhoun's *Treatise on the Wealth of the British Empire* (1814) and laying great emphasis on the burden of taxation under which British producers and consumers suffer. For those who borrow to engage in business, interest payments are a significant burden: "land, or an investment in funds that everywhere else would be sufficient to secure leisure without work is not enough in England to support its possessor" (2020a, 326). As for workers, their income is but three-quarters of their expenditure, the remainder coming from the parish rates. "One third, it is said, of the population of Great Britain is thus compelled to rely upon public charity" (326). Such are the burdens on all sections of society, but the need to save on costs of production has had one great benefit: to seek the cheapest form of production, reducing costs of production by operating at a large scale. "I saw in Glasgow dairies with three hundred cows where milk was sold for 2 sous" (330).

> But it is mainly the introduction of machines that has rendered the production of wealth more economical. There is hardly a large farm in England where, for example, the threshing machine is not employed, by means of which, used extensively, one can do more of the work in a hour than in a month by the usual method. (331)

He then immediately turns to the steam engine, where human labour, "which the expense of objects of consumption has made so disposable, is in no circumstance more advantageously replaced than with *steam engines*".

We can read in his travel diary that he had certainly seen a threshing machine in action, in Penrith, and sketched it: but it was powered by four horses, not by steam (Say 2020b, 361–62). Besides this one item of agricultural machinery the remainder of his diary is filled with observations of manufacturing machinery, warehouses, harbours, mills and foundries on a tour that took him from London to Glasgow and back via Liverpool, Manchester, Birmingham, and Oxford. He then travelled on 10 December to Gatcombe Park, where he was well-received by Ricardo, and who showed him a local linen spinning mill and a cloth manufactory (377). On 14 December he and Ricardo

went to visit Jeremy Bentham at Ford Abbey. Then he returned to London, met Leonard Horner, Sir Samuel Romilly, the Baring brothers, and visited a mint.

The essay does not communicate the strong interest conveyed by the diary in the technical details of the "gadgets" to which he was introduced; instead, there is an emphasis upon the financial burdens under which all British citizens suffered, employed as a general explanation for the alacrity with which manufacturing and steam-driven machinery was being introduced. Besides general remarks on the Corn Laws, the essay pays little attention to the agrarian economy. It is significant that, besides the Glasgow dairy, the only item of agricultural equipment noted in the travel diary is a horse-powered threshing machine.[8] As we shall see, arguments over the nature and timing of the "Agricultural Revolution" do not rely upon such tangible pieces of equipment; indeed, the classic study of the violent response to the introduction of threshing machines concludes that farmers who possessed them were not averse to their decommissioning, provided that all such machines remained unused (Hobsbawm and Rudé 1973, 258–59). Here there was a clear distinction from the fate of handloom weavers.

It was only in the final years of the nineteenth century, once the idea of an Industrial Revolution had been established, that an alternative history of agrarian change was modelled upon it: no longer the triumphal progress of mechanisation, but a tale of decline, immiseration and pauperisation, culminating in the creation of an agricultural proletariat.[9] And so as the story of an Agricultural Revolution took shape in the twentieth century, modern historians mostly ignored the contemporary view that an exemplary late eighteenth-century English model of agricultural improvement existed, a view shared at the time both within Britain and in Continental Europe. While the idea that Britain was undergoing an industrial transformation from the later eighteenth to the early nineteenth centuries is not an idea commonly encountered in the writings and speeches of the time either in Britain or elsewhere in Europe,[10] there is ample evidence that in the later eighteenth century contemporaries identified significant changes in agricultural organisation and practice with an English exemplar. But by the twentieth century the historiographies of the industrial and of the agricultural revolution had become symmetrically opposed: the former emphasising events, the significance of which few contemporaries seemed fully aware; the latter by contrast ignoring

[8] Whose use was centred on Scotland at this time, while take-up in Southern England was much slower – see Collins (1972, 16–19).

[9] Leaving to one side for the moment Rowland E. Prothero [Lord Ernle] (1888); subsequent editions from 1912 titled *English Farming, Past and Present*, the classic account of agrarian improvement and progress.

[10] This is a literature that first developed in the 1830s, Adolphe Blanqui himself being part of this predominantly French wave of writing; and upon which Marx built once he had moved to Paris in late 1843. See Tribe (2016); and for an overview of the French literature, my *Economy of the Word* (2015, 180–94).

well-documented and widespread contemporary recognition of exemplary agricultural progress. Moreover, the story of agricultural decline and pauperisation that first gained traction in the early 1900s built upon a discourse only first fully articulated in the 1820s, related to the reform of the Poor Laws; and which was then retrospectively imposed by twentieth century writers upon the later eighteenth century, when few writers regarded these issues as of central importance (Lanot and Tribe 2024).

But views on when this process of pauperisation had occurred differ by a century or more. The Hammonds argued that the wave of parliamentary enclosure in the later eighteenth century was the mechanism that was fatal to small farmers, cottagers and squatters (1911, 97), and that at the beginning of the eighteenth century

> ...the life of the common-field system was still the normal village life of England, and that the land which was already enclosed consisted largely of old enclosures or the lord's demesne land lying side-by-side with the open fields. (42)

In the same year Levy examined the emergence of large-scale agricultural holdings, paying due attention to differences between arable and pasture farming, but likewise arguing that the disappearance of smallholders was a direct result of parliamentary enclosures, which were followed by engrossing and the formation of large holdings. Here the first chapter talks of the "Agricultural Revolution of the eighteenth century", that in the period 1760–1815 small owners sold up to become large tenant farmers (Levy 1911, 30, 24, 27).

