CAMBRIDGE HISTORY OF CAPITALISM, Volume one.1

An historical materialist assay.

That Comfortable Word 'Growth'

The old problem of establishing canons of selection and settling who determines them has been 'solved' by abolishing selection altogether. Everything now goes in, as if in answer to the familiar question in children's examinations, 'Tell all you know about X.'

M. I. Finley (1983).²

The essence of the problem of 'the destiny of capitalism in Russia' is often presented as though prime importance attaches to the question: *how fast*? (i.e., how fast is capital developing?) Actually, however, far greater importance attaches to the question: *how exactly*? And to the question: *where from*? (i.e., what was the nature of the pre-capitalist economic system in Russia?)

V.I. Lenin (1899)³

The jacket blurb on volume one of *The Cambridge History of* Capitalism announces that, '[s]tarting with its distant origins in ancient Babylon, successive chapters trace its progression up to the "Promised Land" of capitalism in America.' The biblical gloss to this marketing gambit cannot help but remind one of the parishioner who, in the wake of criticism of the literal truth of the Bible and the Darwinian challenges to Genesis, told her minister that she 'found great support in "that comfortable word Mesopotamia".' And so does repeating 'growth' for our Cambridge authors who demonstrate no surer understanding of capitalism than the old dear had of a place name. The eighteenth-century preacher, George Whitefield - who could make congregations laugh or cry by how he pronounced 'Mesopotamia' - had nothing on the effect induced by the contributors as they evade 'capitalism' by intoning that comfortable word 'growth'. Their promotional summary continues:

Adopting a wide geographical coverage and comparative perspective, the international team of authors discuss the contribution of Greek, Roman, and Asian civilisations to the development of capitalism, as well as the Chinese, Indian and Arab empires. They determine what features of modern capitalism were present at each time and place, and why the various precursors of capitalism did not survive. Looking at the eventual success of medieval Europe and the examples of city-states in northern Italy and the Low Countries, the authors address how British mercantilism led to European imitations and American successes, and ultimately, how capitalism became global.

Putting aside the thought that capitalism might have been born that way, we can comfort ourselves that the first of the volume's thirty tables is of 'Mediterranean shipwrecks datable

¹ Larry Neal and Jeffrey G. Williamson (eds), *The Cambridge History of Capitalism, volume I, The Rise of Capitalism: from Ancient Origins to 1848*, Cambridge University Press, Cambridge, 2014, 616 pages. Quotations will be referenced by bracketed page numbers. My thanks go to Joe Collins. Peter Curtis, Bruce McFarlane, Walter Struve and Gary Werskey.

² 'How it really was', *Ancient History Evidence and Models*, Pimlico, London, 2000, p. 61. My use of this quotation began as a slap at the Cambridge effort but has become a backhander for my review.

³ V.I. Lenin, *The Development of Capitalism in Russia*, Progress Publishers, Moscow, 1964, pp. 380-1; Karl Marx: 'It is not what is made, but how, and by what instruments of labour, that distinguishes different epochs.' *Capital*, I, Everyman, London, 1957, p. 172; Penguin, London, 1976, p. 286; Foreign Languages Publishing House (FLPH), Moscow, 1958, p. 180.

⁴ Brewer's Dictionary of Phrase and Fable, Brewer's, Edinburgh, 2009, p. 862.

within hundred-year ranges, graphed according to an equal probability of sinking in any year during the date range for each wreck.' (p. 49) With such guides, the titanic task of locating the black box⁵ of 'capitalism' is in safer hands than the quest for Malaysian Airlines flight 370 as we trawl an arc from co-editor Larry Neal's 'Introduction' across eight of the eighteen chapters in hope of encountering an account of what distinguishes capital within capitalism.⁶

By way of introduction

This review essay casts the *Cambridge History* against Marx's critique of political economy through re-readings of *Capital* to detect the indicators he gave as to 'how exactly?' the revolution in capital erupted, after which the capitalist mode became possible without guaranteeing its survival. The inquiry proceeds from provisional conclusions regarding that revolution, drawing on the scholarly literature that circles but mostly evades that question. One aim, therefore, is to get out from under a stack of 'conventional wisdoms', identified by J.K. Galbraith as 'the ideas which are esteemed at any time for their acceptability.' Clichés abound in accounts of the origins of capitalism, with variants found across the political spectrum; several flourish among Marxists whose attempts remain as gestural as those from bourgeois ideologues who either make one element represent the whole or toss wage-labour, credit, factories and steam-engines into a pot after the manner of the witches in *Macbeth*, Act 4, sc I:

Surge in trade, divided skill,
Navvy's spade, exchange of bill,
Engine's steam, and low piece-rate
Goldsmith's loan and factory gate
For a mode of powerful trouble.
Like a hell-broth boil and bubble.

No recipe of traits, prerequisites and causes⁸ will explain a putative industrial revolution, let alone the revolution in capital.

A complete account of that revolution is beyond the scope of even so baggy a monster as this review but would integrate the following: the formal and actual subsumptions of wage-labour into capital; the centralisation of ownership/control with the concentration of resources, both accelerated by 'the development of the credit system'; the maximising of exploitation by see-sawing the extraction of absolute and relative surplus value, with consequent shifts in capital's organic composition. These elements take effect through individual and socialised capitals, the former most likely family businesses or partnerships whereas the latter revived after the relaxation of the post-Bubble limits on the formation of joint-stock companies whose directors gained the protection of limited liability in the late 1850s. At the start of the era of

⁵ 'Once upon a time the organisation of the firm ... was a black box. Into this box went labour and capital and out came products. Some venturesome economists have wondered what the black box contained.' Armen A. Alchian and Suzan Woodward, 'The Firm is Dead: Long Live the Firm', *Journal of Economic Literature*, 26 (1), March 1988, p. 65.

⁶ For the distinctions between capital across the millennia and capital-within-capitalism see my 'Re-fining capital'. Unless otherwise stated, my writings are accessible on www.surplusvalue.org.au

⁷ J.K. Galbraith, *The Affluent Society*, Penguin, Harmondsworth, 1962, p. 18. Flaubert compiled a dictionary of 'received ideas' such as 'MATERIALISM: Utter this word with horror, stressing each syllable.' Gustav Flaubert, *Bouvard and Pechucet*, Penguin, Harmondsworth, 1976, p. 316.

⁸ Alexander Gerschenkron, 'Reflections on the Concept of "Prerequisites" of Modern Industrialisation', *Economic Backwardness in Historical Perspective*, Belknap Press, Cambridge, Mass., 1962, pp. 32-33.

⁹ Karl Marx, *Capital*, III, Penguin, London, 1981, pp. 298 and 569; Progress Publishers, Moscow, 1959, pp. 196 and 438.

¹⁰ Geoffrey Parker, 'The Emergence of Modern Finance in Europe 1500-1730', Carlo M.Cipolla (ed.), *The Fontana Economic History of Europe, The Sixteenth and Sevneteeth Centures*, Fontana, Glasgow, 1974, pp. 527-94; Ron Harris, 'Political Economy, Interest Groups, Legal Institutions, and the Repeal of the Bubble Act, in 1825', *Economic History Review*, New Series, 50 (4), November 1997, pp. 675-96.

¹¹ H. A. Shannon, 'The Coming of General Limited Liability', *Economic History*, 2 (6), January 1931, pp. 267-91; 'The First Five Thousand Limited Liability Companies and their Duration', *Economic History*, 7, January 1932, pp.

monopolising capitals around 1880, the unchartered corporation ceased being illegal to prove the exemplar of 'socialised' capital, ¹² lauded by Henry B. du Pont as '[t]he greatest invention of them all.' ¹³

'Social (aggregate) capital' is of a different order and is in no sense a third way of organising capital but rather is the way in which capital exists in the capitalist mode. In short: social capital is capitalism. ¹⁴ It is the object of Marx's critique of political economy throughout *Capital* and nowhere more so than in his analysis of the interlocking circuits of money-, production- and commodity-capitals, their asymmetrical turnover times operating through supply chains for raw materials, semi-finished goods, ancillaries, finance and marketing. 'Aggregate' has to be inserted to rescue Marx's 'social capital' from association with community building. Sociability is a subordinate part in his account of social capital, appearing in the co-operation of wage-slaves at the point of production. ¹⁵ However, 'aggregate' is itself misleading since social capital is not determined by adding up individual and socialised ones. It is a totality, not a sum total.

Because all capital is accumulated labour, capital is made social because its expansion is subject to the socially necessary costs of reproducing labour-power and socially necessary labour-times, for which money provides a universal equivalent. ¹⁶ Value and price are determined socially when new methods of production requiring lesser amounts of labour-time push down the value present in each unit, and reduce the price of unsold stock and then of future output. This pressure is one of the means by which competition enforces an average rate of profit, causing capital to move away from investments giving lesser rates of return. The tendential law of the rate of profit to fall does not befall this or that firm or sector but arises with excess capacity across the economy, that is, in social capital.

Before the 'general glut' of 1857, the law of value and social capital had advanced asymptotically, 17 and more or less in tandem, without either having reached 'full development' around the globe, which, as Marx reaffirmed, 'depends on definite historical pre-conditions ... a society in which large-scale industrial production and free competition obtain.' 18 Nearly 160 years on, not all the world's individual capitals are captured by the circuits of social capital, and a scatter are never likely to be. Money, equipment and commodities circulate through peripheral societies such as in the highlands of New Guinea or New Age communities, their fate decided within the world system of capital-within-capitalism without their as yet being constituents of that form.

Notwithstanding the power present in these features of 'social capital', like 'History', it does nothing. Only the real living personifications of capital can expropriate surplus value, realise as much of it as possible into 'profit', and then accumulate some of that to expand the individual and socialised capitals that they manage while the state, as the executive committee of the bourgeoisie, holds custody of social capital.

^{396-419;} P.W. Ireland, 'The Rise of the Limited Liability Company', *International Journal of the Sociology of Law*, 12 (3), August 1984, pp. 239-60; Rob. A. Bryer, 'The Mercantile Laws Commission of 1854 and the Political Economy of General Limited Liability', *Economic History Review*, New Series, 50 (1), February 1997, pp. 36-54. ¹² The corporation developed its multi-divisional form around 1919 and the multi-national one during the 1950s; Alfred D. Chandler Jr., *The Visible Hand, The Managerial Revolution in American Business*, The Belknap Press of Harvard University Press, Cambridge, Mass., 1977; *Scope and Scale*, The Belknap Press of Harvard University Press, Cambridge, Mass., 1990, pp. 605-28; my *The Essence of Capitalism*, Black Rose Books, Montreal, 2003, chapter 2.

¹³ Vital Speeches of Today, 35 (19), 15 July 1959, p. 602.

¹⁴ Marx, *Capital*, III, Penguin, p. 375; Moscow, p. 266; Karl Marx, *Capital*, II, Penguin, London, 1978, p. 220; FLPH, Moscow, 1957, pp. 142-3.

¹⁵ Marx, *Capital*, I, Everyman, chapter 11; Penguin and Moscow, chapter 13.

¹⁶ Karl Marx, *A Contribution to a Critique of Political Economy (CPPE)*, Progress Publishers, Moscow, 1970, pp. 64-70; in the words of George Simmel: 'All things float with equal specific gravity in the constantly moving stream of money.' (*The Philosophy of Money*, 1900)

¹⁷ Engels to Schmidt, 12 March 1895, Marx-Engels Selected Correspondence, FLPH, Moscow, 1950, pp. 562-3.

¹⁸ Marx, *CCPE*, p. 60.

Refining 'capital'

The preliminary task is to redeem the concept of capital-within-capitalism from the thicket of quasi- and pseudo-definitions of capitalism by whose propagators are smart enough never to broach a definition of 'capital'. 20 Jose Luis Cardoso's chapter on 'The political economy of rising capitalism' does not so much as limn the multiplication of meanings given to 'capital' in the three hundred years before the volume's cut-off date of 1848, shifts which register changes in practice. Exercises in etymology are child's play compared with discerning how those activities affected vocabularies. The earlier spellings of 'capitall' and 'stocke' do not need to be afflicted with (sic) to remind us that the past is another economy. A financial sense of 'capital' entered English via book-keeping primers translated from the Italian after 1540s to appear in Congreve's Dictionary (1611) as 'all what a man possesseth; whether Money, Wares, Debts due to us, or the like.' Before 1800, two changes had emerged: first, a distinction was being drawn between the stock/capital of nations and that of individuals or firms; and secondly, production had been added to distribution, indicative of the rise of processors alongside the merchandiser. Among the Mercantilists, 'Capital Stock' still emphasised the money risked in a merchant's venture. In keeping with the Physiocrat's notion of agriculture as the sole source of additional wealth, they thought of the nation's capital stock in terms of the powers of the soil.²¹ Adam Smith identified wealth with productive labour, breaking thereby both from the Mercantilist equation of wealth with money held as a store of bullion garnered from favourable balances of trade, and from the Physiocratic 'superstition' that the labour applied to nature alone could bring forth 'net product'. His advance foreshadows the one that Marx makes between the miser who hoards and the capitalist who augments his wealth by throwing it back to expand.²² In 1827, Thomas Malthus defined capital as that segment of stock used for profit rather than personal consumption.²³

Before another word on the course of the revolution in capital that these variations represent, a few words about definitions are called for since one complaint throughout this review will be that none of the contributors offers a definition of capital and only co-editor Larry Neal attempts to define capitalism. The others associate capitalism with some combination of growth, industrialisation and markets, also ill-defined. Resort to 'capitalistic' is to throw dust into the eyes of the blind to make them see. Other terms float by with little thought of the sense in which they are being used: nation-state, money, price-signals, profit, rent and value. The difficulties in arriving at dictionary-style definitions are shared by all who venture onto this field.²⁴ Who is encouraged by Marx's spreading his definition of 'capital' across 4,000 pages?²⁵ However, it is one thing to seek and fail, and another to pretend that there is no need to think one's way through how it might to be possible to isolate the capital that exists only within capitalism. Worse still is to cultivate avoidance as a fine art.

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¹⁹ R.H. Hilton. 'Capitalism – What's in a Name?', *Past & Present*, 1, February 1952, pp. 32-43; Frederic C. Lane, 'Meanings of Capitalism', *Journal of Economic History*, 29 (1), March 1969, pp. 5-12; Michael Merrill, 'Putting 'Capitalism' in Its Place: A Review of Recent Literature', *William and Mary Quarterly*, Third Series, 52 (2), April 1995, pp. 315-26. Maurice Dobb provides an invaluable disquisition, *Studies in the Development of Capitalism*, Routledge, London, 1963, pp. 1-32.

²⁰ Edwin Cannan, 'Early History of the Term Capital', *Quarterly Journal of Economics*, 35 (3), May 1921, pp. 469-481; R.D. Richards, 'Early History of the Term Capital', 40 (2), February 1926, pp. 329-38; Henry Rand Hatfield, 'The Earliest Use in English of the Term Capital', 40 (3), May 1926, pp. 547-8, and 'The Early Use of "Capital",' 49 (1), November 1934, pp. 162-3; Marc Bloch, *The Historian's Craft*, Vintage, New York, 1953, pp. 170 and 174-5.

^{5. &}lt;sup>21</sup> Bert F. Hoselitz, 'Agrarian Capitalism, The Natural Order of Things: François Quesnay', *Kyklos*, 21 (4), 1968, pp. 637-64.

²² Marx, *Capital*, I, Everyman pp. 114-5 and 138-9; Penguin, pp. 231-2 and 254; Moscow, pp. 133-4 and 153.

²³ T.R. Malthus, *Definitions in Political Economy*, John Murray, London, 1827, Chapter 10, Items 47-55.

²⁴ No more will be said here on the utility of definitions than to mention to my 'Capital re-fined' and a very rough draft on 'Dialectics and/or definitions?'

²⁵ Eden and Cedar Paul, 'Translator's Preface', Marx, *Capital*, Everyman, 1957, p. xlii; Joan Robinson, *An Essay on Marxian Economics*, Macmillan, London, 1947, pp. 6-9 and 96-101.

Neal admits that since 'capitalism' as a term began with the system's critics, 'the connotation is nearly always negative.' (p. 1) Its reputation had never been lower than in the early 1940s after delivering two world wars, fascism and yet another depression to overfill a black-book of monstrosities. To fight back, the U.S. National Association of Manufacturers spent two million dollars on market research to come up with a shinier brand: 'free enterprise'.²⁶ That PR campaign had its academic counterpart in the dismissal as unscholarly of certain terms ending in '–ism': imperialism and fascism.²⁷ The inability of the Cambridge authors to refine their uses of capital or capitalism therefore is no quirk but expresses a residual ideology. It is far safer to take 'capital' for granted than to characterise a regime of exploitation and mayhem.

How many of the contributors retain even a passive memory of the 1960s controversies between scholars at Cambridge in the U.K. and Cambridge, Massachusetts, over the meaning of capital? A U.S. participant in that dispute reports that, in the United States,

mainstream economics goes on as if the controversy had never occurred.

Macroeconomics textbooks discuss 'capital' as if it were a well-defined concept – which it is not, except in a very special one-capital-good world (or under other unrealistically restrictive conditions). The problems of heterogeneous capital goods have also been ignored in the 'rational expectations revolution' and in virtually all econometric work.²⁸

More economic historians prefer to spice literary evidence with 'the spurious consistency of poor data'²⁹ than build their investigations from articulating the specifics of capital-within-capitalism.

Contra-history

... historical materialism is simply the self-knowledge of capitalist society. Georg Lukacs (1919).³⁰

Also in order are a few words to distinguish historical materialism from narratives about the past. In *Capital*, Marx re-forges the links between the conceptual and the historical by severing both from the bourgeois practice of extracting generalities out of story-telling. His chapter on 'The Working Day', for instance, is misunderstood as narrative when, on the contrary, its details make sense only through the insights gained from the preceding chapters on the commodity and surplus value. Engagement of the conceptual with the empirical is one face of how Marx and Engels redefine 'historical' to answer 'how exactly?'. Marx looks upon preparedness to distinguish between modes of production, and then to delineate the phases within them, as essential for scientific analysis, mocking failure to do so as a 'very rewarding method – for

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²⁶ W.D. Scott, *Greater Production*, The Law Book Co., Sydney, 1950, p. 432, quoted Alex Carey, 'Worker Motivation: Social Science, Propaganda and Democracy', P. Boreham and G. Dow (eds), *Work and Inequality*, volume 2, Macmillan, Melbourne, 1980, p. 69; Elizabeth Fones-Wolf, *Selling Free Enterprise*, University of Illinois Press, Urbana, 1994; to plumb the shallows of academic cravenness, N.S.B. Gras, 'Capitalism – Concepts and History', Frederick C. Lane and Jelle C. Riemersma (eds), *Enterprise and Secular Change*, George Allen and Unwin, London, 1953, pp. 66-79.

²⁷ Hugh Seton-Warson, 'Fascism, Right and Left', *Journal of Contemporary History*, 1, 1966, p. 183; W.N. Medlicott, *International Affairs*, 37 (1), January 1961, p. 84.

²⁸ Edwin Burmeister, 'The capital theory controversy', Heinz D. Kurz, *Critical essays on Piero Sraffa's legacy in economics*, Cambridge University Press, Cambridge, 2000, p. 310; Avi J. Cohen and G.C. Harcourt, 'Whatever happened to the Cambridge Capital Theory Controversies?', *Journal of Economic Perspectives*, 17 (1), Winter 2003, pp. 199-214; V. Shemyatenkov, *The Enigma of Capital: a Marxist Viewpoint*, Progress Publishers, Moscow, 1981.

²⁹ Quoted George Grantham, 'Agricultural Supply during the Industrial Revolution: French Evidence and European Implications', *Journal of Economic History*, 49 (1), March 1989, p. 69; rare indeed is it for authors to proceed far before warning of the imperfect numbers upon which their hypotheses must be constructed.

³⁰ Georg Lukacs, 'The Changing Function of Historical Materialism', *History and Class Consciousness*, Merlin Press, London, 1971, p. 213.

³¹ Pierre Vilar, 'Marxist History, a History in the Making: Towards a Dialogue with Althusser', *New Left Review*, 80, July-August 1973, pp. 65-106; Geoffrey de Ste. Croix, 'Class in Marx's Conception of History, Ancient and Modern', *New Left Review*, 146, July-August 1984, pp. 94-111; Ellen Meiskins Wood, 'Marxism and the Course of History', *New Left Review*, 147, September-October 1984, pp. 95-107; Richard Nordahl, 'Marx on the use of history in the analysis of capitalism', *History of Political Economy*, 14 (3), Fall 1982, pp. 342-65.

stilted, sham-scientific, highfaluting ignorance and intellectual laziness.'³² Evolutions punctuated by revolution are marks of his critique of political economy in which he shows that capital is neither eternal, natural nor universal.³³ Impermanence applies no less to his method in which the conceptual is always open to changes, whereas Proudhon,

has not perceived that economic categories are only abstract expressions of these actual relations and only remain true while these relations exist. He therefore falls into the error of the bourgeois economists, who regard these economic categories as eternal and not as historical laws which are only laws for a particular historical development, for a definite development of the productive forces. Instead, therefore, of regarding the political-economic categories as abstract expressions of the real, transitory, historic social relations, Monsieur Proudhon, thanks to a mystic inversion, sees in the real relations only embodiments of these abstractions. ³⁴

In a later discussion, Marx contends that the division of labour

strikingly demonstrates how even the most abstract categories, despite their validity in all epochs – precisely because they are abstractions – are equally a product of historical conditions even in the specific form of abstraction, and they retain their full validity only for and within the framework of these conditions.³⁵

Marx sneers at the 'stupid economist' for whom '[r]eproduction on an extended scale is inseparably connected ... with accumulation, the capitalist form of this reproduction', lashing out once more against the ideologues' failure to see the capitalist mode as transitory/historical. Their myopia leaves them unable to perceive why the revolution in capital means that, henceforth, '[a]ccumulation merely presents as a continuous process what in primary accumulation appears as a distinct historical process, as the process of the emergence of capital and as a transition from one mode of production to another.'³⁶

Historical materialists are not distinguished by taking backward glances at human action but by a revolutionary approach to interpreting the links from the past, through the present and onto the future. Marx's critique of political economy spells an end to narrative history no less than to speculative philosophising. Dazzling as is his *The Eighteenth Brumaire of Louis Bonaparte* (1852), it was but a stepping stone towards his substantiating the *Manifesto*'s assertion that '[t]he history of all hitherto existing society is the history of class struggles.' ³⁷ Engels added weight to their claim with *The Peasant Wars in Germany*, and Marx did more with *Wage-Labour and Capital* (1849), despite his inability at that point to distinguish labour-power from labour, a 'crucial' contribution to political economy and hence to historical materialism as a weapon for proletarian self-emancipation. ³⁸

Capital is more than an application of the historical materialism that Marx and Engels developed in the 1840s to settle accounts with their 'former philosophical conscience', as Marx put in the 'Preface' to his Contribution to a Critique of Political Economy in 1859. Capital is

³⁶ Karl Marx, TS-V, Part III, Progress Publishers, Moscow, 1971, p. 272.

³² Karl Marx to Ludwig Kugelmann, 27 June 1870, *Marx-Engels Collected Works (M-ECW)*, vol. 43, Lawrence & Wishart, London, 1988, p. 527; Karl Marx, *Grundrisse*, Penguin, Harmondsworth, 1973, p. 85.

³³ Karl Marx, 'The Poverty of Philosophy', *M-ECW*, vol. 6, Lawrence & Wishart, London, 1976, pp. 166, 170 and 174-5; F. Engels to F.A. Lange, 29 March 1865, *Marx-Engels, Selected Correspondence*, 1950, p. 208; Karl Marx, *Theories of Surplus-Value (TS-V)*, Part I, FLPH, Moscow, n.d., p. 44.

³⁴ Karl Marx to P.V. Annenkov, *Selected Correspondence*, 1950, 28 December 1846, p. 45, cf. p. 47; for more on Proudhon, Marx, *M-ECW*, vol. 6, 1976, pp. 105-212.

³⁵ Marx, *CCPE*, 1970, pp. 210-11.

³⁷ Karl Marx and Frederick Engels, 'Manifesto of the Communist Party', *M-ECW*, vol. 6, 1976, p. 482; in 1888, Engels added: 'That is, all written history.'

³⁸ Karl Marx, *Wage-Labour and Capital*, *M-ECW*, vol. 9, Lawrence & Wishart, London, 1977, pp. 197-228; corrected by Engels in 1891 from 'labour' to 'labour power', p. 201n.; for the 'twofold character of labour contained in commodities', Marx, *Capital*, I, Everyman, p. 10; Penguin, p. 132; Moscow, p. 41; V. Afanasyev *et al.*, *Karl Marx's Great Discovery The Dual-Nature-of-Labour Doctrine: Its Methodological Role*, Progress Publishers, Moscow, 1986.

also a critique of the schematics and suppressions of that Preface, ³⁹ and an advance on even the Contribution's abandoned Introduction which gives the lie to every allegation that Marx was a mechanical determinist, let alone a technological one. 40 In promoting A Contribution, Engels reenforced the Introduction's relegation of the Preface while pointing to his comrade's method as 'indeed nothing but the historical method, only stripped of the historical form and diverting chance occurrences.'41 Its logical component arose from a double critique, the first of Hegel's Logic, the second of that 'mighty thinker's' deployment of narratives in The Phenomenology of Spirit to resolve conceptual difficulties, a move which left a matrix for Marx to remould in achieving his breakthroughs after the mid-1850s. Just as his concepts elevate the historical into historical materialism so does his analysis of the evidence preserve his concepts from abstractness to out-Ranke Ranke at fact-grubbing while spurning the metaphysics and biases lurking in his 'how it really was.' Similarly, when Lenin insists on 'how exactly?', he is seeking the conceptual clarity needed to advance our relative knowledge towards the unobtainable pinnacle of objective truth. ⁴³ Capital carries Marx's practice of historical materialism towards the 'luminous summits' of science, 44 which he scales by *not* producing a work of history as practiced by even the finest of bourgeois thinkers who had killed off chronicling 'the past' during the previous 200 and more years. 45 To herald the demise of bourgeois history, Marx garners the advances proffered by its founders. His new science surpasses Vico's recognition of institutional conflicts as endogenous drivers to reveal how class contradictions would generate general crises; he extends the scepticism of Voltaire and Gibbon about superstition and Popery to a criticism of property and the state; upon the Scottish Enlightenment's four stages of production he projects three more, starting from capitalism before traversing socialism to end with communism.