The following year R. H. Tawney published an alternative story, one which emphasised the importance of a transition from copyhold to leasehold during a period from the mid-sixteenth to the mid-seventeenth centuries, hence with a legal rather than economic focus. "The Transition to Capitalist Agriculture" described in Part II (1912, 175ff.) is treated primarily as a change in forms of landholding that resulted in the creation of large leasehold properties. Tawney's argument lacks the simplicity of the Hammonds, and he draws a clear distinction between the enclosure movement of the later eighteenth century and that of the sixteenth; his chief concern is not the creation of an agrarian proletariat, but the demise of the small independent landowner in the face of the machinations of landlords and government.[11] He outlines changes in

[11] Not a "small farmer", since to be consistent we need to use the term "farmer" precisely as someone hiring land, and "farmed" by the owner to the tenant, a usage that dates from the later sixteenth century. "Farmer" as an occupation was more or less unknown before the Civil War, and first became commonly used in the nineteenth century, whereas "yeoman" could mean either a freeholder or a copyholder, but was all the same in common use up to the early nineteenth century (Hoyle 2013, 6). Tawney uses the term "peasant" for tenants, not freeholders, which today seems counter-intuitive (1912, 55–57) and "yeomen" are here freeholders (20–23).

the way in which land was held in a developing commercial context, that agriculture was opened up to change by these forces and not by any internal pressures. Most importantly, this located the principal period of agricultural change in the seventeenth, not the eighteenth century.

The exact sources of this increasing, but delayed, interest in British agrarian development are difficult to place.[12] It seems obvious that the final chapter of Marx's *Das Kapital*, "So-called Original Accumulation",[13] might play a role here, since this turned on the creation of "free labourers" selling their own labour power. As he notes, such free labourers were not means of production like slaves, nor did the means of production belong to the worker; the capital relation presupposed the separation of labourers from property, transforming social means of production into capital and producers into wage labourers. "So-called original accumulation is therefore no more than the historical process dividing producer and means of production. It appears to be 'original' because it constitutes the prehistory of capital and its corresponding mode of production" (1932 [1872], 660). He went on to clarify that the expropriation of workers from the land was the basis of the whole process, assuming different variants and running its course in differing sequences in different times and places. Only in England did it have a classical form (661).

Marx here dates the capitalist era from the sixteenth century, and in the following pages he describes the dissolution of feudal relations and the creation of free proletarians, stimulated by the development of Flemish wool manufacturing and the rise in wool prices: "the purely economic driving forces of the agrarian revolution" (1932, 667). Even at the end of the seventeenth century the "Yeomanry" (Engl.) was more numerous than the class of tenant farmers, and rural wage labourers possessed common rights. But by 1750 the yeomanry had disappeared, and by the final decade

[12] The influence of John Ruskin and William Morris certainly contributed to a cultural shift in Britain during the 1880s that, among other things, revived ideas of peasant proprietorship as a reaction to an agricultural depression and the urbanisation of the British population. The latter issue was also linked to the Garden City movement outlined by Ebenezer Howard's *To-morrow: A Peaceful Path to Real Reform* (1898), revised and retitled as *Garden Cities of To-morrow* (1902).

[13] Ch. 24 of the second edition redivides the six chapters of the first edition by promoting existing sub-sections. Section 1 of this chapter, "Das Geheimnis der ürsprunglichen Akkumulation" refers to Smith's use of "previous accumulation" (Engl.), but this is inexact (Marx 1932 [1872], 659). At the beginning of Book I Ch. VIII, "Of the Wages of Labour", Smith writes of the "original state of things, which precedes both the appropriation of land and the accumulation of stock", in which "the whole produce of labour belongs to the labourer. He has neither landlord nor master to share with him". (WN.I.viii.2). He uses similar phrasing at WN.I.vi.1. Smith writes elsewhere of "the accumulation of stock" which "must, in the nature of things, be previous to the division of labour" at WN.II.i.3. Both ideas are different from Marx's sense of "original accumulation", which is the exact translation of "ürsprunglichen Akkumulation". The Garnier translation of Smith that Marx actually read has "Dans cet état primitif que précède la propriété des terres et l'accumulation des capitaux…", which is probably where the idea comes from that "primitive accumulation" is the correct rendering of Marx's German (Smith 1802, 129).

of the eighteenth century the last trace of rights in common, too. This was linked to the parliamentary enclosure movement, and terminated in the Highland Clearances. As he stated in the preface to the first edition, while England was the model, "the more industrially developed country shows the less developed only the image of its own future" (35).

Whatever impact Marx's account of labour and property might have had around 1900, one of the earliest detailed studies of rural dispossession was by a Soviet historian, V. M. Lavrovsky, in a study of claims to common and other rights in eleven Suffolk parishes (1937). He went on to write an entire book on this period, published in Russian in 1940 and helpfully summarised by Christopher Hill as follows:

> To summarise Prof. Lavrovsky's conclusions: the independent peasantry had already ceased to exist, even in unenclosed parishes, by the end of the eighteenth century. An agricultural bourgeoisie had grown up, few in numbers but predominant in acreage owned and leased, employing wage labour to produce agricultural commodities for the market. The other side of this picture was the almost total disappearance of middle peasant proprietors, and the conversion of the small peasantry – still very numerous – into an agricultural proletariat. And this had occurred in unenclosed parishes, showing that although enclosure might facilitate it it did not cause the process. (Hill 1942, 94)

Sixty years later Leigh Shaw-Taylor published a survey article based on his postgraduate work that in some respects came to similar conclusions, while in the interim debate over the real impact of enclosure, regional variations, differences in the distribution of land and rights to common had continued to rage. Shaw-Taylor's verdict was unequivocal:

> Most laboring households in the arable lowlands of southern and eastern England were not proletarianized by parliamentary enclosure, for the simple reason that they were thoroughly proletarian already. Parliamentary enclosure did not, therefore, represent the last decisive stage in the development of agrarian capitalism. Capitalist farmers and proletarian laborers dominated English agriculture before parliamentary enclosure. The views of the Hammonds and Neeson, asserting the semiproletarian nature of the pre-enclosure agricultural workforce, must be set aside. (2001, 659)

And so at one level the conceptualisations of Agricultural and Industrial Revolutions had merged along the dimension of the nature of the labour force that both required, endorsing the basic point about "free labour" that Marx had made, and which for example Max Weber considered critical to the development of capitalism in Western

Europe. This leaves to one side all the factors listed by Eric Kerridge in his argument that there had indeed been an Agricultural Revolution in England, but in the sixteenth and seventeenth centuries, where

> The chief criteria to be used in assessing the agricultural revolution … must be the floating of water meadows, the substitution of up-and-down husbandry for permanent tillage and permanent grass or for shifting cultivation, the introduction of new fallow crops and selected grasses, marsh drainage, manuring, and stock breeding. (Kerridge 1967, 40)

Which is the agricultural equivalent of a wave of gadgets, with no consideration given to the domestic distribution of production and consumption, the national and international commercial context, the structure of landholding, and the shifting seasonal demand for labour that new crops would create.

Kerridge is at one extreme of arguments about the English Agricultural Revolution, but simply because the book was published over fifty years ago does not mean that it can safely be ignored. Robert Allen revived the figures of the "yeoman" and "peasant" farmers in 1992, arguing that parliamentary enclosures did not increase corn yields, so that while there were two agricultural revolutions — one of small landholders of the seventeenth and early eighteenth century (Kerridge 1967), and one of the later eighteenth which recast the landscape but made little contribution to output — the latter made a negligible contribution "to the growth in national income" (Allen 1992, 310).

This latter point indicates another development that is important here: an essentially microeconomic appreciation of economic activity at the level of parish and region has since the 1980s been challenged by an aggressively macroeconomic approach, in which the ultimate criterion of change is the extent to which it registers in estimates of the growth of national income. Through this route any idea of an "English model" evident to contemporaries is lost in the evaluation of competing national growth paths, which at its most extreme simply assumes that, for example, "In 1815, Britain was the leading economy in Europe" (Allen 2004, 15), the words with which Allen opens his account of a British exceptionalism untainted by any serious comparative framework other than national rates of growth. Agricultural production is approached through the perspective of labour productivity and a search for the genesis of an "agricultural revolution", noting that the established explanation for the rise in agricultural productivity and output had been the enclosure of the open fields. But Allen has long argued that innovation was equally possible in an open-field environment and that enclosure did not decisively improve grain yields, especially the phase of Parliamentary enclosure in the later eighteenth and early nineteenth centuries — nor, he argues, were

large farms especially superior in efficiency to small farms (2004, 22–26). Rather than consider comparative agricultural structures, Allen is seeking an origin for a process of "economic development" in Britain that made it "exceptional", and so little light here is shed on diversity and difference, whether national or international.

In the same volume James Simpson did offer a more nuanced perspective on English agricultural development and its wider significance, summarising eighteenth century changes as follows:

> The planting of legumes increased the nitrogen content of the soil, produced more fodder for animals and reduced the area of unsown fallow. Root crops allowed more livestock to survive the winter months, leading to larger herds. Large numbers of animals produced greater quantities of manure which, with their better integration with the arable, increased crop yields. Finally, by enclosing common land and the open fields, English landowners were able to establish large, compact farms. (Simpson 2004, 72)

While he goes on to endorse Allen's view that the path followed by English agriculture was distinct from that in the rest of Europe, he neglects to mention that Allen in fact dismisses the importance of enclosure in the later eighteenth century on the grounds that grain yields, according to his estimates, did not increase. Simpson then attributes the distinctiveness of English farming firstly to high wheat prices in the second half of the eighteenth century,[14] which in turn is attributed to "state intervention that protected farmers rather than consumers" (72–73), a bizarre conclusion that results from imposing post-Napoleonic War opinion on the very different policy framework of the later eighteenth century, where consumer protection governed the management of import and export duties and the associated debate. A second factor is said to be the relative decline of the agricultural population from the later seventeenth to the mid-eighteenth centuries, which given the relative stability of the population in this period might suggest a rural-urban shift, although more likely in this period shifts in the relationship between agriculture and rural industry. The homogenised national perspective that Simpson employs fails to engage with the broader narrative of agricultural improvement and specialisation that is, today, a characteristic more of social historical research than economic history.

This macroeconomic framework becomes especially crass when considering rural labour, ignoring issues such as seasonal fluctuations in employment, or distinctions

[14] As compared with France, Italy, Belgium and Spain over the 200 years from the 1620s to the 1820s, 100 = the average price for 1601–1650 – see Table 3.3 (Simpson 2004, 73).

between male and female labour, or the relationship between day labourers and farm servants, in favour of the vague nostrums of textbook economics:

> Finally, labour market organisation suggests that the lower transaction costs associated with small family farms were in fact also enjoyed by English farmers. In 1700, the English agricultural workforce consisted of family labour 'supplemented by young adults in their late teens and early twenties hired on annual contracts as servants'.[15] The paternalistic nature of these labour contracts helped reduce problems of moral hazard, and provided incentives for good work. As labour was recruited on annual contracts, large farmers also used the slack periods of the year to create capital assets as small family farmers did. (Simpson 2004, 80)

While these ideas might well organise something like an "English model", they remain at such a high level of generality that they are vulnerable to the criticism that they truly represent neither any one period, nor any one place. In this way, the "English model" is no longer a specific set of institutions and practices, but instead an economist's model into which data can be plugged and relationships estimated, creating a sense of rigour but in truth a device for turning inexact categories into exact numbers. If we are to compare across countries we cannot do so at the national level, but like for like by farming region, or crop, or type of landholding and consequent rural patterns of settlement. This is the kind of observational data that we might expect from visitors and travellers, but as is evident from the example of Jean-Baptiste Say, here the particular interests of the observer dominate, and the visibility of what is observed.