The Past is bunk, and History less so, whereas historical materialism is worth more than that tinkerer Henry Ford's curse only when we Marxists grapple with how our species continues to remake itself through 'the struggle for production, the class struggle and scientific experiment', ⁴⁶ that is, for the inextricable trio of existence, power and knowledge.

Revolution?

... history professors ... hate a revolution ... because they feel it is lawless, incoherent, irrelevant – in a word, unhistoric ...

Thomas Mann. 47

'Revolution' means either a return to the point of departure or an overturning. The first sense can be perpetual motion but the latter surely loses momentum if it takes the 400 years implied in the debate about a 'transition' from feudalism to capitalism. ⁴⁸ In dealing with the arrival of capital-

³⁹Arthur M. Prinz, 'Background and Ulterior Motive for Marx's "Preface" of 1859', *Journal of the History of Ideas*, January-March 1969, 30 (1), pp. 437-450; Prinz is mistaken to claim that Marx never mentions 'class'.

⁴⁰ Marx, *CPPE*, p. 22.

Engels in Marx, *CCPE*, p. 225.

⁴² Marx, *Capital*, I, Everyman, p. lix; Penguin, p. 103; Moscow, p. 20.

⁴³ V. I. Lenin, 'Materialism and Empirio-Criticism', Collected Works, vol. 14, Progress Publishers, Moscow, 1972, 122-43; Ervald Ilyenkov, Leninist Dialectics and the Metaphysics of Positivism. Reflections on Lenin's book: 'Materialism and Empirio-Criticism', New Park Publications, London, 1982 – www.marxist.org/archive/ilyenkov; Louis Althusser, Lenin and Philosophy, and other Essays, NLB, London, 1971, pp. 27-68; David-Hillel Ruben, 'Lenin and his Critics', Marxism and Materialism, A Study in Marxist Theory of Knowledge, Harvester, Sussex, 1979, pp. 165-99; cf. Anton Pannekoek, Lenin and Philosophy, New Essay, New York 1948, chapter 6.
⁴⁴ For the opposing views, Daniel Little, The Scientific Marx, University of Minnesota Press, Minneapolis, 1986, chapter 2

chapter 2. ⁴⁵ J.H. Plumb, *The Death of the Past*, Penguin, Harmondsworth, 1993; Herbert Butterfield, *Man on his Past*, Cambridge at the University Press, 1969, pp. 1-61.

⁴⁶ Mao Tse-tung, 'Where do correct ideas come from?', *Four Essays on Philosophy*, Foreign Languages Press, Beijing, 1966, p. 134.

⁴⁷ Thomas Mann, 'Disorder and Early Sorrow', *Stories of Three Decades*, Secker & Warburg, London, 1936, p. 506. ⁴⁸ Immanuael Wallerstein, 'From feudalism to capitalism: transition or transitions?', *The capitalist world-economy*, Cambridge University Press, Cambridge, 1979, pp. 138-51.

within-capitalism, historical materialists give 'revolution' precedence over 'transition'. Quantitative changes act as a 'solvent' to deposit the 'sediment of previous modes' during what Marx calls 'Period One' in contrast to 'Period Two' when capital has become 'the production of its own reproduction.' Here is the revolution in capital. Elsewhere, he contends that the switch to the capitalist mode 'takes place in two different ways', one is 'the really revolutionary way' while the other cannot bring about an 'overthrow of the old mode by itself, but rather preserves and retains it as it own precondition.' The second way can contribute to the 'overthrow' only because the other is present as the driving force.

Although in no sense radicals, the present Cambridge crew have not erased 'revolution' to match their treatment of capitalism as a chronic evolution. They are not in flight from the very word 'revolution' as were the generations reeling from the survival of the Soviet Union and the spread of anti-capitalist regimes to a third of the earth's surface and people, a mentality which flared again during the approaches to the bi-centenary of the French Revolution. Unable to deny the enormity of the changes after 1770, bourgeois propagandists avoid the revolution in capital by hitching their careers to chemical, commercial, consumer, financial, industrious or military revolutions, they are not enthralled by 'Industrial Revolution' as apotheosised by David S. Landes in *The Unbound Prometheus* (1968).

A remaking as protracted as the one commonly labeled the 'industrial revolution' is better thought of as a run of processes to be grouped under the rubric 'industrialisation'.⁵⁶ A multitude of transitions criss-crossed the field of technology. Improvements to spinning equipment involved incremental shifts across more than forty years from the jenny to a self-acting mule;⁵⁷ similarly, it took almost a century for the fuel-guzzling Newcomen 'fire-engine' to be replaced by ones fitted with Watt's 'sun-and-planet gear, which converted the reciprocating stroke of the piston into rotary motion and made it possible to drive the wheels of industry';⁵⁸ turning vitriol into a bleaching powder for textiles took fifty years.⁵⁹ These transitions were

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⁴⁹ Marx, *TS-V*, III, 1971, p. 491; Marx, *CCPE*, p. 211; Marx, *Capital*, I, Everyman, pp. xlix and 689; Penguin, pp. 91 and 775; Moscow, pp. 9 and 624.

⁵⁰ Marx, *Capital*, III, 1981, p. 402; Moscow, 1959, p. 334.

⁵¹ A qualification missed by Georges Lefebvre, 'Some Observations', Rodney Hilton (ed.), *The Transition from Feudalism to Capitalism*, NLB, London, 1976, p. 124, and even more so by Michael Zell, 'Credit in the Pre-Industrial English Woollen Industry', *Economic History Review*, New Series, 19 (4), November 1996, p. 668, and not only due to his reliance on a secondary source.

⁵² Kevin Greene, 'V. Gordon Childe and the vocabulary of revolutionary change', *Antiquity*, 279, March 1999, pp. 97-109.

⁵³ Toynbee's Industrial Revolution, David & Charles Reprints, Newton Abbot, 1969; Anna Bezanson, 'The Early Use of the Term Industrial Revolution', *Quarterly Journal of Economics*, 36 (2), Feb. 1922, pp. 343-349; *Encyclopedia of the Social Sciences*, vol. 8, Macmillan, New York, 1932, p. 3; J.U. Nef, 'The Progress of Technology and the Growth of Large-Scale Industry in Great Britain, 1540-1640', *Economic History Review*, 5 (1), October 1934, pp. 3-4; Carlo M. Cipolla provides a judicious rehabilitation, 'Introduction', *The Fontana Economic History of Europe, The Industrial Revolution*, vol. 3, Fontana/Collins, Glasgow, 1973, pp. 7-21; David Cannadine, 'The Present and the Past in the English Industrial Revolution 1880-1980, *Past & Present*, 103, May 1984, pp. 131-172.

⁵⁴ Albert Soboul, 'Classical Revolutionary Historiography and Revisionist Endeavors', *Understanding the French Revolution*, Merlin Press, London, 1988, pp. 255-773; Mike Hayes and Jim Wolfreys (eds), *History and Revolution*, *Refuting Revisionism*, Verso, London, 2007; John Markoff, *The Abolition of Feudalism, Peasants, Lords and Legislators in the French Revolution*, Pennsylvania State University Press, University Park, Penn., 1996.

⁵⁵ Alexander and Nan L. Chew, *The Chemical Revolution, A contribution to Social Economy*, Batchworth, London, 1952; Ben Fine and Ellen Coleman, 'Consumerism and the Industrial Revolution', *Social History*, 15 (2), May 1990, pp. 151-79; Henry Roseveare, *Financial Revolution, 1660-1760*, Longman, London, 1991, pp. 72-73. Geoffrey Parker, *The military revolution, Military innovation and the rise of the West, 1500-1800*, Cambridge University Press, Cambridge, 1988.

⁵⁶ Keith Tribe, '"Industrialisation" as an Historical Category', *Genealogies of capitalism*, Macmillan, London, 1981, pp. 101-20.

⁵⁷ John Addy, *The Textile Revolution*, Longman, London, 1976, pp. 20-21.

⁵⁸ David S. Landes, *The Unbound Prometheus, Technological Change and Industrial Development in Western Europe from 1750 to the Present*, Cambridge University Press, Cambridge, 1969, p. 102.

⁵⁹ Archibald Clow and Nan L. Clow, 'Vitriol in the Industrial Revolution', *Economic History Review*, 15 (1/2), 1945, pp. 44-55; Klaus H. Wolff, 'Textile Bleaching and the Birth of the Chemical Industry' *Business History Review*, 48 (2), Summer 1974, pp. 143-163; Alastair J. Durie, 'Textile Bleaching: A Note on the Scottish

paralleled by the reskilling of operatives, such as the London clock-makers who joined Boulton and Watt to develop precision engineering in Manchester. 60 The transitions in legal and financial instruments and practices, such as bills-of-exchange and mortgages to get around the entail of estates, 62 merit no less attention. Even if a run of such advances might be spoken of as revolutionary inside its own domain, they are no more than tributaries to the revolution in capital.

Industrial

To critique the ideology lurking in 'Industrial Revolution' requires historical materialists to see why industrial connotes capitalist, as much as it does manufacture. Marx's understanding of 'industrial' could not have been further from the one that prevails today. The chapter in *Capital* headed 'The Genesis of the Industrial Capitalist' is unabashed: 'In the strict sense the farmer is just as much an industrial capitalist as the manufacturer.' Farmers had been the subject of previous chapters on 'The Genesis of the Capitalist Farmer' and 'Impact of the Agricultural Revolution on Industry. The Creation of a Home Market for Industrial Capital'. Marx gives corn-growing as an example of the rate of surplus-value. His chapter on 'Machinery and Large-Scale Industry' concludes with their impacts on agriculture, having already noted how 'the revolution in cultivation had led to the introduction of the industrial system' on the land. 63 When discussing ground rent, he explains how the landlord can extract that 'monopoly tax' from 'the industrial capitalist, the farmer.'64

To recognise farmers as industrial capitalists is not to equate the condition of their landlords with that of capitalist processors since 'the monopoly of landed property is a historical precondition for the capitalist mode of production and remains its permanent foundation ... '65 That circumstance yields ground rent, an 'excess profit' which 'flows not into the pocket of the capitalist [farmer] but into that of the landowner since it is the *landowner* who represents this natural basis.'66 Furthermore, the landlord is shielded against the full force of 'competition between capitals' that would otherwise 'reduce the value of agricultural products to their costprice' because an equalisation of the rates of return on investment takes effect only

to the extent that all the conditions of production are either directly created by capital or are equally – elementally – at its disposal as if it had created them. With land this is not the case, because *landed property* exists and capitalist production starts its career on the presupposition of landed property ... All that capital can do is to subject agriculture to the conditions of capitalist production. But it cannot deprive landed property of its hold on that part of the agricultural product which capital could appropriate ...

This condition compensates to a degree for the fact that 'labour expended farms is relatively less productive', a condition which will 'disappear', as will inferior soils, thanks to the flow-ons from

Experience', Business History Review, 49 (3), Autumn 1975, pp. 337-345; Alastair J. Durie, The Scottish Linen Industry, Donald, Edinburgh, 1979, pp. 5-6, 41-42, 55-59, 81-88 and 102-6.

⁶⁰ A.E. Musson and E. Robinson, 'The Origins of Engineering in Lancashire', *Journal of Economic History*, 20 (2), June 1960, pp. 221-2.

⁶¹ Abbott Payson Usher, 'The Origin of the Bill of Exchange', *Journal of Political Economy*, 22 (6), June 1914, pp. 566-76; J.H. Clapham, The Bank of England: a history, vol. I, 1694-1897, Cambridge at the University Press, 1944, pp. 21 and 144-50; T.S. Ashton, 'The Bill of Exchange and Private Banks in Lancashire, 1790-1830', Economic History Review, 15 (1/2), 1945, pp. 25-35; Robin Pearson, 'Towards an Historical Model of Services Innovation: The Case of the Insurance Industry, 1700-1914', Economic History Review, New Series, 50 (2), May 1977, pp. 235-48; Anne L. Murphy, 'Learning the business of banking: The management of the Bank of England's first tellers', Business History, 52, (1), February 2010, pp. 150–168.

⁶² R.S. Neale, "The bourgeoisie, historically, has played a most revolutionary part", Eugene Kamenka and R.S. Neale (eds), Feudalism, Capitalism and Beyond, ANU Press, Canberra, 1975, pp. 96-99.

⁶³ Marx, *Capital*, I, Everyman, pp. 831n. and 778-9; Penguin, p. 914, n.1, and 860-1; Moscow, pp. 750n. and 703; Capital, I, Everyman, pp. 217-8; Penguin, pp. 328-9, Moscow, p. 220; Capital, I, Everyman, pp. 545-8; Penguin, pp. 636-9; Moscow, pp. 504-7; Everyman, p. 423; Penguin, p. 522; Moscow, pp. 398-9.

⁶⁴ Marx, *Capital*, III, Penguin, p. 755; Moscow, p. 618; the German has 'vom industriellen Kapitalisten, dem Pachter', where Pachter is closer to tenant than to farmer, Das Kapital, III, Karl Dietz, Berlin, 1964, pp. 630-1. 65 Marx, Capital, III, Penguin, p. 754; Moscow, p. 617.

⁶⁶ Marx, TS-V, II, pp. 240-2.

metallurgy, chemistry, and transport.⁶⁷ Whether the capital invested in engrossed agriculture before those improvements could become the product of its own reproduction is less than likely, though it became so.

When Marx turns to the sectors now known as 'Industrial', he distinguishes handicrafts in guild workshops from manu-facture often by outworkers, and both from machino-facture in factories. Those three arrangements were not demarcated by 'hard and fast lines' anymore than the terms applied to them were bolted onto the tasks undertaken by processors and distributors.⁶⁹ Among the makers of woollen broadcloth, a clothman (later clothier) could be known as a 'merchant', though that designation came to be 'reserved for the Londoners who bought the cloths for resale. Around 1770 in Lancashire, 'the word "manufacturer" meant an organiser of the domestic system (as *verlag*), '71 overlapping with a new type of merchant who supplied the raw materials to domestic spinners and weavers; at the same time, 'manufacturer' was being used for the factory operative, not the master. ⁷² 'Undertaker' meant someone who undertook to perform certain tasks, and it too could apply to both sides of the class divide. Marx observed that, into the middle of the nineteenth century, the manufacturer in French silks, as in English hosiery and lace, 'was a manufacturer only in name. In reality, he was a merchant.' François Crouzet opened his 1983 Cambridge lectures on the 'First industrialists' by pointing out that the term 'industrialist' did not acquire its current meaning until the 1860s, and for more than 100 years, it, like 'manufacturer', had not distinguished Masters from Hands; few writers on the 'Industrial Revolution', Crouzet notes, pause to wonder what it says about that phenomenon for it to have arrived without 'industrialists'. 74 Given these shifts in usage, should 'processing' replace 'manufacture' and 'industrial' as the generic?

Maxine Berg opens with six pages on the coinage of 'Industrial Revolution' but takes no stab at defining 'industrial' or 'manufacture', and ignores how a machine differs from a tool. ⁷⁵ *Manu*-facture can be distinguished from *machino*-facture only if you grasp that distinction, ⁷⁶ a thought absent from all the Cambridge contributions, along with any consideration of the varying sources of motor power, since a tool does not become a machine if driven by steam. ⁷⁷ One management guru attacked Eric Hobsbawm for writing of railways as part of the industrial revolution since they were not inside factories, though he had to concede that trains were driven by steam engines; he also claimed, wrongly, that railway workers do not produce commodities. ⁷⁸

Contrary to a resolve among Marx's friends and foes to reduce his historical dialectics to a technological determinism, he sees how 'industry' in the capitalist mode is not decided by technologies but grows out of the 'concentration' of resources, including labour, and the

⁶⁷ Marx, TS-V, II, pp. 243-4; Capital, III, Penguin, pp. 756-7; Moscow, pp. 618-9.

⁶⁸ Marx, Capital, I, Everyman, p. 391; Penguin, p. 492; Moscow, p. 371.

⁶⁹ Milan Myska, 'Pre-Industrial Iron-Making in the Czech Lands: The Labour Force and Production Relations', *Past & Present*, 82, February 1979, pp. 44-49 and 68-69.

⁷⁰ G.D. Ramsey, *English woollen industry*, *1500-1750*, Macmillan, London, 1982, pp. 23-4. The women and children, who did the work, retained appellations in accord with the division of labour: spinner, weaver, fuller and shearsman. Why not webster and spinster?

⁷¹ Stanley D. Chapman, 'British Marketing Enterprise: The Changing Roles of Merchants, Manufacturers and Financiers, 1700-1860', *Business History Review*, 53 (2), Summer 1979, p. 213n.

⁷² Essay on Trade and Commerce, quoted Marx, Capital, I, Everyman, p. 281; Penguin, p. 387; Moscow, p. 275.
⁷³ Marx, Capital, III, Penguin, p. 452; Moscow, p. 334; cf. Lenin, 1964, pp. 95-7, 112, 118n., 121, 138-9, 183-4, 438-47, 451-5 and 515-6 and 550n.; for an attack on Marx's uses, H. Freudenberger and F. Redlich, 'The Industrial Development of Europe: Reality, Symbols, Images', *Kyklos*, 17, 1964, pp. 385-92.

⁷⁴ Francois Crouzet, *First industrialists: the problem of origins*, Cambridge University Press, Cambridge, 1985, pp. 2-4; Raymond Williams traces 'art', 'industry' and 'mechanical', but not 'manufacture/er', *Keywords*, Fontana, London, 1976, pp. 32-35; 137-9 and 167-9.

⁷⁵ Maxine Berg, *The Age of Manufactures*, 1700-1820, Fontana, London, 1985, pp. 15-20.

⁷⁶ Donald Mac Kenzie, 'Marx and the Machine', *Technology and Society*, 25 (3), July 1984, pp. 473-502; Marx to Engels, 28 January 1963, *M-ECW*, vol. 41, Lawrence & Wishart, London, 1985, pp. 449-51, contrast that translation with *Marx-Engels, Selected Correspondence*, 1950, p. 169.

⁷⁷ Marx, *Capital*, I, Everyman, pp. 391-98; Penguin, pp. 492-7; Moscow, pp. 371-6.

⁷⁸ Michael Fores, 'The Myth of a British Industrial Revolution', *History*, 66 (217), June 1981, p. 183.

'centralisation' of enterprises for ever more accumulation.⁷⁹ 'Industry', therefore, covers construction, ⁸⁰ fishing, mining and transport⁸¹ as much as it does agriculture and machinofacture, since 'mining, agriculture, stock-raising, manufacture, transport, etc. are branches resulting from the social division of labour and as such form particular spheres of investment for industrial capital.'⁸² Merchant's capital and money-lending capital are both of a different species since their operatives cannot add value.⁸³

In the absence of concentration and centralisation, simple commodity production and circulation will not install capital-within-capitalism. Although there is never a shortage of individual processors and merchants within the capitalist mode, 'small-scale capitalism' is oxymoronic. When scholars nowadays connect agriculture with industry it is likely to be as proto-industrialisation among rural crafts rather than the re-organisation of farming itself. Proto-industrialisation' has become a digression from thinking through the social relations of simple commodity production, Industrial Revolution' shirks the revolution in capital.

The fountainhead of Physiocracy, Francois Quesnay, in his *Tableau Economique* (1758-9) envisaged an economic system in which all the elements flowed into each to expand with each cycle – which he believed could be achieved through agriculture since only there did nature supply a free gift to the labour applied to the earth. All other economic activities, no matter how necessary to the flows, were 'sterile', that is, unproductive of 'net product' and, as a consequence, a drain on accumulation. The Physiocrats therefore championed the engrossment of grain-producing farms, the removal of 'feudal' obligations (*corvee*) and an end to state interference in the management of economic activity. In the political domain, they endorsed Absolutism, which they called 'legal despotism', much to the amusement of Catherine the Great. On questions of political economy, they had to be radical because French agriculture was so unproductive. Their privileging of agriculture was not retrograde but the essential first step towards Period II.

Agriculture got itself expelled from the realms of the industrial because farming suffers from guilt by association with the Physiocrats' belief that the application of labour-power to nature alone the sum of use-values to leave a 'net product' (land rent). Smith's acceptance of processing as productive labour signaled as novel a departure as the Physiocrats had achieved by shifting the focus of inquiry from distribution to production. Marx sees that the inadequacies in the Physiocrats' investigations result from 'the contradictions of capitalist production as it works

⁷⁹ Marx, *Capital*, I, Everyman, pp. 689-94; Penguin, pp. 775-81; Moscow, pp. 623-8; Marx, *Capital*, III, Penguin, p. 375; Moscow, p. 266; Philip L. Williams, 'Monopoly and centralisation in Marx', *History of Political Economy*, 14 (2), Summer 1982, pp. 228-241.

⁸⁰ Linda Clarke, Building Capitalism, Historical Change & the Labour Process in the Production of the Built Environment, Routledge, London, 1992.

⁸¹ Derek Aldcroft and Michael Freeman (eds), *Transport in The Industrial Revolution*, Manchester University Press, Manchester, 1983; Peter Maw, Terry Wyke and Alan Kidd, 'Canals, rivers, and the industrial city: Manchester's industrial waterfront, 1790-1850', *Economic History Review*, New Series, 65 (4), November 2012, pp. 1495-1523.

⁸² Marx, *Capital*, III, Penguin, p. 440; Moscow, p. 323.

⁸³ Marx, *Capital*, III, Penguin, pp. 431-3; Moscow, pp. 315-7.

⁸⁴ Jacques M. Chevalier, 'There is nothing simple about simple commodity production', *Journal of Peasant Studies*, 10 (4), July 1983, pp. 153-86.

⁸⁵ For an effort to blend the two, Berg, 1985, chapters 3 and 4.

⁸⁶ Despite the best of its advocates such as Maxine Berg, 'Small Producer Capitalism in Eighteenth-Century England', *Business History*, 35 (1), 1993, pp. 17-39, and 1985, pp. 77-83.

⁸⁷ D.C. Coleman, 'Proto-Industrialisation: A Concept Too Many', *Economic History Review*, New Series, 36 (3), August 1983, pp. 435-48; E.A. Wrigley, *Continuity, Chance and Change, The Character of the Industrial Revolution in Britain*, Cambridge University Press, Cambridge, 1988, pp. 91-7.

⁸⁸ Ronald L. Meek, 'Physiocracy and Classicism in Britain', *The Economics of Physiocracy*, Harvard University Press, Cambridge, Mass., 1963, p. 353.

⁸⁹ Elizabeth Fox-Genovese, *The Origins of Physiocracy*, Cornell University Press, Ithaca, 1976, chapter 5.

⁹⁰ Eleuthere Irenee Dupont de Nemours, son of one of Quesnay's younger disciples turned apostate in showing how processing need not be 'sterile' after fleeing to the United States where he founded a fortune on the production of explosives. His descendants extended operations into chemicals, paints and automobiles, during which the State of Delaware became the state of du Pont, William S. Dutton, *Du Pont – One Hundred and Forty Years*, Scribners, New York, 1942; Alfred D. Chandler Jr., *Strategy and Structure*, M.I.T. Press, Boston, 1966, chapters 2 and 3.

⁹¹ Karl Marx, TS-V, Part I, FLPH, Moscow, n.d., pp. 44-59.

its way out of feudal society, and so they can do no more than interpret feudal society itself only in a bourgeois way.'92 That condition lingered with Smith retaining several of what Marx called the Physiocrats' 'superstitions'.⁹³

Eppur si muove

Irrespective of any challenge advanced in this review, there can be no hesitation about grappling with the core of the Marxian inheritance to explain the genesis of capitalism. Whatever birthdate one gives to that mode, one conclusion is ineluctable: 'revolution', in the sense of a complete overthrow, is the apposite term and concept, whether for capitalism's arrival or for the changes since wrought to the factors of production, the natural environment, belief and behaviour in almost every corner of the globe. Napoleonic armies tore down barriers to freer trade⁹⁴ so that when Hegel declared the End of History after the Battle of Jena in 1806 he was not prophesying that there would be no more revolutions or wars but rather that all such events would be fought out within the liberal commercial and political orders being set up in England, France and the United States.⁹⁵ Their onward march might be checked by the Congress of Vienna and under the Metternich system until the early 1850s, yet, just as the Aztec and the Inca had had to bow down before the World Spirit, so would the Moghul, the Manchu and the Mikado, Czar and Grand Turk, Holy Roman Emperor and the Pontifax Maximus himself, wrestle with 'der "Geist" des Kapitalismus' at their peril.

The avalanche of details on offer from academe about even the economic concatenations of this new world can overwhelm us. The variety of experiences in space and across time underpins the 1935 despair from that quintessence of liberalism and Warden of New College, Oxford, H.A.L. Fisher, who bleated that not even generalisations could be discerned from 3,000 years of European civilisation. He was right to recognise 'the play of the contingent and the unforeseen', but not to reduce all human activities to chance outcomes. By the mid-1960s, the rise to dominance of the U.S. monopolising corporations and warfare state had underwritten a boom to eclipse all booms, which encouraged David Landes to emerge as the new Pindar for 'Technological Change and Industrial Development', a stance which retains Fisher's resistance to laws but embraces higher-order generalisations. Against a minority with 'qualms about this worship of material achievement', Landes was certain that the advantages from the fire that Prometheus stole from the gods would burn ever brighter.

Lump all the data together and the outcome indeed seems chaotic, with each rhythm disrupted by several exceptions which we cannot sail around by resorting to the cliché that the exception proves the rule – as it does, but in the Scottish sense of meaning to 'test', not to 'establish'. Generalising from the empirical is inadequate. If an inductive approach has value, it is by taking a pattern of exceptions as a key to unlock an inadequate rule, perhaps thereby opening onto a more comprehensive explanation. Genuine exceptions register social conflict which cannot be resolved by smoothing over inconsistencies in the available sources. Disproof, like proof, 'must be derived from history itself', that is, from 'human practice and in the comprehension of this practice.'

⁹³ Marx, *CCPE*, 1970, p. 209; Marx, *TS-V*, I, pp. 60-63 and 69-70; Meek, 1963, pp. 22-27; Maurice Dobb, *Theories of Income and Distribution, Ideology and Economic Theory*, Cambridge University Press, Cambridge, 1973, pp. 55-60.

⁹² Marx, *T-SV*, I, p. 52.

François Crouzet, 'Wars, Blockade, and Economic Change in Europe, 1792-1815', *Journal of Economic History*, 24 (4), December 1964, pp. 567-88; Katherine Aaslestad, 'Revisiting the Continental System: Exploitation to Self-Destruction in the Napoleonic Empire', Philip G. Dwyer and Alan Forrest (eds), *Napoleon and His Empire*, *Europe*, 1804-1814, Palgrave, London, 2007, pp. 114-32.

^{1804-1814,} Palgrave, London, 2007, pp. 114-32.

95 The inability of the intelligentsia on the Left and the Right to understand Hegel's point has got worse since Francis Fukuyama revived the notion, 'The End of History?', *The National Interest*, 16, Summer 1989, pp. 3-18, and 'Reflections on the End of History, Five Years Later', *History and Theory*, 34 (2), May 1995, p. 27.

⁹⁶ H.A.L. Fisher, A History of Europe, vol. 1, Eyre & Spottiswoode, London, 1935, p. vii.

⁹⁷ Landes, 1968, pp. 554-5.

⁹⁸ F. Engels, 'Ludwig Feuerbach and the End of Classical German Philosophy', Marx-Engels Selected Works, vol. 3, Progress Publishers, Moscow, 1970, p. 375; Marx, Theses on Feuerbach', M-ECW, vol. 5, 1976, p. 8.

Lenin's twin criteria for a political strategy in Czarist Russia apply to the pursuit of how capitalism had appeared in the West some hundred years before: 'how exactly?' and 'where from?⁹⁹ One reason why the answers about England cannot be exported to Russia is that the revolution in capital around 1800 had installed conditions which meant that their development elsewhere could not duplicate those of the initial 'take-off'. The injunction to determine 'how exactly?' applies at each step in an historical materialist analysis of any topic. The 'where from?' carries a double significance for the debate about a 'transition' from feudalism to capitalism. First, what do we understand as 'feudalism'?; secondly, 'how exactly?' could the revolution in capital emerge out of the 'sediment' from the dissolution of a previous mode? The conventional wisdom among Marxists of 'a transition from feudalism to capitalism' maroons those questions. What happened was no mere transition but a revolution. Moreover, capitalism rode on a second slavery, a second serfdom and a novel petty commodity production – not up from feudalism, which had ceased to exist in the West by around 1400 and never governed the serfdoms of Central or East Europe, not even in Eighteenth-century Poland where Absolutism was absent as were a monarchy and the nobility. 100 Sweezy couples his recognition that feudalism and serfdom are not necessarily one and the same with the criterion that feudal production is for use while under capitalism it is for exchange. 101 To apply this precept to the second serfdoms is far from straightforward since they produced grain for export under three distinctive socio-political regimes in Prussia, Poland and Russia. Czech ironworks were not alone in mixing corvee and forced wage-labour until the 1850s. ¹⁰² Comparable complexities appear in England where laws that look like feudal leftovers, such as the Statute of Artificers to control entry to the crafts through guilds, had not come into force until 1563. In a Mercantilist rather than a medieval mentality, certain regulations were revived in order to restore the quality of goods so they could compete against imports. ¹⁰³ Serfdom lingered in corners of Scotland till 1799 as did socio-cultural remnants of clans into the 1830s, ¹⁰⁴ while tartans were being commodified to promote the textile industry by cashing in on the Tory nostalgia popularised by Sir Walter Scott. 105

Any sense of incomprehensibility that rises from the volcano of examples does not disprove that a qualitative transformation has taken place across the past 200 years. As Marx puts it: all social laws are tendential. Contemporary capitalism, with all its intricacies and oddities, whether in timing and location, is the outcome. To explain its existence remains the glory of historical materialists, providing we address our investigations to 'how exactly?' a revolution in capital might come to pass? Those who find capitalism everywhere in the 'propensity to truck' of Adam Smith, or those who accept change but only at an incremental pace with a billion twitches transforming the whole without rupturing the system, will never propagate more than the seaweed of footnotes to choke the propeller of science. (Mine serve as a bibliography for the next draft of this project).

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⁹⁹ Lenin, 1964, pp. 380-1.

¹⁰⁰ Perry Anderson, *Lineages of the Absolutist State*, NLB, London, 1974, chapter 4; Witold Kula, *An Economic Theory of the Feudal System, Towards a model of the Polish Economy 1500-1800*, NLB, London, 1976.
¹⁰¹ Paul Sweezy, 'A Critique', Hilton (ed.), 1976, pp. 33 and 35.

¹⁰² Myska, 1979, pp. 60-72.

¹⁰³ K.J. Allison, 'The Norfolk Worsted Industry in the Sixteenth and Seventeenth Centuries', *Yorkshire Bulletin of economic and social research*, 12 (1), November 1960, pp. 73-83, and 13 (1), November 1961, pp. 61-77.
¹⁰⁴ Baron F. Duckham, 'Serfdom in Eighteenth-Century Scotland', *History*, 54 (181), June 1969, pp. 178-9; John Preeble, *The Highland Clearances*, Penguin, Harmondsworth, 1969, chapter 6.

Hugh Trevor-Roper, 'The Highland Tradition of Scotland', Eric Hobsbawm and Terence Ranger (eds), *The Invention of Tradition*, Canto, Cambridge, 1992, pp. 15-41.

¹⁰⁶ Marx, *Capital*, I, Everyman, pp. xlix, 99, 102, and 153; Penguin, pp. 91, 216 and 219, and 268; Moscow, pp. 8, 120, 123 and 165-6; Marx, *Capital*, III, Penguin, pp. 275, 362 and 828; Moscow, pp. 175, 253 and 689; David-Hillel Ruben, 'Marxism and Dialectics', John Mepham and D.-H. Ruben (eds), *Issues in Marxist Philosophy, Volume One Dialectics and Method*, Harvester Press, Hassocks, 1979, pp. 69-71; Michael A. Lebowitz, 'Marx's Falling Rate of Profit: a dialectical view', *Canadian Journal of Economics*, 9 (2), May 1976, pp. 232-54; on www.surplusvalue.org.au

The co-editor speaks

As Cambridge co-editor, Larry Neal feels obliged to engage with capitalism, a risk avoided by almost all his contributors. With digression his preferred approach, he begins from

modern economic growth, defined as a sustained rise in per capita income with population growth. The connection between capitalism and modern economic growth was difficult to see in its early stages. Consequently, the spread of both modern economic growth and capitalism after the middle of the nineteenth century was fitful and uneven. (p. 1)

What can one make of this hotchpotch? Were 'the beneficial effects of modern economic growth' caused by industrialisation, by the market – or by capitalism itself? Suspecting that his causal chain makes scant sense, Neal goes on to ask: 'What are the salient features of modern capitalism ...?' Whether or not he is using 'salient' to convey prominent or essential, he meanders through the 'negative' connotations of 'the word "capitalism" 'before finding his way to

Four elements ... common to each variant of capitalism, whatever the specific emphasis:

- 1 private property rights;
- 2 contracts enforceable by third parties;
- 3 markets with responsive prices; and
- 4 supportive governments. (p. 2)

Not pausing to explain his drift from 'salient' to 'common', Neal expatiates on this quartet after attaching capital to a miscellany of its material forms:

Each of these elements must deal specifically with *capital*, a factor of production that is somehow physically embodied, whether in buildings and equipment, or in improvements to land, or in people with special knowledge. (3)

At last, a definition of 'capital', we might suppose, until we realise that Neal's 'somehow' spotlights that he has come up with elements 'common' to 'capital' in any and every mode of production. Oblivious to the need to identify the historically specific form that capital takes within capitalism, he reduces it to enduring physical forms, when it is a metamorphosis of things, processes and social (class) relationships. ¹⁰⁷ Neal descends from a long line of bourgeois writers who, as Marx observed, dare 'not conceive capital as a relation' since to do so means 'conceiving it as a historically transitory, i.e., a relative – not an absolute – form of production. ¹⁰⁸

<u>Labour</u>: Neal's gloss on his four-part conspectus restricts labour to specialists and excludes money. That limitation and omission allow him to avoid drawing them together to face the uncomfortable truth about 'growth' within the capitalist mode, namely, the augmentation of money-capital from the exploitation of labour. After a brief comment on specialist labour, there comes an outline of turnover-times and then '4 Supportive government', a euphemism which shuts the gate against exploring the nation-*market*-state. The significance of labour-power and labour-times percolates through this review, as they do the accumulation of capital.

The expropriation of the value added by labour-power is the only means through which expansion can take place. Neal's confining of labour to 'people with special knowledge' looks like jetsam from the chatter about 'human capital' which emerged during the 1950s to 'manage' class conflict while papering over its origins in the exploitative social relations between capital and wage-labour. These connections exist for all labour and not just specialists. Every overseer knows something beyond the ken of the professoriate: there is no such thing as labour without a modicum of 'special knowledge', a knack if not a certified skill. Should Neal doubt that

¹⁰⁷ See my 'The "massiness" of capital', *Journal of Australian Political Economy*, 70, Summer 2012/13, pp. 25-46. Marx, *TS-V*, III, p. 274.

navvying with a pick calls for different knacks than with a shovel, let him attempt each task under the hurry-up bark of a ganger and see how long his back holds out. 109

<u>Turnovers</u>: When Neal reverts to his four common elements, he is no longer content that capital should just be 'somehow physically embodied', it must also

be long lived and not ephemeral to have meaningful economic effects. That means that each of the four features listed above has to have a long time horizon, spanning at least several years and preferably several human generations. (p. 3)

That condition is a nonsense for such 'physically embodied' forms of capital as raw materials, semi-finished goods, vendible commodities and labour-power since the purpose of 'market signals' is to lubricate their transformation into exchange values in a somewhat shorter interval than three or four lifetimes. On that scale, capital could never have expanded at a rate to break free from the sediment of previous modes. Velocity is its oxygen.

Neal now adds a third characteristic to the long-lived palpable things which he has mistaken for capital: 'Capital should also be productive and therefore in use throughout its economic lifespan ...' (3) The first response to this criterion is to ask 'productive of what?' His Cambridge team would chorus 'more stuff', and ever more of it. By contrast, Marx demonstrated why capital-within-capitalism has to be productive of the surplus-value present in those commodities. Surplus-value is not unique to capitalism where its specificity is in its realisation as profit to feed cycles of accumulation. Neal's long-lived embodiments are incapable of adding more value than had gone into their production, a limitation which also applies to all but one manifestation of circulating capital. That exception is the labour-power sold by wage-slaves, and called variable capital by Marx because it alone can vary the value emerging from its application. The rest he calls 'constant'. The notion that labour-power becomes any kind of capital, let alone its most important form, is so subversive as to be unthinkable by almost every ideologue since Ricardo. 'Growth' requires 'supportive governments' to ensure the subordination of labour into capital, deploying violence to keep the wage-slaves at their lasts.¹¹¹ To be propertiless is not to be 'free' in the sense that capitalism needs its labour. Rather capital has to be free to do with the labour-power it buys whatever will maximise accumulation, making 'free' labour and wage-slavery synonymous.

Also flowing from Neal's lifespan of capital is concern about the turnover time for production equipment (fixed capital). He recognises that its utility 'may be shorter than its physical life due to obsolescence.' (p. 3) That discarding of machinery is driven by competitive pressures to reduce socially necessary labour-times. Allied to investments in new machinery as a means to extract relative surplus-value are outlays to reconfigure workspaces to achieve continuous flows: in agriculture through engrossment across the 300 years before the torrent of enclosures after 1750; ¹¹² in mining, from underground to open-cut; and in the layout of factories, starting from the Wedgwood Etruria potteries in the 1760s and Arkwright's cotton mills, through the integration of metal foundries and onto Ford's production lines. ¹¹³ Capital must combine speed-ups in the application of labour with the removal of interruptions to the production process, whether by meal-breaks or from the physical-chemistry of processing, notably, when

R.D. Hall McKellar, 'Clay-shoveler's fracture', Journal of Bone and Joint Surgery, XII (1), 1940, p. 40.

¹¹⁰ Marx, *Capital*, I, Everyman, chapter 6; Penguin and Moscow, chapter 8.
¹¹¹ Alf Ludtke, 'The role of state violence in the period of transition industrial capitalism: the example of Prussia from 1815 to 1848', *Social History*, 4 (2), May 1979, pp. 175-221; Neil McKendrick, 'Josiah Wedgwood and Factory Discipline', *Historical Journal*, 4 (1), 1961, pp. 30-55.

W.G. Hoskins, *The Age of Plunder, The England of Henry VIII 1500 to 1547*, Longman, London, 1976, pp. 63-72; J.R. Wordie, 'The Chronology of English Enclosure, 1500-1914', *Economic History Review*, New Series, 36 (4), November 1983, pp. 483-505.

Neil McKendrick, 'Josiah Wedgwood and Cost Accounting in the Industrial Revolution', *Economic History Review*, New Series, 23 (1), April 1970, pp. 45-67; Karen Williams *et al.*, 'The Myth of the Line: Ford's Production of the Model-T at Highland Park, 1909-1916', *Business History*, 35 (3), July 1993, pp. 66-87; Bruce Pietrykowski, 'Fordism at Ford: Spatial Decentralisation and Labour Segmentation at the Ford Motor Company, 1920-1950', *Economic Geography*, 71 (4), October 1995, pp. 383-401.

turning iron into steel.¹¹⁴ Into the 1800s, the tanning of boot leather with dog and pigeon droppings could take up to two years.¹¹⁵ For as long as the bleaching of linen yarn and pieces of cloth took eight months, and cotton more than a week, laid out in fields to be watered every two or three days, the supplies to steam-driven textile mills would never have sufficed for a revolution in capital.¹¹⁶

As vital as it is for capital to turnover as often as possible, the resulting accumulation must last beyond one generation. Hence, the revolution in capital required legal forms and business organisations which allowed capitals accumulated during one lifetime to be incorporated into social capital. This longevity does not require that the funds remain within the same family or firm since when a business is sold to a rival, the resultant concentration is an aid to accumulation. Had businesses never exceeded the familial, capital could never have become the product of its own reproduction.

A survey of Stockport trade directories and wills confirms that most businesses had a short life span. Hore than half of its cotton manufacturers, brewers/publicans and drapers listed in 1821 were gone by 1834, with fewer than one in ten trading in 1850. The likelihood of the owners' dying young encouraged them to write their wills to provide for under-aged children and widows so that between 1822 and 1847 as many business stopped because of testators' instructions as went bust. Only one in three was still going five years after the death of its proprietor since half the wills directed a sell-off of all family property, including the business. Funds from a deceased estate lived to expand on another day in a different location when attorneys lent trust funds to processing firms. Hence, a sell-up did not mean that the assets were devalorised, unlike unsalable commodities or an uninsured plant lost in a fire. Meanwhile, deceased estates invested in 'government security' delivered an income from taxes on values produced elsewhere. Political economists were slow to accept that a national debt with interest payments serviced by taxation, allied to a secure banking system, laid the foundations for commercial credit. 119

By 1683, the English state was centralising its collection of excise and customs duties, which laid a path for the merchants who set up the Bank of England to manage the national debt from 1694. During the 1763 crisis at the end of the Seven Years War, the Bank began to behave as a lender of last resort. Within seventy years, it had become, 'by habit if not by law,

L.A. Clarkson, 'The Organization of the English Leather Industry in the Late Sixteenth and Seventeenth Centuries', *Economic History Review*, New Series, 13 (2), 1960, pp. 246-9; C.H. Spiers, 'Sir Humphry Davy and the Leather Industry', *Annals of Science*, 24 (2), June 1968, pp. 99-113.

¹¹⁸ B.L. Anderson, 'The Attorney and the Early Capital Market in Lancashire', Francois Crouzet (ed.), *Capital formation in the Industrial Revolution*, Methuen, London, 1972, pp. 223-56.
¹¹⁹ Walter F. Stettner, 'Sir James Steuart on the Public Debt', *Quarterly Journal of Economics*, 59 (3), May 1945,

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¹¹⁴ See my 'Time conquers space', *The Essence of Capitalism*, 2003, pp. 213-49, and 'Making capital tick', *Overland*, 170, August 2003, pp. 92-101.

¹¹⁶ Clow and Clow, 1945, pp. 44-55; Conrad Gill, *The Rise of the Irish Linen Industry*, Oxford at the Clarendon Press, 1925, pp. 50-51, 63, 90-91, 118-19, 208-10, 245-9, 272 and 291; Wolff, 1974, pp. 143-163; Durie, 1975, pp. 337-45; Durie, 1979, pp. 5-6, 41-42, 55-59, 81-88 and 102-6; Henry Hamilton, *The Industrial Revolution in Scotland*, Oxford at the Clarendon Press, 1932, pp. 102-3; Leslie A. Clarkson, 'Pre-factory industry in Northern Ireland', Pat Hudson (ed.), *Regions and Industries*, Cambridge University Press, 1989, pp. 262-3.

¹¹⁷ Alastair Owens, 'Inheritance and the Life-Cycle of Family Firms in the Early Industrial Revolution', *Business History*, 44 (1), January 2002, pp. 21-4; Nicholas Rogers, 'Money, Land and Lineage: The Big Bourgeoisie of Hanoverian London', *Social History*, 4 (3), October 1979, pp. 437-54; Leonore Davidoff and Catherine Hull, *Family Fortunes, Men and Women of the English Middle Class, 1780-1850*, University of Chicago Press, Chicago, 1991, chapter 4.

¹¹⁹ Walter F. Stettner, 'Sir James Steuart on the Public Debt', *Quarterly Journal of Economics*, 59 (3), May 1945, pp. 451-76; Ronald L. Meek, 'The Economics of Control Prefigured by Sir James Steuart', *Science & Society*, 22 (4), Fall 1958, pp. 289-305; Gary M. Anderson and Robert D. Tollison, 'Sir James Steuart as the Apotheosis of Mercantilism and His Relation to Adam Smith', *Southern Economic Journal*, 51 (2), October 1984, pp. 456-68. ¹²⁰ Clapham, I, 1944, pp. 21 and 144-6; Murphy, 2010, pp. 150–168; Pierre Vilar, *A history of Gold and Money*, *1450-1920*, NLB, London, 1976, pp. 211-21.

¹²¹ Isabel Schnabel and Hyun Song Shin, 'Liquidity and Contagion: The Crisis of 1763', *Journal of European Economic Association*, 2 (6), December 2004, pp. 929-68; Julian Hoppit, 'Financial Crises in Eighteenth-Century England', *Economic History Review*, New Series, 39 (1), February 1986, pp. 39-58.

banker to the state and most of its departments', so that the prime minister in 1781 could claim it as 'part of the Constitution,' along with *Magna Carta* and the Bill of Rights. 122

Smith detested Sir James Steuart's *Inquiry into the Principles of Political Oeconomy* (1767) for treating the Sovereign as the arbiter of economic decision-making, yet devoted a quarter of *The Wealth of Nations* to 'Of the Revenue of the Sovereign or Commonwealth', with chapters on 'Expenses of the Sovereign', 'Sources of Revenue' and 'Public Debts'. ¹²³ His reluctance to enthuse over the novel mechanisms was not surprising after a run of financial upheavals shook confidence: Scottish investors lost half their country's funds in the Darien disaster (1695-99); the collapse of John Law's bank upon the failure of his Louisiana Company in France ¹²⁴ coincided with the bursting of the South Sea bubble in 1720. ¹²⁵ Walpole raided the Sinking Fund in the 1730s to keep taxes low and regressive. ¹²⁶

Floating the National Debt through transferrable securities had created paper assets which underpinned a money market. Its emergence made possible the setting up of insurance companies, which became 'the basis of a pyramid of other loans ... a fund of credit.' 127 Insurance is an instance of how a socialising of money-capital effected the kind of qualitative change needed for capital-within-capitalism. Innovation in getting around the law made it possible for the Royal Exchange Assurance to flourish despite not securing the charter stipulated for a joint-stock operation; instead, it lived up to its name by assuring the King of a majestic bribe in exchange for permission to proceed. ¹²⁸ In 1771, 'seventy-nine merchants, underwriters and brokers' sailed a different route by opening a joint account at the Bank of England to erect a new Coffee House, known as Lloyd's. 129 Starting in 1782, the Phoenix company was set up by small to medium sugar-bakers, close by each other along the London docks, sharing the fear of ruin by fire. Policy-holders had to be assured that an insurer's reserves were big enough to pay out to a large number in the event of the fire spreading, as in 1666 which destroyed properties valued at £10m.; secondly, the insured had to believe that the company would exist for years to come, if not in perpetuity. ¹³⁰ Directed by Griffin Stonestreet, the Phoenix built up a reserve of £300,000, available for loans.

Fire insurance firms doubled in number between 1760 and 1800 to total £4m., a sixteen-fold increase since 1720. Insured assets rose from £100 million in 1770 to £487m. by 1830. ¹³¹ These sums are one measure of accumulation, indicating that Period Two had appeared. Their plentitude, however, does not point to its cause. A new round of restructuring of financial instruments and institutions began around the 1760s. After the networks for handling bills of

A weighting overlooked by the current idolaters of free-trade who cannot cope with Smith as heir to the Physiocrats, Dobb, 1973, pp. 38-43; Keith Tribe, *Land, Labour and Economic Discourse*, Routledge & Kegan Paul, London, 1978, pp. 110-13.

¹²⁷ A.H. John, 'Insurance Investment and the London Money Market of the 18th Century', *Economica*, New Series, 20 (78), May 1953, p. 139.

Clive Trebilcock, *Phoenix Assurance and the development of British insurance, volume one, 1782-1870*, Cambridge University Press, Cambridge, 1985, pp. 8-9, 16 and 96-109.

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¹²² quoted in Clapham, I, 1944, pp. 101-3.

Andrew McFarland Davis, 'An Historical Study of Law's System', *Quarterly Journal of Economics*, 1 (3), April 1887, pp. 289-318; E.A. Benais, 'Financial Experiments and Colonial Development', A.W. Ward *et al.* (eds), *The Cambridge Modern History*, *vol*, *VI*, *The Eighteenth Century*, Cambridge at the University Press, 1934, pp. 168-78; Vilar, 1976, chapters 26 and 29.

R.D. Richards, 'The Bank of England the South Sea Company', *Economic History*, 7, January 1932, pp. 348-374; Julian Hoppit, 'The Myths of the South Sea Bubble', *Transactions of the Royal Historical Society*, Sixth Series, 12, 2002, pp. 141-65.

¹²⁶ Basil Williams, *The Whig Supremacy 1714-1760*, Oxford at the Clarendon Press, 1960 revised edition, pp. 186-93; E.R. Turner, 'The Excise Scheme of 1733', *English Historical Review*, 42 (165), January 1927, pp. 34-57; J.H. Plumb, *England in the Eighteenth Century*, Penguin, Harmondsworth, 1963 p. 70.

¹²⁸ Barry Supple, *Royal Exchange Assurance: a history of British insurance 1720-1970*, Cambridge at the University Press, 1970, pp. 12, 18-20, 32 and 53.

¹²⁹ Godfrey Hodgson, *Lloyd's of London*, Penguin, Harmondsworth, 1984, pp. 45-57; Christopher Kingston, 'Marine Insurance in Britain and America, 1720-1844: A Comparative Analysis', *Journal of Economic History*, 67 (2), June 2007, pp. 379-409.