Arthur Young[16] had begun his own observational travels in 1767, with a six week tour of the southern counties, and in the Preface to his *Tour through the East of England* wrote that

> Describing the husbandry of the kingdom, by registering minutes on the spot, was a new undertaking, having never been executed either in this or any other country of *Europe*: a novelty that engaged a more favourable notice than the merit of the work could claim, and induced me, in 1768, to take a more extended tour through the northern counties. I advertised the intention, requesting information, and was favoured with much that I found valuable. (1771, vol, I, xi)

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[15] A quotation from Allen (1994, 106).

[16] G. E. Mingay's *Oxford Dictionary of National Biography* entry is the best introduction to Young's life and work; born in 1741 to the chaplain to the Speaker of the House of Commons and rector of Bradfield Combust near Bury St. Edmunds, Suffolk, the farm at Bradfield that he ran for much of his life was part of the family estate. His mother brought a large dowry into the marriage, and so we might conclude that it was this that enabled Young to finance his travels and purchase the literature to which he referred in his writings, which must have been drawn from a substantial private library. He died in 1820.

During the original tour he developed a format for collecting information, and a template for a questionnaire that could be adapted in future work, and this helps account for the sheer volume and the consistency of his writings. He was not distracted by unusual courses or practices, but sought to present an average sample of a locality. In this way he generated a large amount of comparable material, and wrote up his findings in an extraordinary burst of writing and publication — starting with his *Rural Oeconomy* (1770), the three volumes of the *Six Months Tour through the North of England* (1770), the two volumes of *The Farmer's Guide in Hiring and Stocking Farms* (1770), *The Farmer's Kalendar* (1771), various editions of *The Farmer's Letters to the People of England* (1771), the four volumes of *The Farmer's Tour through the East of England* (1771), the third edition of *A Six Weeks Tour, through the Southern Counties of England and Wales* (1772), his *Political Essays concerning the Present State of the British Empire* (1772), besides the two volumes of his *Course of Experimental Husbandry* (1770) which recorded the results of experiments he had conducted on his own farm.

His *Political Arithmetic* (1774) was however no mere distillation of the good practice he had previously observed. Addressed "to the Oeconomical Societies established in Europe", he first noted that he had

> ...met with many passages in the works of foreign writers, wherein they quoted the example of *England*, but under great misrepresentations. These circumstances induced me to attempt a plain explanation of the system of *Great Britain* in the encouragement of agriculture, in order for an opportunity to point out as well as I was able the principles of that policy which has wrought these effects in this country, and which give foreign authors an idea of our prosperity; British ones, a conviction of our declension and ruin. (1774, v–vi)

It is therefore a system of policy, of civil administration, that is here the focus of Young's recommendations, not the details of agricultural practice. The English model that he advances is primarily a policy regime, hence the title — the "political" in the title pertains to "policy", in some passages to "police" and good order.

This is made clear in the first chapter, "Encouragement of Agriculture in Great Britain" which in detailing under nine main headings the factors promoting English agricultural progress, begins with "Liberty":

> An *English* farmer, with a lease, is as independent of his landlord, as that landlord is of the farmer; and if he has no lease, we may be sure he is favoured in the rent proportionably to such circumstance. (1774, 5)

An "English farmer" is thus understood as a tenant, and the existence of a contract between landlord and tenant enables the latter to invest time and resources into his holding in confidence that he will share in any returns. And in fact this general idea underlies the principles that follow this – regarding taxation, leases, the tythe, the absence in Britain of personal services besides those linked to the parish, not to the landlord; a system of Corn Laws that establish duties and subsidies for imports and exports designed to stabilise prices, and a recognition that the general wealth of the nation, and good government, are essential for a flourishing agriculture and a large population. In his discussion of the relationship of population and wealth Young quotes Rousseau (in French):

> It is in this that the true prosperity of a country consists, the strength and greatness that a people draws from itself, which does not depend in any way on other nations, which never needs to attack to sustain it, & provides the surest means of defence. When it is a question of estimating public power, the *bel-esprit* visits the palaces of the prince, his ports, his troops, his arsenals, his cities; the real politician (*politique*) travels the land, and goes into the labourer's cottage. The first sees what has been done, & the second what can be done.[17]

In sum, this first chapter outlines an institutional framework, of good domestic policy as formulated by the "real politician", that underpins the features that other countries might do well to emulate.

The second chapter, "Removal of Obstacles", re-emphasises that other countries seeking to emulate Britain should focus upon civil administration, not any particular course of agriculture; but, he wrote, rather than examine the obstacles to the realisation of proven best practice, they instead focussed on courses and methods of cultivation "where political principles should alone be attended to" (1774, 181).

> ...to think of making improvements in the modes of agriculture – in manuring, fencing, tillage, horse-hoeing, or introducing new vegetable, while the farmers are oppressed by taxes, slavery, personal service, or a want of leases; or where bad corn-laws, defeat every purpose for which they were intended; or where a want of general wealth leaves him a poor market, is to labour against the stream... (182)

And the oppressions listed here form the subject matter of this second chapter, factors that prevent the realisation of good agricultural practice.

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[17] Young (1774, 75), citing Jean-Jacques Rousseau, *Julie, ou La nouvelle Héloïse*, (1961, 535).

The third and final chapter is an "Examination of False Propositions", these being primarily French propositions associated with the writings of Quesnay, Mirabeau and DuPont, the "oeconomical science". Young evidently had a library well stocked with this literature since he not only gives exact details of eleven key volumes, but was also apparently a reader of the *Journal d'Agriculture* and the *Ephemerides du Citoyen.* His critique of "false propositions" shows that he had read this work carefully, his commentary being divided between an analysis of the real incidence of any single tax, and a point-by-point commentary on Quesnay's "Economic Maxims". The first "founded on nothing but absurdity" (210) is attributed not to the Physiocrats themselves, but to English writers, especially Locke and Decker. Whereas Adam Smith would treat the general Physiocratic distinction between productive agricultural labour and unproductive manufacturing labour as the axis of his criticism, Young by contrast goes to some lengths to demonstrate that far from the landed interest being the ultimate source of all taxes and duties,

> The fact is, that all taxes on consumption, such as excises of every denomination – customs and other duties, are all paid by the consumers of the commodity taxed; which so far from being the possessors of land alone, include every rank of the people ... (213)

Following this he develops closer criticism of Mirabeau (218–29) and DuPont (229–36), before turning to an evaluation of Quesnay's "Economic Maxims", criticising some, while accepting others.

But here again, the standard against which Young evaluates this work is that of policy, of the framework necessary for the progressive improvement of agricultural practice. This itself sheds light on the Physiocratic enterprise, which advanced itself as a new science and which in modern historiography has been treated primarily in terms of economic maxims and principles, rather than another variation on the theme of civil administration and good order that was variously characterised as the French "police", or the German "Polizei": both of which were at the time synonyms for the English "policy" or "politics".

This much is evident in the German translation of *Political Arithmetic*, when in the "Preface" Young wrote that

> ...in order for an opportunity to point out as well as I was able the principles of that policy which has wrought those effects in this country...

The German translator wrote:

> ...um bey der Gelegenheit die Grundsätze derjenigen Staatskunst, welche in diesem Lander jene Wirkungen hervorgebracht... (Young 1777, VI)

where "policy" becomes "Staatskunst". The German translator also noted that he had translated Young's text with the French translation (1775) open on his desk, implicating the French version in this rendering. Both translations testify to the visibility of Young's writing in Continental Europe at a time that the English language was relatively unfamiliar outside the British Isles as compared with French and German. Through these and other translations of his prolific writings Continental European readers probably gained their most direct knowledge of English agricultural conditions, more so than through reports from travellers like Say. Additionally, the third chapter of *Political Arithmetic* contains perhaps the most extensive contemporary evaluation in English of Physiocratic literature; more so than Adam Smith's account in Book IV Ch. ix of *Wealth of Nations*, which is based almost exclusively on the *Tableau économique* despite the fact that Smith did possess in his library many of the relevant publications.

However, this aspect of Young's writing, and its Continental reception, has received very little attention. The reliability of his observations, and his representation of English agricultural practice, has always been an object of criticism. Most recently Robert Allen and Cormac Ó Gráda have trawled his *Tours* to estimate developments in grain yields, maintaining that Young favoured enclosure since he believed that it boosted yields. They question the reliability of Young's views on contemporary practice:

> Whatever the ultimate resolution of that matter, two things are clear. Based on the evidence of his tours, Young was incorrect in his view that enclosure radically raised efficiency. He was also wrong in believing that he lived in an age of improvement, at least as far as grain yields are concerned, for his yield data imply that the late eighteenth century was an age of stasis. (Allen and Ó Gráda 1988, 104)

And their conclusion:

> ...why have so many historians ... accepted Young's judgments? There is no mystery why Tory apologists like Lord Ernle did. The real puzzle is why Marx and the Marxists did the same. The facts collected by Arthur Young do not support the conclusion that enclosures or capitalist farming caused the growth in English grain yields. That was just landlord ideology in the eighteenth century. (116)

As already noted, Allen believes that if you can demonstrate that yields did not improve significantly in the relatively short window of the period of parliamentary enclosure of the later eighteenth century, then output could not have risen, hence any improvement linked to enclosure can be shown to have been ineffective. His reasoning is however

faulty. Mark Overton, seeking to restore the idea that an "Agricultural Revolution" did take place during the period 1750–1850, argued that wheat yields rose from around 18 bushels per acre in 1800 to 30 in the mid-nineteenth century at the same time as a declining proportion of the workforce was dedicated to rural labour. Rather than relying on estimates of wheat yields to estimate output, Overton uses three different approaches for estimating output directly for 1700–1850, and finds not only that they are in rough agreement as to quantities, but that they all indicate a turning point around 1740.[18] Over the entire period the sown arable area increased almost in exact proportion as fallow decreased, indicating a more intensive use of the same cultivated area, implying in turn that while wheat yields might remain the same, output could also increase, given changing courses of cultivation. It was this more intensive use of the same land that Young recommended as best practice with his focus on crop courses, coupled with an enthusiasm for the enclosure of "waste land". The mid-century increase in total grain output that Overton identifies coincided with an upward shift in fertility and a downward shift in mortality, the historical point of origin of the ongoing expansion of the population of England and Wales. Not until almost two full generational cycles had elapsed did demand for grain consistently begin to outrun domestic supply even when harvests were average, coinciding with the French Revolutionary Wars and the consequent disruption to the European grain trade. This was the immediate context for the composition of Malthus's *Essay on Population* (1798) in which complex changes in demography, international trade and domestic output were reduced to a simple problem of overpopulation which, in turn, subsequently underwrote a new discourse of pauperism.