¹³¹ John, 1953, p. 138; Robin Pearson and David Richardson, 'Business Networking in the Industrial Revolution', *Economic History Review*, New Series, 54 (4), November 2001, p. 661.

exchange collapsed during 1772, merchants inaugurated a London Clearing House to speed up the processing of cheques. That innovation reduced the quantities of cash that all banks needed to hold. The accumulation of capital for its expanded reproduction required forms of business organisation and commercial law to replace the partnerships and Crown Corporations that had been granted limited life-spans for specific purposes such as the construction of a turnpike. Because the concentration of resources and a centralisation of their ownership are pillars for accumulation, all three had to be underpinned by a revised legal system. The early capitalists could concentrate some of their own resources but needed state sanction for others and more so if they were to centralise ownership; from the 1750s, the industrialisation of agriculture through enclosures required costly and time-consuming Acts of Parliament. Registrations in the new profession of surveying doubled between 1750 and 1770, and did so again by 1810 to nearly 350. 134

The re-writing of commercial law allowed for the socialising of individual capitals as a foundation for social capital, which alone is capitalism for, as Marx recognised, 'the gradual increase of capital by reproduction is clearly a very slow procedure compared with centralisation ...', noting that the world of the 1860s would have still been without railways if it had had to wait for a single investor to accumulate the funds for their construction. 135 Even before the bursting of the South Sea Bubble in 1720, ¹³⁶ the government had limited joint-stock companies for marine insurance to six partners. ¹³⁷ That law did nothing to stop investors getting together to finance slave-ships, ¹³⁸ experiences which introduced merchants to practices useful for their investments in processing and transport. Chief Justice Lord Mansfield (1705-1793), devised the commercial code that secured the first two of Neal's common elements - contracts and property rights. 139 Mansfield personifies Marx's 'conclusion that neither legal nor political forms could be comprehended whether by themselves or on the basis of a so-called general development of the human mind, but that on the contrary they originate in the material conditions of life.' 140 None of the Cambridge contributors examines limited liability or joint-stock beyond stray mentions (pp. 12, 28, 33 and 337-8). In this occlusion, they follow Adam Smith whose detestation of chartered monopolies blinded him to the need for socialised capital beyond the routines of finance and the funding of inland waterways. 141 Scotland also gets short shrift even though its more flexible law of partnerships 142 made it the home for pioneering ventures such as the Carron iron works from 1760, and the application of chemistry to the bleaching of textiles with the sulphuric works at

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1760-1810', Past & Present, 171, May 2001, pp. 95-126.

D.M. Joslin, 'London Private Bankers, 1720-1785', *Economic History Review*, New Series, 7 (2), 1954, p. 184;
 Julian Hoppit, 'Attitudes to Credit in Britain, 1680-1790', *Historical Journal*, 33 (2), June 1990, p. 308.
 W.E. Tate, 'Members of Parliament and Their Personal Relations to Enclosure: A Study with Special Reference to Oxfordshire Enclosure, 1757-1843', *Agricultural History*, 23 (3), July 1949, pp. 213-220; Leigh Shaw-Taylor, 'Labourers, Cows, Common Rights and Parliamentary Enclosure: The Evidence of Contemporary Comment c.

¹³⁴ T.C. Smout, 'Where had the Scottish Economy got to by the third quarter of the Eighteenth century?', Michael Ignatieff and Istvan Hout (eds), *Wealth and Virtue*, Cambridge University Press, Cambridge, 1983, p. 67. ¹³⁵ Marx, *Capital* I, Everyman, pp. 320 and 693; Penguin, pp. 424 and 780; Moscow, pp. 309 and 628.

Robin Pearson and David Richardson, 'Business Networking in the Industrial Revolution', *Economic History Review*, New Series, 54 (4), November 2001, pp. 663, 665 and 667-9; Ron Harris, 'The Bubble Act: Its Passage and Its Effects on Business Organisation', *Journal of Economic History*, 54 (3), September 1994, pp. 614 and 623-4; Nicholas Kyriazis and Theodore Metaxas, 'Path dependence, change and the emergence of the first joint-stock companies', *Business History*, 53 (3), June 2011, pp. 363-74.

¹³⁷ A.H. John, 'The London Assurance Company and the Marine Insurance Market of the Eighteenth Century', *Economica*, New Series, 25 (98), May 1958, pp. 126-141.

¹³⁸ Katie McDade, 'Liverpool slave merchant entrepreneurial networks, 1725-1807', *Business History*, 53 (7), December 2011, pp. 1092-1109.

¹³⁹ C.H.S. Fifoot, *Lord Mansfield*, Oxford at the Clarendon Press, 1936, Chapter IV.

¹⁴⁰ Marx, *CPPE*, p. 20; Marx, *Capital*, I, Everyman, p. 59-60; Penguin, pp. 178-9; Moscow, pp. 84-5.

Adam Smith, *Inquiry into the Nature and Causes of the Wealth of Nations*, 2, Oxford at the Clarendon Press, 1976, pp. 570-5; Penguin, Harmondsworth, 1999, pp. 345-8.

¹⁴² J. Robertson Christie, 'Joint Stock Enterprise in Scotland before the Companies Acts', *Juridical Review*, XXI (1), 1921, pp. 128-47; R.H. Campbell, 'The Law and the Joint-Stock Company in Scotland', Peter L. Payne (ed.), *Studies in Scotlish Business History*, Frank Cass, London, 1967, pp. 136-51; Ireland, 1984, pp. 239-60.

Prestonpans.¹⁴³ That unobservant observer, Adam Smith failed to see what was being made under his nose around Glasgow, unless it was inside a bank.¹⁴⁴

'4 supportive governments'

Changes in the legal codes and in their enforcement manifest the last of Neal's common elements, '4 Supportive government', a notion which takes him some way towards acknowledging impressments by the state while keeping him safe from recognising it as an executive committee of the bourgeoisie. His ilk are more comfortable with talk of the nation-state, a term so commonplace that the grounds for the coupling are assumed more often than justified. That want of interrogation extends to state and to nation, thereby masking their linkages through market and class. Nation-state deflects notice from domestic repression and onto inter-state relations. Why both are necessary becomes apparent by searching behind nation and state to link the expansion of capital at home and abroad through the novelty of its formation both of and through a nation-*market*-state (the subject of yet another rough draft). Capitalist classes come to power through smashing some mechanisms while refashioning others so that the England of Henry VIII, the Russia of Ivan IV and of Peter the Great, the France of Louis XIV and the Prussia of Frederick the Great are no extremes.¹⁴⁵

By showing how markets were wrought through a host of government activities, the Cambridge contributors puncture the neo-liberal wisdom that markets and states are antagonistic. The fact is that states dis-organise labour and organise capital, attempting for its expansion what its personifications and agents cannot achieve through firms. When England rode on the sheep's back, the authorities imposed import duties and paid bounties; in the 1680s, they insisted that shrouds be made of wool, and standardised the quality of thread in 1788 to inscribe circumstances for profit-taking beyond the power of any trade association. To meet foreign competition by advancing social capital, Parliament in the early 1860s limited the length of the working day to support those capitalists who had invested in machinery against those Masters still able to undercut them by prolonging the hours of work.

States are sites of conflict as each rising class fights off both the previous power and against the propertiless on whose labour all else depends. By the late seventeenth century, the spread of firearms had tipped power so far in favour of the propertied classes that France's rural

¹⁴³ Henry Hamilton, 'The Founding of Carron Ironworks', *Scottish Historical Review*, 25 (99), April 1928, pp. 185-93; Clow and Clow, 1945, pp. 44-55.

¹⁴⁴ C.R. Fay, *Adam Smith and the Scotland of his day*, Cambridge at the University Press, Cambridge, 1956, chapter 4; R. Koebner, 'Adam Smith and the Industrial Revolution', *Economic History Review*, New Series, 11 (3), 1959, pp. 381-91; C.P. Kindelberger, 'The Historical Background: Adam Smith and the Industrial Revolution', Thomas Wilson and Andrew S. Skinner (eds), *Market and the state: essays in honour of Adam Smith*, OUP, Oxford, 1976, pp. 1-24; H. Hamilton, 'Scotland's Balance of Payments Problem in 1762', *Economic History Review*, 5 (3), 1953, pp. 344-5.

pp. 344-5.

Hoskins, 1976; Vasili Klyuchevsky, *Peter the Great*, Macmillan, London, 1958; Jerome Blum, *Lord and Peasant in Russia, From the Ninth to the Nineteenth Century*, Princeton University Press, Princeton, 1961, chapters 9 and 18; Colin Moers, *The making of bourgeois Europe: absolutism, revolution, and the rise of capitalism, in England, France and Germany*, Verso, London, 1991, chapter 2; Max Beloff, *The Age of Absolutism, 1660-1815*, Hutchinson, London, 1954.

¹⁴⁶ H. Hamilton, 'The Founding of the Glasgow Chamber of Commerce', 1783', *Scottish Journal of Political Economy*, 1 (1), March 1954, p. 41; Rowland Parker, *The Common Stream*, Paladin, London, 1976, p. 163; Patrick O'Brien, Trevor Griffiths and Philip Hunt, 'Political Components of the Industrial Revolution: Parliament and the English Cotton Textile Industry, 1660-1774', *Economic History Review*, New Series, 44 (3), August 1991, pp. 395-423; Trevor Griffiths, Philip Hunt and Patrick O'Brien, 'Scottish, Irish and Imperial Connections: Parliament, the three kingdoms, and the mechanisation of cotton spinning in eighteenth-century Britain', *Economic History Review*, New Series, 61 (3), 2008, p. 640.

¹⁴⁷ Marx, *Capital*, I, Everyman, pp. 303-11; Penguin, pp. 408-416; Moscow, pp. 295-302; Mac Kenzie, 1984, pp. 473-502; W. Lazonick, 'Industrial relations and technical change: the case of the self-acting mule', *Cambridge Journal of Economics*, 3, 1979, pp. 231-40; Berg, 1985, pp. 189-97.

poor could not prevent the plague of taxes. ¹⁴⁸ The export of firearms to West African rulers underwrote the slave trade. ¹⁴⁹ Three companies of the Black Watch stopped the tenants of the Duke of Sutherland from driving off 10,000 of his sheep in 1792. Every ruling class raises violence to an obligatory norm, aka the 'law', which, as Adam Smith knew, operates 'in every case as a combination of the rich to oppress the poor, and preserve to themselves the inequality of goods. '151 Elaborating on this fact of social production, Max Weber recognises that

[t]he industrialist takes into account the fact that people exist who are hungry, and that those other people in the spiked helmets will prevent them using physical force simply to take the means where they find them which could serve to allay their hunger ... 153

As a careful student of such rational calculations, Weber endorses Trotsky's statement that '[e]very state is founded on force', adding that 'a state is a human community that (successfully) claims the monopoly of the legitimate use of physical force within a given territory.¹⁵³ To that end, England shattered Jacobite pretensions in 1745-6 and Irish ones less so in 1798-1801 before imposing Union. Smith foreshadows Mao on the origins of political power in the barrel of a gun. 154

The state is a fact of production without ever becoming a factor of production like labour. First, the state makes people work, by lopping the ears off vagrants, ¹⁵⁵ a measure endorsed by that herald of bourgeois liberty, John Locke, in his 1697 Report to the Board of Trade on Relief and Unemployment of the Poor, in which he also proposed that the recalcitrantly idle be whipped while their children be taken away at the age of three and placed in schools to inculcate work discipline. 156 Scottish Poor Laws of 1579, 1597 and 1672 allowed the authorities to 'seize upon' vagrants for hateful work in salt and coal, from which servitude they could escape by selling themselves into bondage for life. 157 In Scotland, parish officers leased the occupants of workhouses to factory-owners such as David Dale who obtained Edinburgh orphans for his water-frames in 1783. 158 The Dutch exported pins made by workhouse paupers. 159

Secondly, having driven people to sell their labour, 'supportive governments' re-enter the class-war to block the workers' resistance to wage-cuts, speed-ups and piece-rates by outlawing combination among the sellers of labour-power. The Quaker Josiah Wedgwood summoned the military to suppress riotous workmen in 1783, saw to it that one of their leaders was hanged, and

¹⁴⁸ John S. Pettengill, 'The Impact of Military Technology on European Income Distribution', *Journal of* Interdisciplinary History, 10 (2), August 1979, pp. 201-225; Ronald W. Batchelder and Herman Freudenberger, 'On the Rational Origins of the Modern Centralised State', Explorations in Economic History, 20 (1), January 1983, pp.

¹⁴⁹ Joseph E. Inikori, 'The import of firearms into West Africa, 1750 to 1807: a quantitative analysis', Joseph E. Inikori (ed.), Forced migration: the impact of the export slave trade on African societies, Hutchinson, London, 1982, pp. 126-53.

¹⁵⁰ Keith Burgess, 'The Making of a Class Society, Commercialisation and Working-Class Resistance, 1780-1830', Tony Dickson (ed.), Scottish capitalism: class, state, and nation form before the Union to the present, Lawrence & Wishart, London, 1980, p. 169.

¹⁵¹ Adam Smith, *Lectures on Jurisprudence*, Oxford at the Clarendon Press, 1978, p. 208.

¹⁵² Max Weber, *Critique of Stammler*, Free Press, New York, 1977, p. 102.

¹⁵³ Max Weber, 'Politics as a vocation', H.H. Gerth and C. Wright Mills (eds), From Max Weber, Essays in *Sociology*, Routledge and Kegan Paul, London, 1948, pp. 78 and 82-3. ¹⁵⁴ Smith, 1976, 2, pp. 706-7; Smith, 1999, pp. 244-5.

A.L. Beier, 'Vagrants and the Social Order in Elizabethan England', *Past & Present*, 64, August 1974, pp. 3-29; C.S.L. Davies, 'Slavery and Protector Somerset: The Vagrancy Act of 1547', Economic History Review, New Series, 19 (3), 1966, pp. 533-49; Robert M. Schwartz, Policing the Poor in Eighteenth-Century France, University of North Carolina Press, Chapel Hill, 1988.

¹⁵⁶ E.J. Hundert, 'The Making of *Homo Faber*: John Locke between Ideology and History', *Journal of the History of* Ideas, 33 (1), Jan.-March 1972, pp. 5-6; C.B. MacPherson sets Locke's view of the idle poor within his account of the labouring poor as beyond the Pale, The Politics of Possessive Individualism, OUP, 1964, pp. 213-29; Ellen Meiksins Wood and Neal Wood, A Trumpet of Sedition, Pluto Press, London, 1997, pp. 123-34.

Into the 1960s, the Australian administration exacted a head-tax from Papua-New Guineans to enforce wage-labour, C.D. Rowley, *The New Guinea Villager*, Cheshire, Melbourne, 1972, pp. 85-9. ¹⁵⁷ Duckham, 1969, pp. 178-9.

¹⁵⁸ Burgess, 1980, p. 139.

¹⁵⁹ Joan Thirsk, Economic policy and projects; the development of a consumer society in early modern England, OUP, Oxford, 1978, pp. 80-81.

moaned that he could not thrash the rest.¹⁶⁰ Similarly, Welsh iron-masters called on the troops to suppress food riots in 1800-01.¹⁶¹ Smith's 1776 judgement lost none of its force: 'The masters ... never cease to call aloud for the assistance of the civil magistrate, and the rigorous execution of those laws which have been enacted with so much severity against the combinations of servants, labourers, and journeymen.' He revealed the class bias of the Enlightenment by favouring the instruction of the inferior ranks even when that expense returned nothing in productivity but because

[a]n instructed and intelligent people, besides, are always ... more disposed to respect their superiors. They are more disposed to examine, and more capable of seeing through, the interested complaints of faction and sedition, and they are, upon that account, less apt to be misled into any wanton or unnecessary opposition to the measures of government. ¹⁶³

Here the 'invisible hand' is in partnership with an iron fist so that the chaos inherent in the pursuit of individual interests is constrained by the state as well as by the necessity for the majority to sell their labour-power. The most direct service of the nation-market-state came when employers serving as Justices of the Peace fixed wages for each other's employees. Around 1812, the 'supportive government' sent 12,000 troops into the field against the machine-breakers behind 'General Ned Ludd', more than on the Iberian Peninsula against Napoleon. The state repeated its assault around 1830-31 against the 'Captain Swing' agricultural labourers, a reign of repression immortalised by the transportation of the Tolpuddle Martyrs for the crime of taking an 'illegal oath' to resist wage-cuts from nine to six shillings. No sooner had Parisian workers overthrown the Bourbons in July 1830 than the 'liberal' regime gaoled Rouen ones for the crime of 'coalition'. 167

Trade wars

These home truths remain a step too far for the Cambridge contributors, although they recognise the commercial advantages from violence overseas, ¹⁶⁸ as captured by Colbert's policy that war was trade by other means and vice versa, a strategy echoed more than a hundred years later in the dictum of Pitt the Elder: 'When Trade is at stake ... you must defend it, or perish.' Patrick Karl O'Brien in his chapter on 'The formation of states and transition to modern economies' documents the genesis of 'the fiscal-naval state' from 1630s when the right of the Crown to impose taxes as ship money led to the recall of parliament, civil war and regicide. Following the Stuart Restoration (1660), the merchant-manufacturers relied on the Royal Navy to even up the global competition.

As if unaware of O'Brien's chapter, Neal laments that '[t]he long-distance trade conducted under the oversight of competing warlords was not a favourable setting for the rise of capitalism.' Primed with ideals left over from the League of Nations, he protests that '[w]ar

¹⁶⁰ McKenrick, 1961, p. 52.

¹⁶¹ M.J. Daunton, 'The Dowlais Iron Company in the Iron Industry, 1800-1850', *Welsh History Review*, 6 (1), June 1972, p. 35; Sidney Pollard, *Genesis of Modern Management: a study of the Industrial Revolution in Great Britain*, Edward Arnold, London, 1965, chapter 5.

¹⁶² Smith, Wealth of Nations, 1, 1976, pp. 82-3; Penguin, 1974, pp. 169-70.

¹⁶³ Smith, Wealth of Nations, 2, 1976, p. 788; Penguin, 1999, pp. 374-5; for a more vicious version in Locke see MacPherson, 1964, pp. 113-29.

¹⁶⁴ Tony Dickson and Tony Clarke, 'Scotland and the First British Empire', Dickson (ed.), *Scottish capitalism*, 1980, p. 106; T. C. Smout, 'Scottish Landowners and Economic Growth, 1650-1850', *Scottish Journal of Political Economy*, 9 (3), November 1963, p. 218.

¹⁶⁵ J.L. and Barbara Hammond, *The Skilled Labourer 1760-1822*, Allan Sutton, Stroud, 1995, pp. 282-6; E.P. Thompson, *The Making of the English Working Class*, Vintage, New York, n.d., pp. 547-602.

¹⁶⁶ E.J. Hobsbawm and George Rude, *Captain Swing*, Lawrence & Wishart, London, 1969, chapters 13 and 14. William M. Reddy, *The Rise of Market Culture, The Textile Trade & French Society, 1750-1900*, Cambridge University Press, Cambridge, 1984, pp. 120-5.

The supports given to capital today range from Fair Work Australia to the state-sponsored disappearance of unionists across Central America and their incarceration as hooligans in mainland China.

¹⁶⁸ N.A.M. Rodger, 'War as an Economic Activity in the "Long" Eighteenth Century', *International Journal of Maritime History*, XXII (2), December 2010, pp. 1-18.

¹⁶⁹ Quoted Plumb, 1963, p. 71.

finance and capital levies despoiled previous accumulations.' (p. 9) Since global conflict boosted British social capital, his regrets are as bathetic as T.S. Ashton's sermonising that without the losses from war-making, 'the English people would have been better fed, better clad and, certainly better housed, than they were' – as if the norm for a class society has ever been a more equitable distribution of the wealth extracted from its workforce.¹⁷⁰ Overcoming squeamishness about the importance of war for distributing 'growth', Neal returns to the fiscal face of the naval state in his concluding sentence:

Perhaps Marx was correct when he identified the British creation of a truly national debt funded explicitly by parliamentary commitment to servicing it with specific taxes after 1688 as the key element in the rise of modern capitalism? (p. 21)¹⁷¹

Neal does not footnote this suggestion but it looks like a distortion of Marx's comments in the chapter on 'The Genesis of the Industrial Capitalist' which comes nowhere near to referring to '[t]he system of public credit' as 'the key element', contending rather that its creation 'marked the capitalist era with its stamp', or, following the imagery he applies to how

[t]here is in every social formation a particular branch of production which determines the position and importance of all the others ... It is as though light of a particular hue were cast upon everything, tingeing all other colours and modifying their specific features. ¹⁷²

Viewed in this way, and not as the prime mover, we see that Marx was commenting on how the

becomes *one* of the most powerful *stimuli* of *primary* accumulation. With the wave of an enchanter's wand, 'the funds' endow barren money with the power of reproduction, thus transforming it into capital, and this without the risk and trouble inseparable from its investment in industrial undertakings, and even from putting it out upon usury. ¹⁷³ (emphasis added)

Marx never suggests that the 'key' to the 'rise' of capitalism was in public finance, but shows that taxes derive from exploitation, just as he refutes the Trinity Formula of Rent, Profit and Wages as distinct forms of earnings when each is a segment of surplus-value.

Thanks perhaps to the lacunae, lapses and lop-sidedness to which Neal falls prey in his first four pages, he has no trouble in convincing himself that '[c]apitalism, therefore, can be defined usefully as a complex and adaptive economic system operating within broader social, political, and cultural systems that are essentially supportive.' (p. 4) This throw of the definitional dice is nothing if not comprehensive – comprehensively useless. He expects his cliché-clotted sentence to provide an 'operational definition of capitalism' which will lead us

to search for characteristics that may have been present in different historical settings when economic growth was achieved for a significant period ... (at least a couple of centuries, as with modern capitalism.) (p. 4)

¹⁷⁰ T.S. Ashton, *Economic Fluctuations in England 1700-1800*, OUP, Oxford, 1959, p. 83; for another attempt to sever capitalism from war, John U. Nef, *War and human progress, an essay on the rise of industrial civilisation*, Norton, New York, 1963; for a *realpolitik* commentary, A.H. John, 'War and the English Economy, 1700-1763', *Economic History Review*, New Series, 7 (3), 1955, pp. 329-44; M.S. Anderson, *War and Society in Europe of the Old Regime 1618-1789*, Sutton, Stroud, 1988; Sandra Halperin, *War and Social Change in Modern Europe, The Great Transformation Revisited*, Cambridge University Press, Cambridge, 2004.

¹⁷¹ For a summary execution of the Idealist claims about the 1688 Glorious Revolution, see Anne L. Murphy, 'Demanding "credible commitment": public reactions to the failures of the early financial revolution', *Economic History Review*, New Series, 66 (1), February 2013, pp. 178-97.

¹⁷² Marx, *CCPE*, p. 212.

¹⁷³ Marx, *Capital*, I, Everyman, p. 836; Penguin, p. 919; Moscow, p. 754. The Everyman translation gives 'primary' for *urspungliche* throughout, pp. 790ff. while the Penguin pp. 873ff. and the Moscow pp. 713ff. stick with 'primitive'. Marx attaches 'so-called' to 'primary' and refers to it as '(the "previous accumulation" of Adam Smith)', dismissing that line of explanation as 'childish imbecility... preached in defence of property.'

Here we find the editorial justification behind the volume's pilgrimage from Babylon through India and onto West Africa. ¹⁷⁴ Should so attenuated a reach strike you as daft, try the extrapolations that predict income patterns in 1997 between 112 countries according to their dates of transition to agriculture – the Neolithic revolution – beginning in Mesopotamia some 10,000 years ago. ¹⁷⁵ For comparative research to pay dividends, its practitioners would have to rid themselves of the doctrine of the eternal and natural essence of capitalism and accept its transient condition. That the Cambridge editors and authors cannot do without ceasing to be themselves.

Neal's truism 'that the current world economy has been a long time in the making' is no reason to 'look for the beginnings of the 'rise of capitalism' as far back as archaeologists have been able to detect tangible evidence of some human activity that was consistent, if not fully congruent, with the practices of modern capitalism ...'. (p. 6) The sophistry of 'consistent, if not fully congruent' is like rifling through a *Thesaurus* for synonyms of 'abracadabra' to advance one's understanding. Why all those earlier economies failed to become modern capitalism, Neal muses, 'remains a mystery, but a mystery that has stimulated all sorts of conjectural histories.' (p. 6) Indeed it has, and will continue to do so since 'all mysteries which misled theory into mysticism find their rational solution in human practice and in the comprehension of this practice.' Meanwhile, a thousand scholarly reputations have scuttled themselves to rest alongside the datable shipwrecks that strew the Mediterranean.

No contributor rises to the challenge of specifying capital-within-capitalism, offering neither criteria nor methods for discerning how capitalism broke through the sediment of previous modes. An examination of the chapters on Babylon, Greece, the late middle ages, Italy, the Low Countries, Britain, the U.S. of A. and Political Economy reveals how their authors spurn the revolution in capital in favour of the comforts of 'Mesopotamia'.

Mesopotamia

Steeped in the economic theories of the nineteenth century, which affect even the Assyriologist most naïve in matters of economic theory, we are bound to locate every economic situation within the traditional coordinates of money, market, price, etc, as these have been defined and have found acceptance within the last hundred years of our civilisation.

A.L. Oppenheim, 1956. 177

When Neal summarises the chapter on Babylon he is pleased to repeat his contributor's earlier conclusion that its

economy was growing, the productivity of (frequently market-oriented) agriculture was increasing, a substantial part of the urban population worked in non-agrarian occupations, there was a high degree of labour specialisation, and the economy was largely monetised. In a word, basic elements of what became Western capitalism ... made their documented appearance well before the rise of the Greek city-states or of the Roman empire. (p. 8)

This catalogue records but one 'common' element out of his four, i.e. labour specialisation.

¹⁷⁴ This sprawl is in line with David S. Landes, Joel Mokyr and W.J. Baumol (eds), *The Invention of Enterprise, Entrepreneurship from Ancient Mesopotamia to Modern Times*, Princeton University Press, Princeton, 2010; Baumol, however, is uneasy with so a-historical an approach, 'Entrepreneurship: Productive, Unproductive, and Destructive', *Journal of Political Economy*, 96 (5, Part 1), October 1990, p. 916.

¹⁷⁵ Louis Putterman, 'Agriculture, Diffusion and Development: Ripple Effects of the Neolithic Revolution,' *Economica*, New Series, 75 (300), Nov. 2008, pp. 729-748.

 $^{^{176}}$ Karl Marx, 'Theses on Feuerbach', M-ECW, vol. 5, Lawrence & Wishart, London, 1976, p. 8.

¹⁷⁷ A.L. Oppenheim, 'A Bird's Eye View of Mesopotamian Economic History', Karl Polanyi *et al.* (eds), *Trade and Market in the Early Empires*, The Free Press, Glencoe, Illinois, 1957, p. 28.