Allen and Ó Gráda's negative conclusions regarding Arthur Young's "data" has not resulted in the general reliability of his material being, once again, perhaps finally, questioned and dismissed. Fifteen years later Liam Brunt set out to rehabilitate Young as a source for quantitative history, reviewing the history of negative reception to which Allen and Ó Gráda allude, and arguing that Young did pursue a consistent method of study that rendered his "data" usable. He noted that that small farms are under-represented in Young's sample,[19] but that this fits with Young's interest in "good average" practice, and with the wider economic insignificance of small farms. Brunt argues that Young's sampling methods were after all not that faulty, since if we are to rely upon Young's data at all it has to be representative. And in a thoroughly modern fashion Brunt set out to "...follow the lead of modem agricultural scientists

[18] Overton (1996a, 5, 6). See more generally his (1996b).

[19] Brunt (2003, 286–87). Figure 2 page 288 shows that despite there being a large number of small farms, they occupied a minor proportion of agricultural land.

and use the input-output data in Young's sample to construct a regression model of the physical response of output to each input (what economists would call a production function)" (2003, 292).

But to approach Arthur Young's prodigious output purely as a source of data is to set aside the discursive context in which these works circulated, were read and criticised. As already noted, *Political Arithmetic* was "addressed to the Œconomical Societies established in Europe", and on the verso of the title page we can find a more expansive dedication: "To the Societies established in different parts of Europe for the encouragement of agriculture, this treatise on the principles of **British Policy** relative to that important design, is inscribed, by their most obedient, and devoted servant, Arthur Young". Young was an Honorary Member of the Dublin, York and Manchester societies, and also that of Berne. He already saw himself as working within a network of like-minded agricultural improvers, specifically of improvers who were writers, like William Ellis, whose *Modern Husbandman or Practice of Farming* (1731) remained widely read, and whose *Practical Farmer* (1732) reached a fifth edition in 1759. Arthur Young's *Farmer's Kalendar* (1770) itself reached ten printings by 1820, with 2000 copies printed in 1804 for the fifth edition, of which 1200 sold within a month. (Goddard 1989, 362). More specialised literature, dealing with cultivation, livestock, manures and buildings was published from 1830s onwards, with dictionaries and reference works from the early nineteenth century.[20] While national societies explicitly organised for agricultural purposes did not in Britain begin to develop until the very end of the eighteenth century, there were local farmers' organisations from the mid-eighteenth century, and by 1820 there were over fifty local societies.[21] Wilmot records ninety local agricultural societies in 1834 (1990, 9). The most prominent institution was the Board of Agriculture, a quasi-governmental body founded in 1793 to diffuse information on best practice, with Sir John Sinclair as its president, the thirty ordinary members of the Board all being landed gentry or aristocracy (Goddard 1989, 379). Sinclair at once set about commissioning a series of county-by-county *General Views*, presuming that six weeks over the winter would be sufficient for each agricultural surveyor to complete their work. The basic rubric for the material to be gathered indicated that information was needed

> ...on the nature of the soil, the manner of land possessed and occupied, land use, grasses, stock, grains, fallowing, manures, the effects of enclosure, wages, labour, draining, prices, roads, improvements, leases, societies..." (Goddard 1989, 380)

[20] Goddard, (1989, 365). Magazines and serials are discussed pages 366–70.

[21] Goddard, (1989, 375), and Fig. 2 page 376.

The results were uneven, from the 26 pages on Essex to the 219 pages of a parish-by-parish survey of Cambridgeshire. A new set of surveys was commissioned from 1796, but this failed to eradicate the unevenness of the original reports. It was for this reason that William Marshall set about synthesising the County Reports into regional surveys, which also gave him ample opportunity to deplore the failings of the peripatetic surveys that Young had initiated, and advocate the importance of a proper appreciation of farming regions that he had himself undertaken. At the turn of the century argument had moved beyond the nature of best agricultural practice to occasionally bad-tempered exchanges on research methodology.

Nicholas Goddard had also drawn attention to the agricultural press, listing serial titles and their duration of publication (1983, 118–19). Arthur Young's flagship *Annals of Agriculture* began publication in 1786 and remains an invaluable source – but the 1791 volume sold only 350 copies that year[22] while the 1805 edition of *Farmers' Magazine* reprinted six times (Goddard 1983, 120, fn. 10). Nevertheless, citing Veliz's study of the *Annals*,[23] he noted that the first twenty-five volumes included 316 different authors, 53 of whom wrote five or more contributions; and that with society and library subscription the periodical probably had a readership of around 3000.[24] In the latter half of the eighteenth century an already flourishing literature on husbandry practice was displaced by discussion of farm and agricultural management, the purpose of which was to disseminate the best practice.[25] While this interest in improvement was not something confined to Britain, the existence of an "English Model" of agrarian development, of public discussion of the factors promoting and inhibiting best practice, was widely recognised at the time.

But unfortunately there is little place for this contemporary perception in the accounts of the English "Agricultural Revolution" that are written today. As suggested above, modern historians typically disregard contemporary perceptions and instead seek to determine the "real causes" of change; whether this be in the transition from open field to enclosure, the extent of the cultivated area, the increase of population and hence the demand for basic foodstuffs, new crops and new course of cultivation, new tools and techniques, the relationship of town and country and, by extension,

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[22] *Annals of Agriculture*, Vol. XV (1791, 170–1).

[23] A 1959 University of London PhD dissertation.