From a footnote, Marx thunders against associating the Ancient world with modern capitalism: 'In classical dictionaries we find such nonsense as the assertion that in the ancient world capital was fully developed, "except that the free worker and the credit system were lacking".' Even putting aside the absence of those two pillars of capitalism, all was not growing as well in the hanging gardens of Babylon as Neal would like:

... the extensive building projects carried out by royal authorities seem to have been financed mainly from the spoils collected by continued raids into surrounding territories ... This was hardly the basis for sustained economic growth, much less for embedding capitalist mental models in society. (p. 8)

Plunder and piracy have never been foreign to modern capitalism, with 'loot' one of the first Hindustani words to enter English. Fortunes continue to be built on theft, as shown in the transitions during 1990s from socialism to capitalism, despite remaining a feeble basis for sustained growth. Even where ownership is the result of theft, the stolen wealth has to be produced by someone.

What more does Michael Jursa have to say for himself? In keeping with the volume's avoidance of 'capitalism', the title of his chapter is 'Babylonia in the first millennium BCE - economic growth in times of empire.' Jursa is unusual, however, in referring back to Neal's probing of 'capitalism' when he challenges the scholarly consensus that in Mesopotamia 'the dominance of subsistence production and the "palatial" sector of the economy left at least limited scope for economic phenomena that can be classified as "capitalist" ...'. (p. 27) He builds his revisionism on 'data from around 1850 BCE', which 'document profit-oriented commerce in textiles and in base and precious metals that can be classified as "capitalist" according to the definitions set out in the introduction.' (p. 27) We have seen how taxing it would be to come up with an economic activity which failed to do so.

Jursa establishes a case for 'economic growth', albeit one confined to 'the long sixth century' out of his millennium. He also stays close to equating capitalism with monetised markets, though he neglects to spell out how such mechanisms differ between one era and another, still less of how they operate in different systems of production, partly because production is marginal to his concerns. Suspecting that absolute growth is insufficient for capitalism, he reports that one sort of investment was 'expected to yield to the investor double the amount invested, plus additional profits.' Those calculators did not seek the rate of return on investment that distinguishes modern capital but Jursa's thought that something more needs to be measured than the size of the surplus is a step up from accepting that increases in volume alone amount to the kind of expansion demanded for capital-within-capitalism where, in each circuit, the volume of money-capital increases, say, from 100 to 103 to 107 to 112 and so on – until a crisis. A mathematical illustration proves nothing, with Marx ridiculing writers who regard capital 'as a self-acting automaton, without regard to the conditions of reproduction and labour, (as a mere number that increases by itself, just as Malthus saw people in his own geometric progression). '180

Like all devotees of the market, Jursa is embarrassed by the influence of imperial and religious institutions over the economy, as with the empire's driving of monetisation through taxes, even though that regime is a further instance of Neal's 'supportive governments'. Moreover, contracts and fair dealing depended on the intervention of city authorities, who were no friends of free trade: 'it is less clear that we can see here a fundamental qualitative distinction, rather than gradual differences, that distinguished ancient markets from, for instance,

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¹⁷⁸ Marx, *Capital*, I, Everyman, pp. 154-5n.; Penguin, p. 271, n. 2; Moscow, p. 168n.; Marx, *Capital*, III, Penguin, p. 444, n. 46; Moscow, p. 327 n.46; Karl Marx, *Pre-Capitalist Economic Formations*, International Publishers, New York, 1964, pp. 118-9; Tony Burns, 'Capitalism, modernity and the nation state: A critique of Hannes Lacher', *Capital & Class*, 34 (2), 2010, pp. 240 and 250-53.

¹⁷⁹ J.H. Parry, *Trade and Dominion, The European Overseas Empires in the Eighteenth Century*, Weidenfeld and Nicholson, London, 1971, p. 275; Henri Pirenne excludes an eighth-century 'strong and fortunate bandit' from being 'an ancestor of the capitalists', but accepts 'assassination' in Antwerp eight centuries later, 'The Stages of the Social History of Capitalism', *American Historical Review*, 19 (3), April 1914, pp. 498 and 512; Marx, *Capital*, III, Penguin, p. 448-9; Moscow, p. 331.

Marx, Capital, III, Penguin, p. 520; Moscow, pp. 395-6.

homologous institutions of early modern Europe.' (p. 35) 'Homologous' in the life sciences refers to body parts having the same origin but evolving different functions, for example, the wing of a bird and the fin of a whale. It is not charity alone which allows historical materialists to accept that Mesopotamia is more homologous with modern capitalism than an orca with a sparrow. Nonetheless, we spurn the prestidigitation by which a bazaar in Babylon is 'homologous' with the Chicago pork-futures market, thereby slipping in Smith's 'propensity to truck' as an a-historical proof for the naturalness of corporate capital.

Jursa's bias towards markets means that his only mention of production is when he attributes the prosperity of his 'long sixth century' to a shift from grain to horticulture and to the construction of canals. There is none of Smith's division of labour in the making of Cuneiform tablets, and, despite mentioning some improved technologies, Jursa cannot lift his eyes from the 40,000 records of transactions to ask how their clay was moulded, whether by men or by women, by freemen or slaves. As the moving finger predicted about the last Babylonian king: *Mene*, Mene, Tekel, Upharsini - 'Thou art weighed in the balances, and art found wanting.' (Daniel 5: 25)

The glory that wasn't quite Greece

Alain Bresson's 'Capitalism in the ancient Greek economy' sails past 'consistent', 'congruent' and 'homologous' to pursue a 'parallel' between '[t]he possible "capitalist" character of the ancient economy' and the "capitalist revolution" of early modern Europe?' If such a parallel exists, he asks: 'Should we use a broader definition of "capitalism" to make sense of the "capitalist aspects" of societies of the past like those of the classical Mediterranean world? (p. 43) Any definition would be a change but Bresson is not giving one. Instead, he summarises a dispute from late nineteenth-century Germany when Karl Kautsky, ¹⁸² Werner Sombart ¹⁸³ and Max Weber, ¹⁸⁴ each displayed more insight than anything on offer in this volume. ¹⁸⁵ One faction of the German professoriate had thought that capitalism,

could be analysed as the association on the one hand of a new financial system that was able to mobilise huge financial means and on the other hand of new techniques of production and organisation oriented towards mass production, scientific progress being at the heart of the matter.

Weber himself did not refrain from using the world 'capitalism' for the ancient economy, provided it was limited to denoting the existence of a developed maritime trade, banking activity, a plantation economy, and of course slavery. (p. 47)

That 'of course' is - of course - Bresson's, and contradicts Weber's recognition that

¹⁸² Daniel Gaido, 'Karl Kautsky on "Capitalism in the Ancient World"', Journal of Peasant Studies, 30 (2), January 2003, pp. 146-58; Jarius Banaji, 'Summary of selected parts of Kautsky's The Agrarian Question', Economy and Society, 5 (1), February 1976, pp. 1-49; John R. Love, Antiquity and Capitalism, Max Weber and the sociological foundations of Roman civilisation, Routledge, London, 1991, chapters 2, 6 and 7.

183 Frank H. Wright, 'Historical and Theoretical Issues in the Problem of Modern Capitalism', Journal of economic

and business and history, 1 (1), November 1928, pp. 119-35; Reiner Grundmann and Nico Stehr, 'Why is Werner Sombart Not Part of the Core of Classical Sociology?: From Fame to (Near) Oblivion', Journal of Classical Sociology, 1 (2), July 2001, pp. 257-87.

184 Rita Aldenhoff-Hübinger, 'Max Weber's Inaugural Address of 1895 in the Context of the Contemporary Debates in Political Economy', Max Weber Studies (MWS), 4 (2), 2004, pp. 143-156; Matti Peltonen, 'The Weber Thesis and Economic Historians', MWS, 8 (1), 2008, pp. 79-98. The privileging of Weber's The Protestant Ethic and the 'Spirit' of Capitalism marginalised the 1890s debate and suppressed Weber's materialism, see my forthcoming

Harry W. Pearson, 'The Secular Debate on Economic Primitivism', Polanyi et al. (eds), Trade and Market, 1957, pp. 3-11.

¹⁸¹ This flourish is not followed up.

all these peculiarities of Western capitalism ultimately derive their present significance from the connection with capitalist labor organisation ... Exact calculation – the foundation for everything else – is only possible on the basis of free labour. ¹⁸⁶ Undaunted, Bresson continues to mark down his betters:

But most of the protagonists shared the evolutionist perspective that impregnated European thought of the time, with the idea that each 'stage' of human history was characterised by a specific form of economic and social organisation. (p. 45)

That is, they did not accept Bresson's a-historical treatment of capitalism, even when it looked very like a whale, a camel, or perchance a weasel.

Moses Finley contends that our notion of 'economy', like its cognates, has no place in analysing the Ancient world. For instance, 'market' 'is untranslatable into Greek of Latin.' when it is used for more than a trading place. The Antique polytheists did not make room for the 'Market' in their Pantheon. It is not a question of whether they engaged in many of the activities that we now group under the rubric of economics, or were innocent of booty, gifts and property, but rather that they did not 'combine these particular activities conceptually into a unit ... hence, Aristotle, whose programme was to codify the branches of knowledge, wrote no *Economics*.' 187

One problem with shoehorning Greece into the Cambridge mould was that its economy had seemed to be marked by stagnation: 'The lack of productivity growth was conceived to originate from the lack of technical progress, itself rooted in the lack of interest of the elites in any kind of investment in research.' Instead, scholars believed that chattel-slaves sufficed to sustain the Greek citizenry. Bresson is pleased to report that, as it was in Babylon, so it was in Greece, with recent researchers piling up evidence of expansion, before he has to admit:

This does not make ancient Greece an authentic capitalist society, if we limit the definition to societies where human-produced capital (instead of land), is the major force of production and where accumulation of capital in the framework of competitive markets is crucial to determine economic institutions. But it is quite sufficient to justify the place of ancient Greece in a world history of capitalism, both for the comparative evidence it provides for later and more elaborate economic developments ... (p. 48)

If the statistics about Europe are scant before the nineteenth century, those from the Ancient world are scattered and dubious numbers, isolated data, and, killingly for any drawing of conclusions, have no time series. The 'ignominious truth', lamented by A.M.H. Jones in 1948, 'is that there are no ancient statistics.' 188

Above all, Bresson hopes that his contribution will revive interest in the *longue duree* approach of the *Annales* School. Compared even with the ten years that it took Odysseus to travel the 800 kms home from Troy to Ithaca, Bresson's a-historical 'parallel' across three millennia comes as something of a surprise. Historical materialists, by contrast, do not garner data about the past in order to draw parallels but to search for the structured dynamics in which those details become concrete: 'Studying an epochal social revolution', Bertel Nygard points out, 'should thus enable us to see the main contradictions within ... the "*longue duree*" within specific events, rather than treating this "*longue duree*" as if it inhabited a sphere all its own.' Bresson, like Neal, rests content at having created a new meta-narrative to contrast with the earlier bourgeois portrayals of the Ancient world as a backdrop to capitalism.

¹⁸⁶ Max Weber, 'Prefatory Remarks' to *Collected Essays in the Sociology of Religion* (1920), *The Protestant Ethic and the 'Spirit' of Capitalism*, Penguin, London, 2005, p. 363.

¹⁸⁷ M.I. Finley, *Ancient Economy*, Chatto & Windus, London, 1973, p. 21. Marx draws on the one-seventh of *The Politics* that could be extracted and relabeled 'Economics', *Capital*, I, Everyman, pp. 30-1 and 137-8n.; Penguin, pp. 151-2 and 253-4, n.6.; Moscow, pp. 59-60 and 152n.1; William James Booth, 'Households, Markets, and Firms', George E. McCarthy (ed.), *Marx and Aristotle Nineteenth-century German Social Theory and Classical Antiquity*, Rowman & Littlefield, Savage, MD., 1992, pp. 243-71. Irrespective of Finley's point about Aristotle, the title to Marshall Sahlins's *Stone Age Economics* (1974) is doubly awry.

¹⁸⁸ Finley, *Ancient History Evidence and Models*, pp. 27-8 and 31; M.I. Finley, '[The Mycenaean Tablets and Economic History]: Note', *Economic History Review*, New Series, 11 (1), 1958, p. 97.

¹⁸⁹ Bertel Nygard, 'The Meanings of "Bourgeois Revolution": Conceptualising the French Revolution', *Science & Society*, 71 (2), April 2007, p. 163.

So, we bid farewell to beautiful Athens and, deaf to the Siren calls from contributors on Rome, India, China, the Middle-east, West Africa and pre-contact North America, make landfall on the five economies which almost all writers accept are the contenders for the genesis of capitalism: Medieval Europe, northern Italy, the U.S. of A., the Low Countries and Britain.

Half-light on the Dark Ages

Neal's summary of Karl Gunnar Persson on 'Markets and coercion in medieval Europe' reads as if he has read no more of it than Persson has of his editor's effort to define capitalism. The conflict implied in the chapter's title is between the freedom brought by market forces and the coercions of pre-capitalist systems of labour and other exchanges. In regaling us with this Whig interpretation, Persson cannot escape from how the installation of a freer market also depended on coercions, backed by the state. Instead, he fancies that labourers volunteered to enter into contracts but he fails to link their liberty to his thread of how they were compelled to sell themselves because they had been 'freed' from access to the means of production that would have allowed them to remain self-sufficient. He does admit 'imperfections in the capital markets that made it difficult for workers to "hire" capital', (p. 245) but, in case anyone is more puzzled by the persistence of this impediment to universal happiness than himself, he explains: 'It is owners of capital who hire labor and not the other way round.' (p. 248) By viewing his evidence with one eye on Smithian divisions of labour between regions and the other on a Coasean cutting of transaction costs through the firm, Persson concludes that '[m]ost of the economic institutions associated with a capitalist economy were present or emerged in the medieval era.' (260) Yet this loaf did not rise. 190 No doubt the ingredients would have behaved themselves 'if Richard Coeur-de-Lion and Philip Augustus had introduced free trade instead of getting mixed up in the crusade' 191 The historical materialist is not so crude as 'to apply the standard of the fourteenth century to the relations of production prevailing in the nineteenth. 192

The city-market-states

Luciano Pezzolo puts 'capitalism' into the title of his chapter - 'The *via italiana* to capitalism' - and uses the term seven times in his opening fourteen lines, though its first mention is perplexing: 'The great medieval cities have offered abundant material for scholars of modern capitalism.' (p. 267) 'Medieval' is 'modern' in as much as it is not as ancient as Mesopotamia. The next appearance of 'capitalism' is in a masterstroke of prevarication:

The merchants' leading role, the innovations in accounting and commercial practices, the legal rules and commercial institutions, and the emergence of a new mentality – all have been considered elements characteristic of early capitalism. (p. 267)

These 'elements characteristic of early capitalism', by the bye, are not the four common ones offered in Neal's 'Introduction'. When all is said and done, 'characteristic' does engineer a fifth wheel onto the avoidance vehicle of 'consistent', 'congruent', 'homologous' and 'parallel'.

The start of Pezzolo's second page holds out promise of definitions: 'Before continuing, however, it is worth clarifying the fundamental concepts that form the base of this essay.' (p. 268) But no, the 'via' hits a road-block when our Italian journey takes a sharp right into a sociocultural-political survey of familial connections and courtly manners intersecting with state power. Less impassioned than Goethe's *Italianische reise* and serving a far richer feast of information and perceptions than any celebrity cook's tour of Tuscany, the bulk of the chapter

¹⁹⁰ To the point of denying not just the presence of any form of capitalism but of anything we would recognise as an economy, Jacques Le Goff, *Money and the Middle Ages, An essay in historical anthropology*, Polity, Oxford, 2013. ¹⁹¹ F. Engels to F. Mehring, 14 July 1893, *Marx-Engels Selected Works*, vol. 3. 1970, p. 497.

¹⁹² Marx, *Capital*, I, Everyman, p. 779; Penguin, p. 861; Moscow, p. 704.

nonetheless reads like one more stroll through a portrait gallery of the great families of Venice, Genoa and Florence.

Pezzolo takes double-entry book-keeping for granted and so need never ask: was the Italian method' much practiced outside the text-books?; were family accounts kept separately?; were balances computed regularly?; was there any attempt to calculate the rate of return on investment? Historians of accounting answer in the negative. Double-entry was rarely more than a convenience for separating creditors from debtors. The Lombards mixed business and household items. Almost all venturers were content with a surplus, preferably one larger than last year's, but were not cognizant of the need to measure rates of exploitation. Cost accounting was as rare as were meaningful allowances for depreciation. Once accounting became widespread, it underwrote swindlers.

The irrefragable conclusion is that the Italian *via* did not lead to capitalism. Merchants' capital and bankers' (usurers') capital play their parts in disrupting previous modes. Once the capitalist mode prevails, their roles are rewritten to serve its structured dynamics. ¹⁹⁵ Marx never considered that the appearance of either of those forms flagged capitalism. Funds ventured on the Rialto were not the same as money-capital:

Turn and twist as we may, the sum total remains the same. If equivalents are exchanged, then no surplus value is created; and if non-equivalents are exchanged, still no surplus value is created. Circulation, the exchange of commodities, does not create value. The reader will therefore understand why, in our analysis of the basic form of capital, our analysis of the form in which it determines the economic organisation of modern society, we can, for the present, completely ignore its popular and so to speak antediluvian forms – merchants' capital and moneylenders' capital. ¹⁹⁶

An exchange economy is not capitalism.

Although money in its multiple forms is pivotal to Marx's understanding of capital-within-capitalism, he does not mistake interest for surplus-value, or confuse swindling with exploitation. Merchants' capital and moneylenders' capital arose during what he calls Period One, the sediment of previous modes, before a revolution in capital ushers in a system in which capital is 'value which produces surplus-value': 197

The *formation process* of capital – when capital, i.e., not any particular capital, but capital in general, only evolves – is the *dissolution process*, the *parting product* of the social mode of production preceding it ... The process of capital becoming capital, or its development *before* the capitalist process of production itself, belongs to two historically different periods.

Here, Marx casts the genesis of capitalism away from talk of a transition from feudalism while scorning the fancy that capitalism had emerged by the 1500s:

In the second, capital is *taken for granted*, and its existence and automatic functioning is presupposed. In the first period, capital is the sediment resulting from the process of dissolution of a different social formation. It is the *product* of a different [formation], not the product of its own reproduction, as is the case later. ¹⁹⁸

The outcome is capital-within-capitalism which cannot survive without growing, a condition imposed through competition, the demands of the workforce for more pay and shorter hours, and

¹⁹⁸ Marx, *TS-V*, III, pp. 491-3 and 272.

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¹⁹³ Sybil M. Jack, 'An Historical Defence of Single Entry Book-Keeping', *Abacus*, 2 (2), December 1966, pp. 137-58; James O. Winjum, 'Accounting and the Rise of Capitalism: An Accountant's View', *Journal of Accounting Research*, 9 (2), Autumn 1971, pp. 333-50; B.S. Yamey, 'Notes on Double-Entry Bookkeeping and Economic Progress', *Journal of European Economic History*, 4 (3), Winter 1975, pp. 717-24; Rob. A. Bryer, 'Double-entry Book-keeping and the Birth of Capitalism: Accounting for the Commercial Revolution in Northern Italy', *Critical Perspectives on Accounting*, 4, 1993, pp. 113-40. Bryer's writings are surveyed in my 'Accounting for capital'. ¹⁹⁴ Rob. A. Bryer, 'Accounting for the "Railway Mania" of 1845 – A Great Railway Swindle?', *Accounting, Organisaitons and Society*, 16 (5/6), 1991, pp. 439-86; Wray Vamplew, '"A Careful and Most Ingenious Fabrication of Imaginary Accounts": Scottish Railway Company Accounts before 1868', *The Accountant's Magazine*, 78 (818), 1974, pp. 307-312.

¹⁹⁵ Marx, *Capital*, III, Penguin, pp. 732-4; Moscow, pp. 597-9; *CCPE*, pp. 213.

¹⁹⁶ Marx, *Capital*, I, Everyman p. 150; Penguin, p. 266; Moscow, p. 163.

¹⁹⁷ Marx, *Capital*, II, Penguin, p. 185; Moscow, pp. 105-6; Marx, *TS-V*, Part III, pp. 131 and 475.

the need on every capital to realise the surplus value into profits through lifting effective demand. Slavery and feudalism could persist while stagnating. Capitalism cannot. Steady-states and equilibria are so much hogwash.

Individual capitals had been formed within slavery and serfdom, allowing a handful to continue as nodes for the individual and socialised capitals of capitalism. The Florentine Frescobaldis were bankers to the English throne until bankrupted in 1311 and again in 1581 but are now in the global wine trade. The Viscontis ruled Milan from 1,277 to 1,447 when a son-in-law established the Sforza dynasty; late in the nineteenth century, the Grand Duke married an heiress to the Erba pharmaceutical corporation; the Visconti coat-and-arms shows a serpent swallowing a child. Few contemporary corporations have so venerable a lineage. In a Jamesian turn, the Agnellis of FIAT descend on their maternal side from a broken-down Umbrian aristocrat married to an American heiress.

The presence of such hangovers will offend mechanical materialists who worship Ideal Forms. Marc Bloch reported similar reactions after documenting impurities throughout real existing feudalism. ¹⁹⁹ No social organisation operates within the simplifying assumptions of its model. Those conditions must be relaxed to approach the actualities of life. No straight line of progress proceeds out of one mode of production into another as became obvious with the breakup of feudalism in Western Europe around 1400, while Absolute Monarchies imposed serfdom in Muscovy from the late 1500s, and east of the Elbe to guarantee to supply farm labourers after the depopulation from the Thirty Years War (1618-48). ²⁰⁰ At the same time, more Africans were being sold into the Americas to supplement and eventually replace the European convicts and bonded servants. ²⁰¹ Hence, the passage to capitalism out of western serfdom has to be charted through both its eastern variants and modern slaveries. ²⁰²

Not only does Pezzolo not come within a country mile of mentioning so uncomfortable a fact, but steers clear of the labours that kept his bankers, merchants and princes supplied with commodities and castles, for example, as he scampers past the repression of the Florentine woolworkers in 1378. His analysis of the familial connections in Italian commercial life is not a patch on *Power & Imagination* by Lauro Martines who states:

The Renaissance owes more than we suspect to labour, partly through a decline in wages ... The images of ragged workers and poor folk in the frescoes of Masaccio, Cosimo Tura, and Filippino Lippi are not fictions: they depict the submerged part of the human investment that went into the making of Renaissance culture. ²⁰³

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¹⁹⁹ Bloch, 1953, pp. 156ff.; Elizabeth A.R. Brown, 'The Tyranny of a Construct: Feudalism and Historians of Medieval Europe', *American Historical Review*, 79 (4), October 1974, pp. 1063-88; Ernesto Laclau, 'Feudalism and Capitalism in Latin America', *New Left Review*, 67, May-June 1971, pp. 19-38; Rodney Hilton, 'Feudalism in Europe: Problems for Historical Materialists', *New Left Review*, 147, October 1984, pp. 84-93.

Jerome Blum, 'The Rise of Serfdom in Eastern Europe', *American Historical Review*, 62 (4), July 1957, pp. 807-36; William E. Wright, *serf, seigneur, and sovereign, Agrarian Reform in Eighteenth-century Bohemia*, University of Minnesota Press, Minneapolis, 1966; Robert Millward, 'An Economic Analysis of the Organisation of Serfdom in Eastern Europe', *Journal of Economic History*, 42 (3), September 1982, pp. 513-48; Stefano Fenoaltea, 'The Organisation of Serfdom in European Europe: A Comment', *Journal of Economic History*, 43 (3), September 1983, pp. 705-8; Heide Wunder, 'Serfdom in Later Medieval and Early Modern Germany', T.H. Aston *et al.* (eds), *Social Relations and Ideas, Essays in Honour of R.H. Hilton*, Cambridge University Press, Cambridge, 1983, pp. 249-72; William W. Hagen, 'Seventeenth-Century Crisis in Brandenburg: The Thirty Years' War, The Destabilisation of Serfdom, and the Rise of Absolutism', *American Historical Review*, 94 (2), April 1989, pp. 302-35; Sheilagh Ogilvie, 'Communities and the "Second Serfdom" in Early Modern Bohemia', *Past & Present*, 187, May 2005, pp. 69-119; Beloff, 1954, chapters 5 and 6; Georges Duby, *The Early Growth of the European Economy, Warriors and Peasants from the Seventh to the Twelfth Century*, Weidenfeld & Nicholson, London, 1974; Kula, 1976.

²⁰¹ David W. Galenson, 'White Servitude and the Growth of Black Slavery in Colonial America', *Journal of Economic History*, 41 (1), March 1981, pp. 39-47; special issue on slavery and free labour, *Journal of World History*, 14 (2), June 2003.

²⁰² Evsey D. Domar, 'The Causes of Slavery or Serfdom: A Hypothesis', *Journal of Economic History*, 30 (1), March 1970, pp. 18-32.

²⁰³ Lauro Martines, *Power & Imagination, City-States in the Renaissance*, Penguin, Harmondsworth, 1983, p. 261, a work not listed in Pezzolo's References. Martines reports the advice to a young monarch in the 1480s not to waste his time on 'the work of ignorant chroniclers ... a cobbler of nonsense and lies, without attraction in form, in style, or in serious reflection,' p. 268.

The exploitation that is papered over by celebrating the civilisation of the Renaissance as a banquet of ideas is clear for all who have eyes to see that palaces, paintings and pageants had to be paid for by extracting a surplus from labour. To critique capital-within-capitalism, historical materialists hold fast to the difference between private possessions and the properties that underpin production, towards which the dukes and doges did not devote enough of their expropriations to initiate a revolution in capital, after which the production of surplus-value will contribute to Period Two only if a goodly portion is re-invested.