[24] Goddard (1983, 120). Goddard also uses stamp returns to estimate sales of specific agricultural titles 1840–1870 (121, fig. 2); and see his Appendix (129–31) for brief notes on the titles covered. See also Horn (1982).

[25] I discuss this transition in my *Land, Labour and Economic Discourse* (1978, chap. 4): "The Agricultural Treatise, 1600–1800". I also explore the Continental European perspective upon English agrarian developments in "Albrecht Thaer and the 'English Model' of Agriculture", presented to the workshop "Advocating Change: The Use and Diffusion of Foreign Models in Early Modern Europe", Cambridge, November 2023.

agricultural and manufacturing labour, the availability of capital and credit, or any combination of these. The broader narrative of change typical of an older literature has been displaced by a quantitative history distilled from contemporary sources in which the dominating narrative has become "economic growth", the annual increase of a reconstituted annual national product, or the lack of it. That contemporaries would have no means of apprehending a unitary "national product", nor its annualised progression, is not something that is given any attention. The result is a disembodied narrative in which "real forces" trundle ever onwards unrelated to the actions and decisions of real people.

If we are instead to understand the past as a history formed by action and lack of action — by a *tun und lassen* directed by preconceptions, ignorance, prejudices, language and institutions — these histories written by modern historians are of little help. During the 1960s and 1970s a new social history took shape that redirected attention to the lives led by ordinary men and women and turned away from both the newly-emerging quantitative history and an older political history towards the lived experience of men and women (Tribe 2021). However, a focus upon the domestic and the personal also abjured analysis of the institutional and more broadly social context in which lives were lived, and decisions made. Much was lost in the process. Nor would Arthur Young have been the kind of figure of any interest to this new social history of everyday life. All the same, Young's book *Political Arithmetic* reveals a preoccupation not with agricultural technique, nor even with agricultural data, but with the legal and political framework of agrarian economies as social organisations. It is about "policy", about good order and administration, not "politics" as understood from the nineteenth century onwards as the management of conflicting interests and the exercise of power. And this preoccupation with policy, rather than technique, can help us re-orient our appreciation of the "context" in which, two years later, Adam Smith would publish *Wealth of Nations*.

Acknowledgements

This paper is developed from an earlier version drafted for a session on "Agricultural Improvement and Foreign Models" at the April 2023 European Social Science History Conference, Gothenburg. My thanks to Alexandre Mendes Cunha for very detailed comments that were of great help during its revision.

Funded by the European Union (ERC, DEPE, 101088549). Views and opinions expressed are however those of the author(s) only and do not necessarily reflect those of the European Union or the European Research Council. Neither the European Union nor the granting authority can be held responsible for them.

Competing Interests

The author has no competing interests to declare.

References

Alcouffe, Alain, and David Le Bris. 2022. "Say's Second Visit to Britain: A Career Turning Point." *History of Political Economy* 54: 393–414.

Allen, Robert C. 1992. *Enclosure and the Yeoman: The Agricultural Development of the South Midlands 1450–1850*. Oxford: Oxford University Press.

Allen, Robert C. 1994. "Agriculture during the Industrial Revolution, 1700–1850." In vol. 1 of *The Cambridge Economic History of Modern Britain*, edited by Roderick Floud and Paul Johnson, 96–116. Cambridge: Cambridge University Press.

Allen, Robert C. 2004. "Britain's Economic Ascendancy in a European Context." In *Exceptionalism and Industrialisation: Britain and Its European Rivals, 1688–1815*, edited by Leandro Prados de la Escosura, 15–34. Cambridge: Cambridge University Press.

Allen, Robert C., and Cormac Ó Gráda. 1988. "On the Road Again with Arthur Young: English, Irish and French Agriculture during the Industrial Revolution." *Journal of Economic History* 48: 93–116.

Blanqui, Auguste. 1837. *Histoire de l'économie politique en Europe* 2 vols. Paris: Guillaumin.

Brunt, Liam. 2003. "Rehabilitating Arthur Young." *Economic History Review* 56: 265–99.

Collins, E. J. T. 1969. "Harvest Technology and Labour Supply in Britain, 1790–1870." *Economic History Review* 22: 453–73.

Collins, E. J. T. 1972. "The Diffusion of the Threshing Machine in Britain, 1790–1880." *Tools and Tillage* 2.1: 16–33.

Colquhoun, Patrick. 1814. *A Treatise on the Wealth, Power, and Resources of the British Empire*. London: Joseph Mawman.

Cunningham, William. 1882. *The Growth of English Industry and Commerce*. Cambridge: Cambridge University Press.

de Vries, Jan. 1994. "The Industrial Revolution and the Industrious Revolution." *Journal of Economic History* 54: 249–70.

Goddard, Nicholas. 1983. "The Development and Influence of Agricultural Periodicals and Newspapers, 1780–1880." *Agricultural History Review* 31: 116–31.

Goddard, Nicholas. 1989. "Agricultural Literature and Societies." In vol. 6 *1750–1850* of *The Agrarian History of England and Wales*, edited by G. E. Mingay, 361–83. Cambridge: Cambridge University Press.

Hammond, B. and J. L. 1911. *The Village Labourer 1760–1832*. London: Longmans, Green & Co.

Hill, Christopher. 1942. "Parliamentary Enclosures." Review of *Parliamentary Enclosure of the Common Fields in England at the End of the Eighteenth and the Beginning of the Nineteenth Centuries* by V. M. Lavrovsky. *Economic History Review* 12: 92–95.

Hobsbawm, E. J., and George Rudé. 1973. *Captain Swing*. Harmondsworth: Penguin Books.

Horn, Pamela. 1982. "The Contribution of the Propagandist to Eighteenth-Century Agricultural Improvement." *Historical Journal* 25: 313–29.

Howard, Ebenezer (1902) *Garden Cities of To-morrow*. London: Swan Sonnenschein.

Hoyle, Richard W. 2013. "Introduction: Recovering the Farmer." In *The Farmer in England, 1650–1980*, edited by Richard W. Hoyle, 1–42. Farnham: Ashgate.

Kerridge, Eric. 1967. *The Agricultural Revolution*. London: George Allen and Unwin.

Lanot, Gauthier, and Keith Tribe. 2024. "Before Political Economy: Debate over Grain Markets, Dearth and Pauperism in England, 1794–96." Scandinavian Working Papers in Economics No. 1025.

Lavrovsky, V. M. 1937. "Parliamentary Enclosure in the County of Suffolk (1797–1814)." *Economic History Review* 7: 186–208.

Levy, H. 1911. *Large and Small Holdings*. London: Cambridge University Press.

Litvine, Alexis D. 2014 "The Industrious Revolution, the Industriousness Discourse, and the Development of Modern Economies." *Historical Journal* 57: 531–70.

Long, W. Harwood. 1963. "The Development of Mechanisation in English Farming." *Agricultural History Review* 11: 15–26.

Marx, Karl. (1872) 1932. *Das Kapital. Kritik der politischen Ökonomie*. 2nd ed. Berlin: Gustav Kiepenheuer.

Orwell, George. (1939) 1961. "Charles Dickens." *Collected Essays*. London: Secker and Warburg.

Overton, Mark. 1996a. "Re-establishing the English Agricultural Revolution." *Agricultural History Review* 44: 1–20.

Overton, Mark. 1996b. *The Agricultural Revolution in England: The Transformation of the Agrarian Economy 1500–1850*. Cambridge: Cambridge University Press.

Prothero, Rowland E. [Lord Ernle]. 1888. *The Pioneers and Progress of English Farming*. London: Longmans, Green.

Rousseau, Jean-Jacques. 1961. "Julie, ou La nouvelle Héloïse." In vol. 2 of *Oeuvres complètes*. Paris: Pléiade.

Say, Jean Baptiste. (1815) 2020a. "De l'Angleterre et des anglais." In vol. 3 of *Œuvres complètes*, edited by Philippe Steiner and André Tiran, 317–43. Paris: Economica.

Say, Jean Baptiste. 2020b. "Journal du voyage en Grande Bretagne, 19 septembre-31 décembre 1814." In vol. 3 of *Œuvres complètes*, edited by Philippe Steiner and André Tiran, 345–81. Paris: Economica.

Shaw-Taylor, Leigh. 2001. "Parliamentary Enclosure and the Emergence of an English Agricultural Proletariat." *Journal of Economic History* 61: 640–62.

Simpson, James. 2004. "European Farmers and the British 'Agricultural Revolution'." In *Exceptionalism and Industrialisation: Britain and its European Rivals, 1688–1815*, edited by Leandro Prados de la Escosura, 69–85. Cambridge: Cambridge University Press.

Smith, Adam. 1802. *Recherches sur la nature et les causes de la richesse des nations*, vol. 1. Paris: H. Agasse.

Smith, Adam. 1976 [Cited as WN]. *An Inquiry into the Nature and Causes of the Wealth of Nations*. Oxford: Oxford University Press.

Steiner, Philippe, and André Tiran. 2020. Introduction to *De l'Angleterre et des anglais* by Jean-Baptiste Say, in vol. 3 of *Œuvres complète*, 309–16. Paris: Economica.

Tawney, R. H. 1912. *The Agrarian Problem of the Sixteenth Century*. London: Longmans, Green & Co.

Toynbee, Arnold. 1884. *Lectures on the Industrial Revolution in England*. London: Rivingtons.

Tribe, Keith. 1978. *Land, Labour and Economic Discourse*. London: Routledge and Kegan Paul.

Tribe, Keith. 1981. "'Industrialisation' as a Historical Category." *Genealogies of Capitalism*. London: Macmillan.

Tribe, Keith. 2015. *The Economy of the Word: Language, History, and Economics*. New York: Oxford University Press.

Tribe, Keith. 2016. "De l'atelier au procès de travail: Marx, les machines et la technologie." In *Dompter Prométhée: Technologies et socialismes à l'âge romantique (1820–1870)*, edited by François Jarrige, 229–50. Besançon: Presses universitaires de Franche-Comté.

Tribe, Keith. 2021. "Moral Economy and Market Order." *Critical Historical Studies* 8.2: 139–72.

Tribe, Keith. 2022. *Constructing Economic Science: The Invention of a Discipline 1850–1950*. New York: Oxford University Press.

Wilmot, Sarah. 1990. *"The Business of Improvement": Agriculture and Scientific Culture in Britain, c.1700–c.1870*. Historical Geography Research Series No. 24.

Young, Arthur. 1771. *The Farmer's Tour through the East of England*. 4 Vols. London: W. Strahan, W. Nicoll.

Young, Arthur. 1774. *Political Arithmetic. Containing Observations on the Present State of Great Britain, and the Principles of her Policy in the Encouragement of Agriculture*, London: W. Nicoll.

Young, Arthur. 1775. *Arithmétique politique*. 2 vols. The Hague: Pierre Frederic Gosse.

Young, Arthur. 1777. *Politische Arithmetik, enthaltend Bemerkungen über den gegenwärtigen Zustand Großbrittanniens, und über die Grundsätze der Verwaltung dieses Staats in Absicht auf die Beförderung des Ackerbaues*. Königsberg: Johann Jakob Kanter.