Having put Shylock and Antonio in their places, we turn to their successors, the merchants and money-lenders in Antwerp and Amsterdam.

The Low Countries

In surveying Belgium and the Netherlands, Oscar Gelderblom and Joost Jonker display a mastery of the evidence and an eagerness to generalise from it, yet come no closer to considering capital in terms of capitalism than do any of their colleagues, resting content to conclude that the 'breakthrough of the industrial revolution tends to obscure the groundwork of market development, on which it was based.' (p. 314) Like the others, and despite exploring the importance of financial entrepreneurs, they take the meaning of 'market' for granted, a slackness to be expected in a milieu where 'the market' has acquired the status of Newton's law of gravity when it should be handled like Einstein's regrets about applying the term 'relativity' to his theory of unified space-time.

More than most contributors, Gelderblom and Jonker investigate wage labour, tying its expressions to property relations. By the 1500s, a third of all Manorial estates, one basis for serfdom, had been replaced by short-term leases which stimulated a switch from labour-services to wage-labour on lands where 'commercialisation led to the rise of large-scale and specialised farms employing local landless laborers supplemented by seasonal migrant workers.' (p. 325) Land reclamation called for various labour services, resulting in diverse ownership patterns. Additional demands for regular wage-labourers came from coastal shipping and for fishing; from the Vereenigde Oost-Indische Compagnie to man its 80-100 global trading vessels with one million employees between 1602 and 1795; from the handling of imported foodstuffs and raw materials; and for a standing army of 30-40,000 in peacetime. This magnitude of wage-earners was compatible with most people being self-employed for part of their working lives, leaving no sharp line between domestic sufficiency and waged labour, but rather 'an economy of makeshift.' (p. 329)

The concentration of resources and the centralisation of money-capital did not dominate Dutch processing in which craftsmen on textiles (linen and tapestry), bricks or nails, rarely worked in units of more than ten or twenty, often with casuals, so that

it was only during the 1740s that larger businesses with a longer lifespan and transferable shares made their appearance as a result of consolidation in processing industries such as brewing and sugar refining ... The concomitant dominance of floating over fixed capital, in turn, determined the structure of financial markets. (p. 338)

Are we to assume that 'fixed' refers to plant and equipment (e.g. ships) while 'floating' is everything else, including labour-power - but not money-capital? Compounding authorial uncertainty, average wages were far from uniform leading Gelderblom and Jonker to decide that, '[i]n that sense the Low Countries economy during the early modern age was not really modern or fully capitalist.' Release from this blur of the 'really' and the 'fully' is promised by their recognition that

[o]ne of the key differences between feudalism and capitalism is the extent to which people work for wages ... We can thus gauge the advance of capitalism in the Low

²⁰⁴ The Protestant forces were more than enough to conquer England in 1688 and install William the Orange in what Marx called a coup and which Christopher Pyne so misunderstands that he wants it made part of the national curriculum.

Countries by considering the switch from feudal services to labor paid in kind or in money. (p. 323)

Perhaps we should, but by which measure? Had the Netherlands failed to pass over into modern capitalism before the 1800s because the share of its workforce dependent on some form of wages never went above 50 per cent? Or was it that the volume of their produce was less than half the national output? Or was it that the fraction of the value added by waged labour was under 50 per cent?²⁰⁵ Moreover, the three possibilities need to be seen as dynamics, so that the question can be posed in terms of whether the fraction of the value added by waged labour was rising towards dominance. In keeping with the understanding of 'historical' as transitory, it is appropriate to ponder whether a revolution in capital did take place in the Low Countries before 1780 but not survive. Seeking answers to why not should cast a searchlight onto 'how exactly?' the English did achieve that revolution and were able to carry it on.

Although the measure of value added by labour would interest Marx, he knew that dominance for a mode of production is at the level of the state, ²⁰⁶ and here lie additional obstacles for a Dutch-driven revolution in capital. ²⁰⁷ Gelderblom and Jonker stress how the diversity and fragmentation of the Low Countries promoted development, with each town administration supporting 'market exchange' through their law courts, backed by military action against neighbouring city-market-states:

The most striking aspect of capitalism in the Low Countries is its variety, that is to say, the marked differences in the actual organisation of transactions between ostensibly similar, free markets driven by supply and demand ... (p. 346)

Without 'clear and distinct' perceptions of capitalism and the free market, how are we to know in which ways the United Provinces departed from some 'really' and 'fully' modern capitalism after having been being preeminent in global trade and finance?²⁰⁸ Their political fragmentation became burdensome once the Netherlands was unable to raise enough taxes for war against the unified administrations of its alternating rivals in Britain and France. Furthermore, why did Dutch Calvinists fall behind while Belgian Papists broke through in the 1800s to rival Britain as the world's most 'industrialised' economy by the 1830s? Belgium moved towards modern capitalism through a checkered sequence of constitutional upheavals starting when the French demolished trading restrictions in 1793 and onto a revolution which installed a not quite independent bourgeois monarchy after 1830.²⁰⁹

By then, the World Spirit had pinched itself awake to set about fissuring the Metternich system as the French bourgeoisie retook control of the state machinery from the Bourbons, while revolts flared from Poland to Canada. Britain's besting of France, its preeminence in the West Indies and on the Indian sub-continent allowed its capitalist revolutionaries to unleash 'freer trade' from 1832. Abolition of slavery within the Empire coincided with freedom for employers to work wage-slaves at home as long and as hard as inhumanly possible. By obliterating the distinctions between night and day, 'Capital was celebrating its orgies.²¹⁰ London became the capital of a market far wider than any imperium dreamt of by Alexander.

England: 'locus classicus'

²⁰⁵ Elizabeth Fox Genovese and Eugene Genovese ignore these criteria in claiming that 'capitalism had emerged as the dominant mode of production by the sixteenth century', Fruits of merchant capital: slavery and bourgeois property in the rise and expansion of capitalism, OUP, New York, 1983, pp. ix and 4. Marx and Engels, 'The Communist Manifesto', *M-ECW*, vol. 6, 1976, p. 486.

²⁰⁷ Bas van Bavel, 'The Medieval Origins of Capitalism in the Netherlands', Low Countries Historical Review, 125 (2-3), 2010, p. 53.

Oscar Gelderblom and Joost Jonker, 'The Low Countries', Neal and Williamson (eds), 2004, pp. 338-46.

²⁰⁹ Joel Moykr, *Industrialisation in the Low Countries*, 1795-1850, Yale University Press, New Haven, 1976, chapter 2; E.A. Wrigley, "The Supply of Raw Materials in the Industrial Revolution', Economic History Review, New Series, 15 (1), 1962, pp. 15-16.

²¹⁰ Marx, *Capital*, I, Everyman, p. 284; Penguin, p. 390; Moscow, p. 278.

Neal introduces C. Knick Harley's chapter, 'British and European industrialisation', by saying that it

takes up the continuing puzzle of how European mercantilism eventually developed as European industrialisation ... While ... there was an industrial revolution, its development into modern economic growth was more gradual and less driven by simply introducing factory systems into the textile trades, as striking as those symbols of early capitalism were ... (p. 14)

Despite no 'capitalism' in Harley's chapter heading, he scatters it throughout his text. He too omits to say what he intends by the keyword in the volume's title, adding to our suspicion that a disinclination to come to grips with 'capital' is more than symbolic. He does not get beyond associating 'capitalism' with growth, industrialisation and markets in a mêlée of categories burdened by circularities: 'Britain's industrialisation had deep roots; produced in an already well-developed capitalist economy that had long been mediated by markets.' (p. 504)

Slaves

Those markets included slaves, their clothing, and their produce, a cross-Atlantic triangle which poses a conundrum for upholders of an economic order supposedly dependent on 'free labour'. According to Neal, the U.S. of A. by 1860 was 'already the largest capitalist economy in the world', (p. 15) but he does not let on whether that computation includes the slave South. Again, we encounter an inability to disentangle the actualities of capitalism from gabble about markets and growth. Slavery grew. Human flesh was traded. Hey, presto, capitalism. No sooner has Neal mentioned Eric Williams's thesis that the middle passage to capitalism was through slavery²¹¹ than he diverts onto African markets where, he tells us, slave prices rose but not whether that extra expense might have been connected to an increase in the socially necessary costs of reproducing the human commodity.

More scholarly effort has gone into refuting Williams over abolition than was paid to his insights before the Civil Rights movement and de-colonisation of the 1950s made slavery a hot topic in the ideological Cold War. Prominent US critic of Williams, David Brion Davis, confesses that '[a]fter preparing for my Ph.D. orals in 1954, I remained totally ignorant of the work of such black historians as W.E.B. Du Bois ... Eric Williams, C.L.R. James.' While bourgeois scholars prefer to draw a veil over the links between slavery and capitalism, few Marxists have integrated the second slavery into their 'transition' debate, while just as many neglect the second serfdom.

The evasion of the umbilical chord between capitalism and chattel-slavery reappears in Harley's venture into this uncomfortable topic:

To what extent, then, did the growth of English manufactured goods depend on West Indian slavery? Certainly slave products ultimately financed exports to America. However, the answer to the more interesting question of whether those exports would have existed if slavery had not is less clear. The mainland colonies flourished largely independently of slavery. (p. 504)

That question is 'more interesting' because it allows scholars to hide behind a counter-factual rather than face up to what slavery did. ²¹³ Such diversions comfort everyone wishing to wash their hands of the slave-blood that mortared every brick in Bristol. ²¹⁴ The Cambridge chapter on

David Brion Davis, 'Slavery and the Post-World War II Historians', *Daedalus*, 103 (2), Spring 1974, p. 2; Seymour Drescher, 'Eric Williams: British Capitalism and British Slavery', *History and Theory*, 26 (2), May 1987, pp. 180-88..

Ronald Bailey, 'The Other Side of Slavery: Black labor, Cotton, and Textile Industrialisation in Great Britain and the United States', *Agricultural History*, 68 (2), Spring 1994, pp. 35-50.

²¹¹ Barbara J. Solow, 'Caribbean Slavery and British Growth, The Eric Williams Hypothesis', *Journal of Development Economics*, 17 (1), Jan.-Feb. 1985, pp. 99-115; and her 'Capitalism and Slavery in the Exceedingly Long Run', *Journal of Interdisciplinary History*, 17 (4), Spring 1987, pp. 711-37.

²¹⁴ Christopher Hill observes that T.S. Ashton, the historian 'who adopts the most optimistic attitude to the position of workers in the Industrial Revolution has only one reference to the slave trade in his *Economic History of England in the 18th Century* [1955], and that to "an attempt ... to mitigate" its "worst horrors".' *Reformation to Industrial*

'America: capitalism's promised land' gives two of its forty pages to slavery (scattered on pp. 538-9 and 544-5) to conclude: 'For slaves, their ability to invest in their human capital was severely constrained,' (p. 545) unlike that of their owners whose two million slaves in the 1820s represented one third of the wealth in capitalism's 'promised land'. 215

From the eighteenth-century, chattel slaves raised tobacco, sugar and cotton for the British market so that the plantations should be treated as part of '[t]he distinctive, highly capitalistic nature of British agriculture' and not considered apart from its domestic components. 216 E.A. Wrigley writes of a million hectares being 'imported' from the Americas to evade the Malthusian trap. ²¹⁷ Slavery bore fruit in what now seem unlikely places. The need to insure sugar mills against fire and ships and their cargoes laid the foundations for insurance businesses²¹⁸ on which brokers erected the edifice of stock-jobbing.²¹⁹ The credit arrangements and long-distance payments for the slaves, for the needs of the plantations and for the several products of slave-labour honed management skills. ²²⁰ Thus, more is involved than the purchase of estates by the tobacco lords of Glasgow. ²²¹ British capitalism, moreover, continued to advance through various forms of slavery until the 1920s. Fifty-four years after Britain's abolition of the trade in black skins, Britons were allowed to sell slaves to Brazil. In the early 1860s, London supported the Confederacy to secure supplies of cotton and to stop their being monopolised by mills in New England. During the eighty years after Britain's abolition of slavery in 1833, its capitalists and state expanded their use of bonded labour – 'a new system of slavery' - to do the heavy lifting from Natal to Fiji, and behind the lines in the Great War. 222 Harley's marginalising of chattel-slavery is in line with the treatment of wage-slavery by propertied Abolitionists such as Wilberforce who introduced a Bill in 1799 to criminalise any combination by 'free' workers after he had been panicked by the dangerous classes parading behind banners which demanded the abolition of slavery 'At home and Abroad'. Before the abolition of chattel slavery, the fight

Revolution, Weidenfeld & Nicolson, London, 1967, p. 187; despite being overtaken by fifty years of doctoral researchers, Hill's survey is as pungent as it is alert to the need to seek explanations.

²¹⁵ Ronald Bailey, 'The Slave(ry) Trade and the Development of Capitalism in the United States: The Textile Industry in New England', Joseph E. Inikori and Stanley L. Engerman (eds), *Atlantic Slave Trade: effects on economies, societies, and peoples in Africa, the Americas, and Europe*, Duke University Press, Durham, NC, 1992, 205-46; Edward E. Baptist, *The Half Has Never Been Told*, Basic Books, New York, 2014.

²¹⁶ Joseph E. Inikori, 'Slavery and the Revolution in Cotton Textile Production in England', Inikori and Engelman (eds), 1992, pp. 145-81; Russell R. Menard, 'Plantation Empire: How Sugar and Tobacco Planters Built Their Industries and Raised an Empire', *Agricultural History*, 81 (3), Summer 2007, pp. 309-32.
²¹⁷ Wrigley, 2006, pp. 470-1.

²¹⁸ Trebilcock, *Phoenix Assurance*, 1985, p. 15; Supple, *Royal Exchange Assurance*, 1970, pp. 87-8 and 157-8; 'Symposium on The Zong', *Journal of Legal History*, 28 (3), November 2007 - the case is not in the indexes to Trebilcock or Supple.

²¹⁹ John, 1953, pp. 139 and 152.

²²⁰ S.G. Checkland, 'Finance for the West Indies, 1780-1815', *Economic History Review*, New Series, 10 (3), 1958, pp. 461-9; R.B. Sheridan, 'The Commercial and Financial Organisation of the British Slave Trade, 1750-1807', *Economic History Review*, New Series, 11 (2), 1958, pp. 249-63; J.H. Soltow, 'Scottish Traders in Virginia, 1750-1775', *Economic History Review*, New Series, 12 (1), 1959, pp. 83-98; Samuel M. Rosenblatt, 'The Significance of Credit in the Tobacco Consignment Trade: A Study of John Norton and Sons, 1868-1775', *William and Mary Quarterly*, Third Series, 19 (3), July 1962, pp. 383-99; Jacob M. Price, 'What Did Merchants Do? Reflections on British Overseas Trade, 1660-1790', *Journal of Economic History*, 49 (2), June 1989, pp. 267-84; Kenneth Morgan, 'Remittance Procedures in the Eighteenth-Century British Slave Trade', *Business History Review*, 79 (4), Winter 2005, pp. 715-749; Katie McDade, 'Liverpool slave merchant entrepreneurial networks, 1725-1807', *Business History*, 53 (7), December 2011, pp. 1092-1109; Gary L. Sturgess and Ken Cozens, 'Managing a Global Enterprise in the Eighteenth Century: Anthony Calvert of The Crescent, London, 177-1808', *Mariner's Mirror*, 99 (2), May 2013, pp. 171-95.

²²¹ Jacob M. Price, 'The Rise of Glasgow in the Chesapeake Tobacco Trade, 1707-1775', Peter L. Payne (ed.), *Studies in Scottish Business History*, Frank Cass, London, 1967, pp. 299-318; T.M. Devine, 'An Eighteenth-Century Business elite: Glasgow-West India Merchants, c. 1750-1815', *Scottish Historical Review*, 57 (163), Part I, April 1978, pp. 40-67; T.M. Devine, 'Glasgow Colonial Merchants and Land, 1770-1815', J.T. Ward and R.G. Wilson (eds), *Land and Industry, The Landed Estate and the Industrial Revolution*, David & Charles, Newton Abbot, 1971, pp. 205-44 and 248-66.

²²² Hugh Tinker, A New System of Slavery, the Export of Indian Labour Overseas, 1830-1920, OUP, London, 1974; K.M. Dallas, 'Slavery in Australia', Tasmanian Historical Research Association, Papers and Proceedings, 16 (2), September 1968, pp. 61-76.

at home had been heating up and would boil over in ways depicted by authors whose imaginaries escaped the parlours of Hampshire – Charlotte Bronte's Shirley (1848), Mrs Gaskell's Mary Barton (1848) and North and South (1855) and George Eliot's Felix Holt Radical (1866).

Jane Austin set Mansfield Park (1814) around an eponymous countryseat of the West Indies planters, the Bertrams. Their fictional plantation on Antigua was where Miss Austin's reverend father had been the principal trustee of a plantation, a detail forgotten by her familial hagiographers. ²²³ The 1807 ending of the trade in slaves explains why Sir Thomas Bertram had had to travel to Antiqua during 1812 on what Austin calls 'business', returning with the family's affairs in order. Profits will flow. Indeed, the real life planters went on living off the proceeds of slavery until at least 1833 when that method of exploitation was abolished throughout the Empire. A sequel to Mansfield Park, set in 1834, would portray the surviving Bertram son, Edmund, now a reverend, in receipt of the government's compensation for having being forced to free his chattels, who got nary a penny. Thereafter, he would live at Mansfield Park without working because his erstwhile slaves had been reduced to his debt peons. The snobs who pride themselves on the prejudice of reveling in the refinements of Georgian England as they sip their Lady Grey from Wedgwood flesh-and-bone china, bristle when the barbarism that underwrote the age of elegance is pointed out, as it was by Edward Said in 1993.²²⁴ How dare that Arab spoil the delight in literature by chucking around the muck of Marxism?

Industrial

Harley's claim that a 'substantial portion of the English labour force was employed in manufacturing well before the industrial revolution' (p. 502) gains validity only by dating that change, specifying the proportions of full- and part-time, and defining 'industrial' and 'manufacture', none of which Harley does.

Merely because the text-book version of an 'Industrial Revolution' is bourgeois propaganda does not mean that an industrial revolution - as understood by Marx - was alien to the revolution in capital. Their working unity is approached by recapitulating his three pointers: first, 'industrial' includes all productive sectors of the economy, including agriculture, and not just machino-facture; secondly, industrial involves a concentration of resources and centralisation of their ownership/control; thirdly, the integration of those two processes spurs the accumulation of capital.

One substantial if lop-sided attempt to weave a version of the Industrial Revolution into capitalism flows out of E.A. Wrigley's highlighting the shift from organic (timber and peat) to mineral (coal) sources of energy as a pre-condition for continuous expansion. ²²⁵ He convinces himself that he can redefine capitalism by adding inorganic fuel as 'a second sense'. Instead of fulfilling the dialectical promise of his title, Continuity, Chance and Change, he shackles his first sense of capitalism as 'modernisation' to 'rationality and self-interest' 226 and thus leads away from class relationships into technological determinism:

To succeed in breaking free from the limitations experienced by all organic economies, a country needed not only to be capitalist in the conventional sense, to have become modernized, but also to be capitalist in the sense that its raw materials were drawn increasingly from *mineral stocks* rather than from the annual flow of agricultural production, and, above all, in the sense that it could tap great stores of energy rather than depend upon the kinds of renewable energy sources that had always previously provided any heat or power need for production. The English economy was capitalist in both senses of the word, but the connection between the two was initially casual rather than causal.²²⁷ (Emphasis added)

²²³ Brian Southam, 'The silence of the Bertrams, Slavery and the chronology of *Mansfield Park*', *Times Literary* Supplement, 17 February 1995, pp. 13-14.

Edward W. Said, Culture & Imperialism, Chatto & Windus, London, 1993, pp. 69-70 and 110-16.

²²⁵ Wrigley, 1962, pp. 1-16.

²²⁶ Wrigley, 1988, pp. 99-104; Immanuel Wallerstein, 'Modernisation: requiescat in pace', *The capitalist world*economy, 1979, pp. 132-7.

²²⁷ Wrigley, 1988, p. 115.

To evaluate the worth of Wrigley's 'second sense' it is necessary to count. By 1830, the total output from 'steam-engines' operating in Britain was around 250,000 hp, ²²⁸ equivalent to the motorised transport today in a town of fewer than 1,000 people. ²²⁹ Much of that steam-power still went into pumping water out of mines, lifting it from dams to drive mills during dry or icy periods, and to process salt and sugar if the owner could afford the fixed costs of installation. ²³⁰ Watt's improvements to fire-engines reduced the volumes of coal needed to apply quantities of heat. The biggest increase in use of coal came with steam-driven transport, some for powering the engines and the rest to fabricate the iron and steel for rails, rolling stock and ships. Even after then, most stationary energy came from wind, water and animals ²³¹ – literally the power of horses - but also from humans – which Wrigley brushes aside. ²³² The bulk of coal was burnt for domestic needs, reducing the demand for peat and the despoliation of forests for charcoal. ²³³

By putting the start of the 'Industrial Revolution' back to around 1830, Wrigley allows time for his 'initially casual' phase.²³⁴ Yet renewables had been enough to help the revolution in capital get under way.²³⁵ After that, a non-organic fuel was essential if values were to accumulate without surcease. That connection ceased to be casual, but never proved causal. Replacements of fuel sources do not determine modes of production, any more than a steam engine can turn a tool into a machine. Fuels are ancillaries which do not enter the new commodities bodily - unlike textiles and metals - but circulate only as the value that went into their production. In light of the significance attributed to coal for steam-power by most commentators on their 'Industrial Revolution', the forms of capital involved in ancillaries require clarification, a topic about which Wrigley is not alone in ignoring and about which Marx is inconsistent. One straightforward case is the fuel that goes into lighting, heating or cooling workplaces: 'The product circulates their value in its own circulation, and they have this in common with fixed capital. But they are completely consumed in every labour process that they enter into.'²³⁶ That is not always true for fertilisers which share a second feature with fixed capital by not necessarily transferring all their value into a single crop but can enrich soils

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²²⁸ G.N. von Tunzelmann, *Steam Power and the Industrial Revolution*, Cambridge University Press, Cambridge, 1978, chapter 2 - to appreciate the reasoning behind his best estimates one needs to read at least chapters 1 and 7; J.R. Harris, 'The Employment of Steam Power in the Eighteenth Century', *History*, 52 (175), June 1967, pp. 133-48; A.E. Musson. 'Industrial Motive Power in the United Kingdom, 1800-70', *Economic History Review*, New Series, 29 (3), August 1976, pp. 415-39 – for von Tunzelmann's criticisms, see *Steam Power etc*, p. 29 n. 44. ²²⁹ Landes collates guesstimates for several economies, *The Unbound Prometheus*, 1972, pp. 220-1; for late nineteenth-century Russia, Lenin, 1964, pp. 222, 427, 480n., 508-9 and 553.

²³⁰ Jennifer Tann, 'Fuel saving in the process industries during the industrial revolution: a study in technological diffusion', *Business History*, 15 (2), July 1973, pp. 149-59.

²³¹ Raphael Samuel, 'Workshop of the World: Steam Power and Hand Technology in Mid-Victorian Britain', *History Workshop*, 3, Spring 1977, pp. 6-72; M.J. Wise, 'On the Evolution of the Jewellery and Gun Quarters in Birmingham', *Transactions, Institute of British Geographers*, 15, 1949, pp. 62-69; Eric Hopkins, *Birmingham, The First Manufacturing Town in the World, 1760-1840*, Weidenfeld and Nicholson, London, 1989, chapter 3; Harris, 1967, pp. 131, 141-2 and 148; K.M. Dallas, *Horsepower*, Fullers Bookshop, Hobart, 1968.

Wrigley, 1988, p. 74, n. 6. The switch to the inorganic added oil and then uranium. Hydro-power had to wait for the applied science of electricity during a second 'industrial revolution' before the twentieth century could become the Age of Dams, a reversal to the organic which depended on the iron and steel from the application of coking coal for reinforced concrete and in the fabrication of the turbines. Now there is a revival of wind and water. Is solar organic or inorganic?

²³³ Gregory Clark and David Jacks, 'Coal and the Industrial Revolution, 1700-1869', *European Review of Economic History*, 11 (1), April 2007, pp. 39-72; Wrigley, 1962, pp. 1-16; Wrigley, 1988, chapter 3.

The Danes' destruction of their forests turned them towards dairy farming, Thorkild Kjaergaard, *The Danish Revolution 1500-1800, an ecohistorical interpretation*, Cambridge University Press, Cambridge, 1994, pp. 1-5 and chapter 4. Marx explains why capitalists are reluctant to invest in forestry, *Capital*, II, Penguin, pp. 321-2; Moscow, pp. 243-4; *Capital*, III, Penguin, pp. 754-5, n. 27 and 902-3; Moscow, pp. 617, n. 27 and 768; for how a forest becomes a commodity, Marx, *TS-V*, II, p. 247. The English Crown set aside forests to preserve oaks for the Royal Navy.

²³⁴ Wrigley, 1988, p. 9, and 2006 p. 474.

²³⁵ Samuel, 1977, pp. 6-72; Wise, 1949, pp. 62-69; Hopkins, *Birmingham*, 1989, chapter 3; Harris, 1967, pp. 131, 141-2 and 148.

²³⁶ Marx, *Capital*, II, Penguin, pp. 238-9; Moscow, pp. 158-9.

beyond the period of each harvest. No category error occurs in Marx until he writes about 'ancillaries'

that enter the product bodily, and not just in respect of their value, as does coal for heating, for example. Here, when the product changes hands, so does the raw material, the cotton, of which it consists, passing from the production process into that of circulation. But as long as cotton functions as an element of productive capital, its owner does not sell it but works on it, makes yarn out of it.

Here, Marx stretches his use of 'ancillary' to cover a raw material or semi-finished good. The challenge from this move to his account of the forms of capital is by-passed as he slips into a criticism of Smith and then back to confirm that 'spinning machines and factory buildings' are both fixed and constant.²³⁷

What is beyond dispute is that expanded accumulation is as insatiable for the cheapest sources of energy as it is to devour the capacity of humans to add value without interruption. The latter is missing from Wrigley's capitalism. Rubbing a mentalist modernisation up against the inorganic will not spark life into accumulation. Nonetheless, the demand for coal did mire noble lords in the muck through rents from mining leases²³⁸ and canal investments.²³⁹

Landlords

English agriculture was unique because landowners rented farms to tenants who provided its working capital and hired labourers. This system underpinned the Trinity formula of rent, profit and wages, streams of revenue which Marx considers to be as alike as 'lawyer's fees, beetroot and music²⁴⁰ Their incongruity aside, they do have two features in common. First, they all derive from the surplus added by labour; secondly, all are liable to pay 'interest'.

Although we should not expect economic historians to know more about the theory of rent than Ricardo got wrong by denying the possibility of differential rent 'as a purely historical fact, which belongs to a *certain* stage of development of agriculture and which may disappear at a higher stage', ²⁴¹ they might at least be aware that landlords were in the grip of financiers. Alongside institutional lenders, the likes of Chief Justice Mansfield could advance £10,000 to the Duke of Grafton in 1762 and comparable sums to other peers, as well as sorting out the financial affairs of the Marquis of Rockingham, the Duke of Portland and the Duke of Newcastle, the latter on several occasions. 242 The grandees carried on under an anti-capitalist mentality, not heeding the cry of 'Accumulate, accumulate!'. 243 What did it profit the Duke of Buccleuch to have Adam Smith as his tutor? The dissipation of money-capitals was lavish among the Scottish lairds who maintained establishments in both Edinburgh and London as well as erecting castles in the Highlands and converting sheep-walks into deer parks. 244 The grandest

²³⁷ Marx, *Capital*, II, Penguin, pp. 274-5; Moscow, pp. 195-6. Whether the electricity that contributes to aluminum enters 'bodily' into that product calls for more expertise in physical chemistry than Marx or even Engels laid claim

²³⁸ T.J. Raybould, 'The Development and Organisation of Lord Dudley's Mineral Estates, 1774-1845', *Economic* History Review, New Series, 21 (3), December 1968, pp. 529-44; J.T. Ward, 'Landowners and Mining', Ward and Wilson, 1971, pp. 63-116; but contrast Myska, 1979, pp. 50-51.

²³⁹ David Brown, 'The industrial revolution, political economy and the British aristocracy, The second Viscount Dudley and Ward as an eighteenth-century canal promoter', Journal of Transport History, 27 (1), March 2006, pp. 1-23; Gerard Turnbull, 'Canals, coal and regional growth during the industrial revolution', Economic History Review, New Series, 40 (4), 1987, pp. 537-60; Baron F. Duckham, 'Canals and river navigations', Aldcroft and Freeman, (eds), 1983, pp. 100-41; Edward Hughes, North Country Life in the Eighteenth Century, volume II, OUP, Oxford, 1965, chapter 5.

²⁴⁰ Marx, *Capital*, III, Penguin, pp. 953-7; Moscow, pp. 814-8.

²⁴¹ Marx, TS-V, Part II, pp. 243-4; Jayati Ghosh, 'Differential and Absolute Land Rent', Journal of Peasant Studies, 13 (1), October 1985, pp. 67-82.
²⁴² Edmund Heward, *Lord Mansfield*, Barry Rose, Chichester, 1979, chapter 7.

²⁴³ Marx, *Capital*, I, Everyman, p. 654; Penguin, p. 742; Moscow, p. 595.

²⁴⁴ Smout, 1963, pp. 218-34; Malcolm Gray, 'The Kelp Industry in the High-Lands and Islands', *Economic History* Review, 4 (2), 1951, pp. 208-9; Finlay McKichan, 'Lord Seaforth and Highland Estate Management in the First Phase of Clearance (1783-1815)', Scottish Historical Review, 86 (1), April 2007, pp. 66-68; Preeble, The Highland Clearances, 1969; J.I. Little, 'Agricultural Improvement and Highland Clearance: the Isle of Arran, 1766-1829', Scottish Economic and Social History, 19 (2), November 1999, p. 139.

of them, the Sutherlands, was preserved from wreck by the vastness of their rent-bearing lands and ruthlessness towards their tenants. 245

Harley welcomes Robert Brenner's picture of capitalist farming as an outgrowth of late medieval class struggles. However, since those contests had ended some 200 years before the revolution in capital, they could do no more than contribute to the sediment from that previous mode. Harley next leans on Robert C. Allen for the importance of 'capitalist agriculture' but does not say whether that category is the same as Brenner's 'agrarian capitalism'. Allen credits yeomen of the seventeenth century with lifting rates of farm productivity on open fields before attacking the eighteenth-century spate of parliamentary enclosures for retarding productivity, especially of grain output per acre. If so, this failure was doubly remarkable because climatic conditions had improved with the ending of the little ice-age by 1700, a condition for 'growth' ignored by the Cambridge authors. Overlooking Allen's reservations about the engrossing landlords, Harley reports that '[a]griculture was unusually productive, probably because of its capitalist organisation.' (p. 505) Perhaps so, but does that re-arrangement refer to a concentration of resources or to a centralisation of ownership, or to some combination of the two? The revolution in capital needed both.

Harley endorses an estimate by Leigh Shaw-Taylor that, in '1700 small-scale capitalism predominated in the south-east with three-quarters of the adult male agricultural workforce being proletarian.' Proletarian' sounds scary enough to be mistaken for Marxism, but English farm labourers at that time were more like 'the great mass of the French nation' around 1850, whom Marx portrayed as 'formed by simple addition of homologous magnitudes, much as potatoes in a sack form a sack of potatoes.' Harley is apologetic that '[a]griculture has featured rather more prominently than might be expected in a narrative of European industrialisation.' (p. 526) That regret seems apt for a book allegedly about capitalism. Either way, the emphasis on farms would not be surprising had more Marxists accepted agriculture as industrial.

Harley is not alone in making heavy weather out of the relations between farming and processing. Oblivious both to the place of agriculture in Marx's understanding of industry, and to the re-dating of the start to the industrial revolution to the 1820s, David Harvey could report in 2010

²⁴⁵ Eric Richards, *The Leviathan of Wealth, The Sutherland Fortune in the Industrial Revolution*, Routledge & Kegan Paul, London, 1973, chapters 3 and 12-17.

²⁴⁷ Robert C. Allen, 'Tracking the Agricultural Revolution in England', *Economic History Review*, New Series, 52 (2), May 1999, pp. 209-35.

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²⁴⁶ T.H. Ashton and C.H.E. Philpin (eds), *The Brenner debate, agrarian class structure and economic development in pre-industrial Europe*, Cambridge University Press, New York, 1985; for later exchanges see Robert Albritton and Mike Zmolek and Raju Das, *Journal of Peasant Studies*, in April 1993 and from 2000 to 2002.

²⁴⁸ H.H. Lamb, *Changing Climate: selected papers*, Methuen, London, 1966, pp. 94-107 and 170-95; W.G. Hoskins, 'Harvest Fluctuations and English Economic History, 1620-1759', *Agricultural History Review*, 16 (1), 1968, pp. 15-31; Jason W. Moore, 'Nature and the Transition from Feudalism to Capitalism', *Review (Fernand Braudel Center)*, 26 (2), 2003, pp. 97-172; Cormac O. Grada and Jean-Michel Chevet, 'Famine and Market in *Ancien Regime* France', *Journal of Economic History*, 62 (3), September 2002, pp. 706-33; Emmanuel Le Roy Ladurie, *Times of feast, times of famine: a history of climate since the year 1000*, George Allen & Unwin, London, 1971; special issue of *The Journal of Interdisciplinary History*, 10 (4), Spring 1980; Geoffrey Parker, *War, Climate Change and Catasthrophe in the Seventeenth Century*, Yale University Press, New Haven, 2014.

Leigh Shaw-Taylor, 'The rise of agrarian capitalism and the decline of family farming in England', *Economic History Review*, New Series, 65 (1), February 2012, p. 57.

²⁵¹ Karl Marx, 'The Eighteenth Brumaire of Louis Bonaparte', *M-ECW*, vol. 11, Lawrence & Wishart, London, 1979, p. 187. Marx's characterisation need not endorse allegations of their being counter-revolutionary, as in the Vendee, see Georges Lefebrve, *The Coming of the French Revolution*, University of Princeton Press, Princeton, 1947, chapters 9 and 10; M.C. Cleary, 'French Agrarian History after 1750 – A Review and Bibliography', *Agricultural History Review*, 37 (1), 1989, pp. 65-74; Hilton Root, 'The Case Against Georges Lefebvre's Peasant Revolution', *History Workshop*, 28 Autumn 1989, pp. 88-102, with a response from P. M. Jones and a reply from Root, pp. 103-10; Peter McPhee, 'The French Revolution, Peasants, and Capitalism', *American Historical Review*, 94 (5), December 1989, pp. 1265-80.

that the British upper classes (the landed aristocracy in particular) accumulated far more wealth from rising rents²⁵² from the mid-seventeenth century [c.1650] onwards than they did from the exploitation of factory labour in Manchester.²⁵³

One reason for this balance-sheet was that Manchester had almost no factories before 1780, since putting-out dominated its processing. Had Harvey said Lancashire, and not just Manchester, he still would have been wrong. By 1830, he would have been correct for Manchester, by then Cottonopolis, 254 though its steam engines had no more than 5,000 horsepower. 255 Meanwhile, Birmingham's metal processing remained small to medium-sized so that in 1851, its 500 gun workshops employed an average of six operatives. ²⁵⁶ Manchester had more and larger machine-making and repair establishments to supply its textile trades. ²⁵⁷ In addition, until the 1780s, London held its lead as the capital of world processing, as well as its emporium.²⁵⁸

An eternal optimist will be hoping that Harley's 'Conclusions: Capitalism and European Industrialisation' might reveal all. Far from his drawing a distinction between the two, or establishing links between them, he leads us back round and round the mulberry bush of capitalism, growth, industrialisation and markets:

European industrialisation was a triumph of capitalism ... Modern economic growth was achieved by societies in which markets became pervasive ... In the initial leaders, the Netherlands and England, market capitalism was firmly established long before the industrial revolution ... In many places elsewhere in Europe, capitalist roots were deep and growth spread quite rapidly during the nineteenth century. (p. 526)

Weary of chasing his tail, Harley takes refuge into the thicket of on-the-one-hand and on-theother-hand:

However, large firms employing masses of proletarian workers – a usual conception of capitalism – played a modest role. Large capitalist firms, of course, played their role ... The capitalism that drove growth pervaded small and medium-sized firms ... (p. 526)

Given the belated appearance of this 'usual conception', are we to assume that it is not Harley's position?

After cataloguing developments in agriculture, chemicals, glass, food-processing, flourmills, refrigeration, packaged food, sewing-machines, machine-making and metallurgy. he can

²⁵² Eric Kerridge, 'The Movement of Rent, 1540-1640', Economic History Review, New Series, 6 (1), 1953, pp. 17-19 and 27; J.R. Wordie, 'Rent Movements and the English Tenant Farmer, 1700-1839', Research in Economic History, 6, JAI Press, Greenwich, Conn., 1981, pp. 194, 199, 204 and 206.

 $^{^{253}\} davidharvey.org/2010/08/the-enigma-of-capital-and-the-crisis-this-time$ ²⁵⁴ Chapman, 1979, p. 213n.; S.D. Chapman, 'James Longsdon (1745-1821), Farmer and Fustian Manufacturer: The Small Firm in the Early English Cotton Industry', Textile History, 1 (3), December 1970, p. 273; A.P. Wadworth and J. DeLacy Mann, The Cotton Trade and Industrial Lancashire, Manchester University Press, Manchester, 1931, pp. 311 and 510; D.A. Farnie, The English Cotton Industry and the World Market, 1815-1896, Oxford at the Clarendon Press, Oxford, 1979, pp. 45ff; Geoffrey Timmins, Made in Lancashire: a history of regional industrialisation, Manchester University Press, Manchester, 1998, chapters 1-3; Peter Maw, 'Yorkshire and Lancashire ascendant: England's textile exports to New York and Philadelphia, 1750-1805', Economic History Review, New Series, 63 (3), August 2010, pp. 750-1 and 759; for Manchester's heyday see Theo Balderston, 'The economics of abundance: coal and cotton in Lancashire and the world', Economic History Review, New Series, 63 (3), August 2010, pp. 569-90. ²⁵⁵ von Tunzelmann, 1978, p. 32.

²⁵⁶ Wise, 1949, pp. 62-69; Berg, *The Age of Manufactures*, 1985, chapter 12; Hopkins, *Birmingham*, 1989, p. 44. ²⁵⁷ Musson and Robinson, 1960, pp. 209-33.

²⁵⁸ M. J. Daunton, 'Towns and Economic Growth in Eighteenth-Century England', Philip Abrams and E.A. Wrigley (eds), Towns in Societies, Essays in Economic History and Historical Sociology, Cambridge University Press, Cambridge, 1978, pp. 245-55; Christopher J. French, 'London's Overseas Trade with Europe 1700-1775', Journal of European Economic History, 23 (3), Winter 1974, pp. 475-501; Gordon Jackson, 'The Ports', Aldcroft and Freeman (eds), Transport in The Industrial Revolution, 1983, pp. 182 and 192-3; J.R. Kellett, 'The Breakdown of Gild and Corporation Control over the Handicraft and Retail Trade in London', Economic History Review, New Series, 10 (3), 1958, pp. 381-94; G.D. Ramsay, English woollen industry, 1500-1750, Macmillan, London, 1982, pp. 51-7; Rogers, 1979, pp. 437-54; John Styles, 'Product Innovation in Early Modern London', Past & Present, 168, August 2000, pp. 124-69; E. A. Wrigley, 'A Simple Model of London's Importance in Changing English Society and Economy 1650-1750', Abrams and Wrigley (eds), Towns in Societies, pp. 215-43.

proclaim: 'This was the dynamics of capitalism at work on a broad scale.' (p. 509) Should 'This' turn out to be his grab bag of products and processes, devoid of order in time or levels of interaction, what causal connection has he established? None. And if 'This' refers back to 'productivity advance', we are adrift in the circularity of identifying capitalism with 'growth'.

Technology transfers

One consequence of Harley's avoidance of capitalist social relations is his digression into the spread of British processing techniques. In doing so, he is not so respectful of Marx as to trace a snippet back to its source to see that Marx's prediction that 'the country that is more developed industrially only shows, to the less developed, the image of its own future', is not about technology but class struggle:

If, however, the German reader pharisaically shrugs his shoulders at the condition of the English industrial and agricultural workers, or optimistically comforts himself with the thought that in Germany things are not nearly so bad, I must plainly tell him: 'De te fabula narratur!' ['The tale is told of you': Horace]

Intrinsically, it is not a question of the higher or lower degree of development of the social antagonisms that spring from the natural laws of capitalist production. It is a question of these laws themselves, of these tendencies winning their way through and working themselves out with iron necessity. The country that is more developed industrially only shows, to the less developed, the image of its own future. ²⁵⁹

Marx considers the spread of the class struggle as both resistance and exploitation by concluding his survey of 'The Working Day' with a segment on 'The Struggle for a Normal Working Day. Impact of the English Factory Legislation on Other Countries.' He is not fixated on the export of machines or the spread of the factory system but is pointing to 'social antagonisms', which arise in reaction to the gulf between those who own productive property and those who hold little or none. That was the future in 1867. It has come to pass.

From the final chapter in volume one of *Capital*, it is clear that the transfer of machinery is not what Marx has in mind when he portrays the future because he knew that the secret of capitalist production lay in relationships of power. He thought it

the great merit of E.G. Mr Wakefield to have discovered ... the truth about capitalist relations ... Just as the system of protection originally had the objective of manufacturing capitalists artificially in the mother country, so Wakefield's theory of colonisation ... aims at manufacturing wage-labourers in the colonies ...

First of all, Wakefield discovered that, in the colonies, property in money, means of subsistence, machines and other means of production does not as yet stamp a man as a capitalist if the essential complement of these things is missing: the wage-labourer, the other man, who is compelled to sell himself of his own free will. He discovered that capital is not a thing, but a social relation between persons which is mediated through things. A Mr Peel, he complains, took with him from England to the Swan River district of Western Australia means of subsistence and of production to the amount of £50,000. This Mr Peel even had the foresight to bring besides, 3,000 persons of the working class, men, women and children. Once he arrived at his destination, Mr Peel was left without a servant to make his bed or fetch him water from the river. Unhappy Mr Peel, who provided for everything except the export of English relations of production to Swan River!²⁶²

²⁵⁹ Marx, *Capital*, I, Everyman, pp. xlviii; Penguin, pp. 90-91; Moscow, pp. 8-9; for Marx's application of this principle to American slavery, Everyman, pp. 236 and 271; Penguin, pp. 345 and 378; Moscow, pp. 236 and 267. Marx, *Capital*, I, Everyman, pp. 306-11; Penguin, pp. 411-6; Moscow, pp. 298-302.

²⁶¹ Landes gives 110 pages to how Europeans emulated the British before closing the gap, *Unbound Prometheus*, chapter 3 and 4.

²⁶² Marx, *Capital*, I, Penguin, pp. 933-3; Everyman, pp. 849-50; Moscow, pp. 766-7; for a misreading of this chapter see Max Hirsch, *Democracy versus Socialism*, Storey Evans, Leeds, 1924, pp. 452-58. For a repeat of Peel's misjudgement about the source of value, John Woodland, *Money Pits, British Mining Companies in the California and Australia Gold Rushes of the 1850s*, Ashgate, Farnham, 2014.

Unhappy Professor Harley who fails to bring those relations of production, and the class struggle, into either his criticism of Marx or to his analysis of capitalism.

Had Harley bothered to read Marx's paragraph about the spread of class struggle in full, it is Paris to a peanut that he still would have not seen what it is about. Having shielded himself from such discomfiting prospects as exploitation and violence, he imagines that he is correcting Marx by claiming that the 'emergence of growth in continental Europe during the nineteenth century depended less on the spread of British-style industrialisation and more on the spread of British-type capitalism and the institutions that supported it.' (p. 492) Harley never faces up to the fact that those institutions were agencies for class oppression, with state violence ensuring the rule of law. Moreover, when Marx does write about industry in terms of machines and technology he is clear that they also serve as weapons in the class struggle: 'The machine is a means for producing surplus-value' while '[a] whole book could be filled with the history of inventions since 1830, inventions which were made as weapons for capital to use against working-class revolts.' Harley does note how 'British manufacturers chose cost-minimising techniques that used capital and energy to save labour, and British research and development had a machinery-using, fuel-intensive starting point.' (p. 497) These measures also intensified the extraction of surplus value by driving down labour-times through concentrating labour, in and out of factories. Technical innovations cut production times.²⁶⁴

Harley reverts to his misrepresentation of Marx in regard to technical transfers to introduce insights about backwardness and economic development from erstwhile Communist Alexander Gerschenkron who considers it 'hardly surprising that the generalisations [attributed to Marx] have proven too sweeping to be a totally reliable guide to the complex economic history of modern Europe' but still appreciates that

[a] good deal of our thinking about the industrialisation of backward countries is dominated – consciously or unconsciously – by the grand Marxian generalisation according to which it is the history of advanced or established industrial countries which traces out the road of development for the more backward countries. 'The industrially more developed country presents to the less developed country a picture of the latter's future.' There is little doubt that in one broad sense this generalisation has validity ... But one should beware of accepting such a generalisation too wholeheartedly. For the half-truth that it contains is likely to conceal the existence of the other half – that is to say, in several very important respects the development of a backward country may, by the very virtue of its backwardness, tend to differ fundamentally from that of an advanced country.

It is the main proposition of this essay that in a number of important historical instances industrialisation processes, when launched at length in a backward country, showed considerable differences \dots^{265}

To reply that Marx's concern is with the class struggle does not vanquish the significance of Gerschenkron's attention to the multiple ways in which industrialisation proceeds since the principle of diversity applies equally to how class struggles manifest themselves. To accept that the emergence of a workforce without productive property is a global tendency cannot tell us a lot about 'how exactly?' such expropriation came about in the Argentine, Japan, or Poland during any decade you care to nominate between the 1850s and today. Since Russian agriculture in the post-Reform decades had to move from the corvee to labour-service, the attempts by landowners to import machines and labourers from the West, Lenin notes, 'could not but end in fiasco'; meanwhile, the 'other than economic pressure', to quote Marx, 'also remained in the

²⁶³ Marx, *Capital*, I, Everyman, pp. 391ff. and 467; Penguin, pp. 492ff. and 563; Moscow, pp. 371ff. and 436; cf. Lazonick, 1979, pp. 231-40.

²⁶⁴ Marx, *Capital*, II, Penguin, pp. 312 and 319-20; Moscow, pp. 234-5 and 242.

²⁶⁵ Harley has lifted his misinterpretation of Marx from Gerschenkron, *Economic Backwardness*, 1962, pp. 6-7. Claude Levi-Strauss responded to an allegation from Maxime Rodinson that any undermining of the belief in 'progress' would sap the militancy of the auto workers in the Paris suburb of Billancourt: 'Billancourt would deserve little consideration if ... it should feel it necessary to its intellectual and moral security that the Papuans become nothing but proletarians. Fortunately, anthropological theory does not play such an important role in tradeunion demands.' *Structural Anthropology*, Anchor Books, New York, 1967, p. 331n.

shape of the peasants' temporarily bound status, collective responsibility, corporal punishment, forced labour on public works, etc.' 266

For the grace of Gerschenkron's prose, breadth and depth of knowledge, and subtlety of analysis, it is a pity that more of the Cambridge contributors had not read him. ²⁶⁷ His essay on a comradely critique of Gramsci's account of the *Risorgimento* is a model of how a dialectical materialist should seek a 'hierarchy of mediations' between the first capitalist revolution and its consequences elsewhere. ²⁶⁸ Gerschenkron's warning against the slippage involved in relabeling 'traits' as 'prerequisites' before discovering them to be 'causes' cautions researchers on any topic. ²⁶⁹

To think of England as 'backward' before the 1820s is at once salutatory and teleological. Before then, what 'forward' was there for incipient capitalists to be 'backward' against? The refusal of the future to arrive prematurely in order to show itself as the way ahead leaves us to travel along what Engels calls the 'zigzag line' of lived experience, expressed in Chesterton's 'The Rolling English Road':

Before the Roman came to Rye or out to Severn strode,

The rolling English drunkard made the rolling English road,

A reeling road, a rolling road, that rambles round the shire,

And after him the parson ran, the sexton and the squire,

A merry road, a mazy road, and such as we did tread,

The night we went to Birmingham by way of Beachy Head.

What was true for capital was no less true for the growth models of Quesnay, Steuart, Smith, Ricardo and Malthus which were not advances upon each other in a straight line of march. On some matters, Smith saw better than Ricardo that something new had happened 'with the accumulation of capital and the appearance of property in land.'²⁷¹ All were limited in their understanding to varying degrees by the level of development of the productive forces and the social relations. In locating their views in terms of class, we are protected against one-dimensional equations by Marx's insistence that what makes thinkers

representatives of the petty-bourgeoisie is the fact that in their minds they do not get beyond the limits which the latter do not get beyond in life, that they are consequently driven, theoretically, to the same problems and solutions to which material interest and social position drive the latter in practice. ²⁷²

Not all spokespeople for the propertied classes are paid agents, sycophants or self-interested. Those who are, ill serve their Masters by being unable to offer a deeper understanding of the problems than the nation of shopkeepers could carve out for itself.

Ever the enemy of 'the eternal, the natural and the universal', ²⁷³ Marx was in the forefront of those insisting on specifics and particulars for India and China:

Both the ruin of rich landowners through usury and the impoverishment of the small producers lead to the formation and concentration of large amounts of money-capital. But to what extent this process does away with the old mode of production, as happened in modern Europe, and whether it puts the capitalist mode of production in its stead,

Gerschenkron concealed his Red years in Vienna as successfully he did his debts to Marx, Hilferding and Trotsky for the law of combined and uneven development, see Marcel van der Linden, 'Gerschenkron's Secret', *Critique*, 40 (4), 2012, pp. 553-62.

²⁶⁶ Lenin, 1964, pp. 193-4 and 219.

²⁶⁸ Gerschenkron, 'Rosario Romeo and the Original Accumulation of Capital', *Economic Backwardness*, 1962, pp. 90-118,

²⁶⁹ Gerschenkron, 1962, pp. 32-33.

²⁷⁰ Engels, in Marx, *CCPE*, 1970, p. 225; possibly from the '*zizac*' diagram for Quesnay's *Tableau Economique*, see letter from Quesnay to Mirabeau, *Economic Journal*, 5 (17), March 1895, pp. 20-21.

²⁷¹ Marx, *TS-V*, I, pp. 83-6, II, p. 169.

²⁷² *M-ECW*, vol. 11, 1979, pp. 130-1. This insight reveals the crudeness of Sartre's complaint that 'Valery is a petit-bourgeois intellectual, no doubt about it. But not every petit-bourgeois intellectual is Valery. The heuristic inadequacy of contemporary Marxism is contained in those two sentences', Jean-Paul Sartre, *Search for a Method*, Vintage, New York, 1968, p. 56.

²⁷³ Marx, *Capital*, III, Penguin, pp. 451-2; Moscow, pp. 333-4.

depends entirely upon the stage of historical development and the attendant circumstances. ²⁷⁴

Hence, the attempts by Harley and Gerschenkron to turn Marx into a cookie-cutter for the transfer of technology tells us a lot about their politics and is a libel on his. Harley's mishandling of the passage from Marx is typical of a slovenliness by which editors and peer reviewers fail to insist that authors track quotations to their origins instead of recycling snatches from some secondary source. By contrast, the losses from the mistreatments of Marx and the gains from giving him the attention he deserves are trumpeted by G.N. von Tunzelmann in *Steam Power and British Industrialisation to 1860*:

... there is one notable exception – Karl Marx. His analysis is spare and succinct, encapsulating what emerge in my study as the truly significant links between steampower and cotton. Had his work acted as a springboard for serious research in economic history, not to speak of countless other disciplines, rather than for polemic and counterpolemic, there is little doubt in my mind that the years 1800 to 1860 would not have remained the dark ages of the stationary steam-engine. As it is his points have been forgotten, although they were central to his exegesis of industrial capitalism.

von Tunzelmann did the hard yards to substantiate and refine the leads that Marx provides. How much more of *Capital* von Tunzelmann has read is unclear but, so convinced is he that he is one of the few to have understood the chapter on machinery that he feels 'free to put forward my present findings ... as essentially a new contribution.' ²⁷⁵

When Harley directs his attention to Europe, he repeats his distortion of Marx about technology transfers, before claiming that his own error provides insights into 'the spread of the leading industries of Britain's industrial revolution', though he never details which technology transfers or notes that they went in both directions, ²⁷⁶ with hydrologists from the Low Countries designing canals and Huguenot refugees inculcating pin-making and textile skills. ²⁷⁷ No processing transfer proved more important than the French discovery of a bleaching powder in the late 1790s which unblocked a choke-point every bit as significant as that cleared by Hargreaves' spinning jenny in keeping the supply of yarn up to its inventor, who, as a frameweaver, had had to find his own weft-yarn 'by walking three miles to see a spinner he knew, by promising presents or extra pay to her, by waiting. ²⁷⁸ In addition, England borrowed large sums from the Netherlands, often to finance warfare.

Despite Harley's predilection for Idealist explanations, he is silent on the transfer of intangibles. Around 1812, Cambridge undergraduates Charles Babbage and John Herschel set up an Analytical Society to replace the Newtonian symbols for the derivative of a function with the letters 'd' and 'f' of Leibnitz, causing Babbage to joke that he had promulgated 'D-ism' over 'Dot-age'. Without such immaterial technical advances, which, as Marx observed, allowed a schoolboy to learn the binomial theorem in an hour, ²⁸¹ Britain could never have produced the

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²⁷⁴ Marx, *Capital*, III, Penguin, p. 729; Moscow, p. 594.

von Tunzelmann, 1978, p. 8; von Tunzelmann acknowledges 'a similar statement by Nathan Rosenberg, 'Karl Marx on the Economic Role of Science', *Journal of Political Economy*, 82 (4), July-August 1974, pp. 713-28.

276 E. Robinson, 'The International Exchange of Men and Machines, 1750-1800', *Business History*, 1 (1), 1958, pp. 3-15; J.R. Harris, 'Industrial Espionage and Technology Transfer: Britain and France in the Eighteenth Century, *International History Review*, 22 (3), September 2000, pp. 611-8.

²⁷⁷ Thirsk, *Economic policy and projects*, 1978, p. 80; Allison, 1961, pp. 61-77.

²⁷⁸ Reddy, *The Rise of Market Culture*, 1984, p. 49.

Elize S. Brezis, 'Foreign Capital Flows in the Century of Britain's Industrial Revolution'. *Economic History Review*, New Series, 48 (1), February 1995, pp. 46-67; R.C. Nash, 'The Balance of Payments and Foreign Capital Flows in Eighteenth-Century England: A Comment', *Economic History Review*, New Series, 50 (1), February 1997, pp. 110-28; J.F. Wright, 'The Contribution of Overseas Savings to the Funded National Debt of Great Britain, 1750-1815', *Economic History Review*, New Series, 50 (4), November 1997, pp. 652-74.
 W.V. Wilkes, 'Herschel, Peacock, Babbage and the Development of the Cambridge Curriculum', *Notes &*

²⁸⁰ W.V. Wilkes, 'Herschel, Peacock, Babbage and the Development of the Cambridge Curriculum', *Notes & Records of the Royal Society of London*, 44 (2), July 1990, pp. 212-4; mathematics are not part of Joel Mokyr's *The Enlightened Economy, Britain and the Industrial Revolution*, 1700-1850, Penguin, London, 2009.

²⁸¹ Marx, *TS-V*, Part I, p. 343, criticises Hobbes for saying that the inventions of war come from pure science rather than from human labour.

engineers needed for mass machino-facture and steam transport from the 1830s.²⁸² Here is the import of ideas without Idealism, an insight absent from the chapter on how Carlyle's 'dismal' few thought about capitalism.

Political economy

Jose Luis Cardoso's 'The political economy of rising capitalism' accepts that ideas can gain a material force before he disables this line of inquiry to rely on words as the prime 'sources that provide documentary evidence of the formation of the capitalist system.' (p. 575) Marx's 'Blue Books' are richer about its doings. The attention Cardoso gives to texts on capitalism shows more promise when he seeks 'the scientific bases for its understanding', though here too those references must be read through the shifting realities that their authors scrambled to keep abreast of, or to explain away. Cardoso accepts such connections when he reports that the mercantilists were 'designing economic policies almost always intending to solve practical problems under particular circumstances', (p. 578) frequently how to finance war or to suppress dissent.

Following these fits and starts, and typically for a philosophiser, Cardoso boils the significance of the volume's closing date of 1848 down to a brace of publications by Mill and Marx, thereby missing its single most important event for the future of capitalism, the discovery of gold in California. The revolutionary year sounded not the death knell of the newborn system but the starter's gun for its lurch towards the global crisis in 1857. Cardoso's omission of gold is odd given that he patches his chapter together out of lists about everything else. In addition, by neglecting gold, he fails to return to his comments on the Salamanca School as they grappled with the price revolution following the influx of precious metals from genocidal colonisations. ²⁸⁴ Neither he nor the Salamanca writers connect 'the diminishing value of coin' to the quantities of labour-time (value) required for the extraction of silver or gold.

Cardoso enshrines Adam Smith as the founder of political economy without giving sufficient weight to the fact that he wrote on the cusp of both the revolution in capital and at the commencement of the concentration of processing, and therefore was a long way from 'founding the science that allows us to understand the changes and transformations of rising capitalism.' (p. 586) Smith accepted that value could be added by the application of any kind of labour, and not just in agriculture, though he placed it above other sectors:

No equal capital puts into motion a greater quantity of productive labour than that of the farmer. Not only his laboring servants, but his laboring cattle, are productive labourers. In agriculture too nature labours along with man; and though her labours cost no expense, its produce has its value, as well as that of the most expensive workmen. ²⁸⁶

²⁸² A.E. Musson and E. Robinson, 'Science and Industry in the Late Eighteenth Century', *Economic History Review*, New Series, 13 (2), 1960, pp. 222-44; Larry Stewart, 'Assistants to Enlightenment: William Lewis, Alexander Chisholm and Invisible Technicians in the Industrial Revolution', *Notes and Records of the Royal Society of London*, 62 (1), March 2008, pp. 17-29.

²⁸³ Cardoso's suggestions on how to connect ideas with actualities pale beside Maurice Dobb's 1937 *Political Economy and Capitalism*, which is not in the References, one omission among several, with no Ronald L. Meek on the Scottish school, no Joseph Schumpeter on *The History of Economic Analysis*, (1953), still less any acknowledgement to Marx's three-part *Theories of Surplus-Value* or the commentary running through his footnotes to *Capital*, and not even a trace of Eric Roll's *A History of Economic Thought*, for which, by its post-1945 editions, Roll had shed the '-h' from his given name, along with his Marxism on his way to serving capital as bureaucrat, banker, Labor cabinet minister and life peer, Eric Roll, *Crowded Hours, An Autobiography*, faber and faber, London, 1985.

²⁸⁴ Massimo Livi-Bassi, 'The Depopulation of Hispanic America after the Conquest', *Population and Development Review*, 32 (2), June 2006, pp. 199-232.

²⁸⁵ Pierre Vilar, 'Problems of the Formation of Capitalism', *Past & Present*, 10, November 1956, pp. 30-35; his 'The Age of *Don Quixote'*, *New Left Review*, 68, July-August 1971, pp. 59-71; and *A history of gold and money*, 1976, chapters 12 to 14.

²⁸⁶ Smith, *The Wealth of Nations*, 1, 1976, p. 145, and 2, p. 343; Penguin, 1974, p. 462, and 1999, p. 252.

Such muddles were unavoidable until the novel relations of production had been built up so that any author might see how much more change might be possible, though not inevitable. Smith's parable of the division of labour inside a pin factory is, as its author admits 'very trifling', ²⁸⁷ and far from the era of machino-facture, a leap beyond the ken of the most of enlightened minds in the 1770s. Smith's pin-maker employs some dozen hands in a workshop, not a factory; with tools, not machines, and with motive power supplied by the workers themselves. It is far from certain that Smith ever saw the inside of a pin-maker's shop and perhaps had relied on an essay in Diderot's *Encyclopedie*. Smith's failure to mention Josiah Wedgwood's pottery works confirms a diagnosis of myopia towards the divisions of labour that were to help propel capital towards self-expansion.

Despite a widening acceptance of Smith's recognition that agriculture is not the sole source of additional value, few writers could see how the division of labour might make a nation's 'capital stock' more productive without adding to the numbers in need of food, thereby creating the crisis of subsistence, since known as the Malthusian trap. As Wrigley would have it: 'Only when output growth exceeds population increase substantially and consistently can there be grounds for supposing that an industrial revolution is in train.' The opinions that Malthus collated in 1798 had been correct and would have remained so had growth had to still depended on organic matter for fuels and fertilisers. Until Marx, no Political Economist had grasped that agriculture and processing could grow geometrically, outpacing population, an insight which fueled his fury because the new mode had no excuse for poverty; the venerable vision of communism as Cockaigne, with a superabundance of material goods, 'no longer seemed Utopian'. On longer seemed

Neither Ricardo nor Marx was smarter than Smith. The difference between them, as Smith set out in his thoughts on why a philosopher differs from a street porter, or a sheepdog from a poodle, was the outcome of the experiences that had formed each. ²⁹² Smith's political economy had been stimulated by commercial and demographic surges alongside government spending on wars to secure un-free trade. Ricardo was as bright as both of them, but the ruthlessness of his intellect was not why he could penetrate further than Smith yet not so far as Marx. The system was more advanced by 1817 when Ricardo published his *Principles*. By the time Marx returned to his critique of political economy in the British Museum Reading Room during the 1850s, the revolution in capital was at work through every level of the economy. ²⁹³

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²⁸⁷ Smith, *The Wealth of Nations*, 1, 1976, p. 14; Penguin, 1974, p. 109; Thirsk, 1978, pp. 78-83.

²⁸⁸ Jean-Louis Peaucelle, 'Adam Smith's use of multiple references for his pin-making example', *European Journal of the History of Economic Thought*, 13 (4), December 2006, pp. 489-512; R. Koebner, 'Adam Smith and the Industrial Revolution', *Economic History Review*, New Series, 11 (3), 1959, pp. 381-91; Ronald L. Meek and Andrew S. Skinner, 'The Development of Adam's Smith's Ideas on the Division of Labour', *Economic Journal*, 83 (332), December 1973, pp. 1094-1116; C.P. Kindleberger, 'The Historical Background, Adam Smith and the Industrial Revolution', Thomas Wilson and Andrew S. Skinner (eds), *Market and the state: essays in honour of Adam Smith*, OUP, Oxford, 1976, pp. 1-41.

²⁸⁹ Wrigley, 1988, p. 11.

²⁹⁰ Quesnay translations in Meek, *The Economics of Physiocracy*, 1963, pp. 81-2, 113, 123, 146, 181 n.3, 235 and 254; Smith, *Wealth of Nations*, 1976, 1, p. 238; Penguin, 1974, p. 325; Marx on Justus von Liebig, Everyman, 240, 343, 409, 547-8 and 629; Penguin, *Capital*, I, pp. 349, 446, 638-9, 718 and 973; Moscow, pp. 239, 328, 573, 504-6 and 573; mineral manures, Penguin, p. 773; Moscow, p. 622; *Capital*, III, Penguin, pp. 195 and 859; Moscow, pp. 101 and 726; improvements to inferior soils are part of Marx's analysis of absolute and differential rents, *TS-V*, II, pp. 241 and 245. Lenin does not draw his references together, 1964, pp. 88, 94, 110, 114, 182, 199, 262, 288, 293, 298, 372 and 420. Despite the importance of the increased output of food and the consequent population growth for the transformation of England during the Eighteenth century, dung and other fertilisers get perfunctory treatment. For all of Wrigley's celebration of the switch from an organic to inorganic economy, he makes no mention of fertiliser in his 1962 article, a passing one in his 1988 book (p. 30), and two in his 2006 essay, pp. 438 and 452. 'Manuring the Market' remains a topic in want of an author to update B.H. Slicher van Bath, *The Agrarian History of Western Europe A.D. 500-1850*, Edward Arnold, London, 1963, pp. 9-11 and 254-62; and Eric Kerridge, *The Agricultural Revolution*, George Allen & Unwin, London, 1967, chapter 5, and to follow the leads of Geoff Cunfer, 'Manure Matters on the Great Plains Frontier', *Journal of Interdisciplinary History*, 34 (4), Spring 2004, pp. 539-67. ²⁹¹ Wrigley, 2006, pp. 476-7; 1988, pp. 68 and 97.

²⁹² Smith, *The Wealth of Nations*, 1, 1976, pp. 28-30; Penguin, 1974, pp. 120-21.

²⁹³ Paul M. Sweezy, 'Karl Marx and the Industrial Revolution', Robert V. Eagly (ed.), *Events, Ideology and Economic Theory*, Wayne State University Press, Detroit, 1968, pp. 107-26.

Once the 'gold shit' had unleashed an unprecedented bout of expansion, ²⁹⁴ Marx's genius was equal to the tasks posed by its coruscations leading to the implosion of 1857, followed by the cotton famine during the War for Confederate Independence. ²⁹⁵ He could accept the inevitability of over-production because he was among the first to see that the system had broken free from being able to do little better than to stagnate when not contracting. Indeed, that change helped him to recognise the dynamics that validated his analysis past where the system was in the mid-1860s to predict that the centralising component of accumulation would intensify rivalries between firms to unfold into a stage of oligopolising competition, ²⁹⁶ and for Engels to explain how state functionaries could replace the prevailing personifications of capital without abolishing capitalism. ²⁹⁷

Since Cardoso's account of the origins of political economy fails to penetrate the heart of capital-within-capitalism, we need to unstitch one more conventional wisdom to see why the Cambridge authors have identified capitalism with 'growth'.

Perpetuating growth

In a text besotted with 'growth', it is no surprise that its obverse should get short shrift. Joseph Schumpeter is here on the failure to innovate, but not for contending that 'gales of creative destruction' are among the drivers of growth under capitalism. ²⁹⁸ Neal's 'Introduction' does no more than hint that, whatever else capitalism might be, it is not a perpetual-motion machine when he writes of 'the inevitability of flux in the economic performance', and of the need to 'resume growth' in the wake of 'successive shocks'. (pp. 4, 16 and 18-20) 'Flux', 'resume' and 'shocks' are about all we hear of the crises of abundance, which, under capitalism, replaced crises of subsistence by producing in excess of effective demand.

Until the 1800s, commentators had doubted whether any economy could move much beyond maintaining its average output so that the prospect of 'equilibrium' was to be welcomed as an escape from stagnation if not regression: 'The most distinctive feature of classical economic growth theory was that it came to see the growth process as an inexorable movement in the direction of a stationary state.'²⁹⁹ In 1767, Sir James Steuart broke new ground by proposing that the ever-present danger of a crisis could be managed by filling the gaps in demand between the agricultural and processing sectors through governmental support to refine the innovatory skills of the workforce, ³⁰⁰ as Wedgwood was doing through the promotion of luxury. ³⁰¹

Dearth due to stagnant or declining farm production for a growing population had been gone from most of England during the 100 years before Parson Malthus mounted his hack in 1798 on behalf of his pew-owning parishioners burdened with rising poor-law rates following

²⁹⁴ Engels to Marx, 23 September 1851, reproduced in Henry Mayer, *Marx, Engels and Australia*, Sydney Studies in Politics 5, F.W. Cheshire, Melbourne, 1964, p. 104; Marx, *CCPE*, p. 23.

²⁹⁵ Marx, *Capital*, III, Penguin, pp. 224-34; Moscow, pp. 128-37.

²⁹⁶ Michael A. Lebowitz, 'The Theoretical Status of *Monopoly Capital*', Stephen Resnich and Richard Wolff (eds), *Rethinking Marxism*, Automedia, New York, 1985, pp. 185-203; my *The Essence of Capitalism*, 2003, pp. 93-98.
²⁹⁷ Marx, *Capital*, III, Penguin, p. 569; Moscow, p. 438; F. Engels, '*Socialism – Utopian and Scientific*', *Karl Marx and Frederick Engels, Selected Works*, vol. 3, 1970, pp. 146-7.

²⁹⁸ Joseph Schumpeter, *Capitalism, Socialism and Democracy*, George Allen & Unwin, London, 1947, pp. 84 and 88.

^{88. &}lt;sup>299</sup> Phyllis Deane, *Evolution of economic ideas*, Cambridge University Press, Cambridge, 1978, p. 37; Wrigley, 1988, pp. 19-23.

³⁰⁰ Robert V. Eagly, 'Sir James Steuart and the "Aspiration Effect" ', *Economica*, New Series, 28 (109), February 1961, pp. 53-61; Aida Ramos, 'Luxury, Crisis and Consumption: Sir James Steuart and Eighteenth-Century Luxury Debate', *History of Economics Review*, 53, January 2011, pp. 64-70.

³⁰¹ N. McKendrick, 'Josiah Wedgwood: An Eighteenth-Century Entrepreneur in Salesmanship and Marketing Techniques', *Economic History Review*, New Series, 12 (3), 1960, pp. 408-33; Smith, *The Wealth of Nations*, Book Three, 'On the Natural Progress of Opulence in Different Nations'; Berg, 1985, chapter 2.

the spread of the Speenhamland system of relief³⁰² to cope with an escalation in bread prices which had started three years earlier.³⁰³ By 1820, Malthus - now a pedagogue for the East India Company - had come to fear under-consumption as well as the crises of subsistence on which his reputation festers.³⁰⁴ Although he never ceased to contrive statistical ratios for grinding the faces of the poor, 305 he devoted the final chapter of his *Principles of Political Economy* to the 'Excitements of wants of the body' to boost consumption among strata whom Marx dubbed 'gluttonous drones'. 306 Having plagiarised his 1798 Essay, Malthus was now verging on the original but had come too soon to recognise the inevitability of excess capacity from overaccumulation. For him, '[a] glut is said to be general, when, either from superabundance of supply or diminution of demand, a considerable mass of commodities falls below the elementary costs of production.³⁰⁷ Ricardo and Say accepted the prospect of moderate growth but denied the possibility of general gluts since supply seemed unlikely ever to grow far or fast enough to exceed total effective demand. 308

By contrast, disruptions are front and center in Marx's analysis of capitalist growth, with crises, as Dobb puts it, providing its dynamic and the means to enforce equilibrium. ³⁰⁹ Marx's crisis theory permeates the four volumes of Capital. Just as 'the commodity-form of the product of labour ... is the economic cell-form', so is 'the value-form of the commodity' embryonic for the crises peculiar to that mode since the circuits of expansion that transform 'a commodity into money' have to be followed by the 'retransformation of the latter from money into a commodity. '310 Should that reflux of exchange-values and their universal equivalent (money) cease to be possible, their interruption can herald a crisis. The complexities under which each seizing-up occurs are presented throughout volume II with its nonuniform circuits of money-, production- and commodity-capitals; the irregular turnover times for fixed and circulating capitals; and the disjunctures between the outputs of production goods (Department I) and consumer items (Department II). The pivotal role of money-capital in accumulation (M-C-M+) means that a steady flow of credit is essential to keep the other circuits going.³¹¹ On top of coping with this climate of turbulence, each capital must meet the simultaneous pressures from competitors and its own workforce, which it attempts by a continuous revolutionising of its means of production.³¹² The investments thereby required for fixed capital risk generating an excess capacity to produce, and thence a seizing-up of the demand for production equipment,

³⁰² Dorothy Marshall, 'The Old Poor Law, 1662-1795', Economic History Review, 8 (1), November 1937, pp. 38-47; Mark Blaug, 'The Myth of the Old Poor Law and the Making of the New', Journal of Economic History, 23 (2), June 1963, pp. 151-84; George R. Boyer, 'An Economic Model of the English Poor Law circa 1780-1834', Explorations in Economic History, 22, 1985, pp. 129-67.

³⁰³ C.R. Fay, 'The Miller and the Baker: A Note on Commercial Transition 1770-1837', Cambridge Historical Journal, 1 (1), 1923, pp. 85-91; Susan Scott, S. R. Duncan and C. J. Duncan, 'The Origins, Interactions and Causes of the Cycles in Grain Prices in England, 1450-1812', Agricultural History Review, 46 (1), 1998, pp. 1-14; Hoskins, 1968, pp. 15-31.

Malthus, *Definitions*, 1827, chapter 10, items 14-17.

³⁰⁵ Ronald L. Meek, 'Malthus - Yesterday and Today', Science & Society, 18 (1), Winter 1954, pp. 22-25 and 45-

<sup>6.
&</sup>lt;sup>306</sup> T.H. Malthus, *Principles of Political Economy*, Thomas Pickering, London, 1836, pp. 320-34 and 408ff.; Marx,

Malthus, *Definitions*, chapter 10, 1827, item 55. Keynes takes him up as a fellow under-consumptionist, *The* General Theory of Employment Interest and Money, Macmillan, London, 1936, pp. 32, 362-71.

Thomas Sowell, Say's law; an historical analysis, Princeton University Press, Princeton, 1972, pp. 89-108 and 115-41; William J. Baumol, 'Say's (at Least) Eight Laws, or What Say and James Mill May Really Have Meant', Economica, New Series, 44 (174), May 1977, pp. 145-61.

³⁰⁹ Maurice Dobb, *The Political Economy of Capitalism*, Routledge & Kegan Paul, London, 1940, chapter 4; Anwar Shaikh, 'Political economy and capitalism: notes on Dobb's theory of crisis', Cambridge Journal of Economics, 2 (2), June 1978, pp. 233-51. ³¹⁰ Marx, *Capital*, I, Everyman, pp. xlviii and 88; Penguin, pp. 90 and 205; Moscow, pp. 8 and 110.

Marx, Capital, II, chapters one to four. The labeling of the current implosion of capital expansion as the GFC – Global Financial Crisis – is not entirely wrong. That a crisis of excess capacity would erupt through the financial sector rather than in production or exchange is almost inevitable. The 2008-9 bailouts cleared one blockage to inter-

³¹² Nathan Rosenberg, 'The Direction of Technological Change: Inducement Mechanisms and Focusing Devices', Economic Development and Cultural Change, 18 (1, Part 1), October 1969, pp. 1-24.

where a contraction in orders is more disruptive than is a lack of effective demand from consumers. The chapters in volume III on the tendential law of the rate of profit to fall and its counter-tendencies take effect only within the forces presented in the previous volumes. Given the improbability of synchronising these elements, capital, even at the best of times, can expand only by grinding its gears and over-riding its brakes while one or more of its pistons misfire. The miracle is that social capital exists.

The revolution in capital – if sustained – makes a general glut inevitable. Equally, a general glut cannot precede the epoch where capital has become the product of its own reproduction (that is, where value is self-valorising). To date the first such crisis is to espy an upper time limit for the revolution in capital. A crisis of over-production could erupt no earlier than 1825 when, as Marx notes, 'the periodic cycle of its modern life opens for the first time'; other possible candidates for the initial crisis of excess capacity are 1837 and 1847. That 1857 was one is beyond doubt. Hence, the possibility of a growth-driven crisis falls within the Cambridge volume's cut-off date of 1848, though none of its authors pays any attention to the prospect. Rather, they operate on notions about 'growth' which gained currency some 100 years later without their showing any awareness of the threads, again both physical and ideological, from which their comfort blanket was women.

The capitalist road back

The Cambridge equation of capitalism with 'growth' relies on the experiences of capitalism - the treasure of Kuznetsian expansion³¹⁵ - across the past 200 years, which, despite recessions and deflationary spirals has seen unprecedented rises in output. Paradoxically, from the 1870s, growth slipped off the agenda as vulgar economists fled from studying the exploitation required for the accumulation of capital to realms of consumer choice. Few now notice Kuznets's doubts.³¹⁶

In the aftermath of the Great War, challenged by the rise of fascism, the survival of Soviet power, and the likelihood of a new global conflict in the pit of a deflationary spiral, H.A.L. Fisher peered into 3,000 years of European civilisation to see 'only one emergency following upon another.'³¹⁷ The economic depression led Keynes to his under-consumptionist *General Theory* (1936), a vanity which aspired to Einstein's.³¹⁸ The Thirties confirmed the socialist belief that capitalism was chaotic and wasteful, but generated anti-socialist programs emphasising production for use to be funded by Social Credit schemes. New Deals could not tame the animal spirits prowling the market.³¹⁹ Nothing short of world war could reverse the plunge, a whirlwind which blew all calculations off course. In 1943, Paul Samuelson warned that without a planned demobilisation of capital and labour, the U.S. of A. would undergo 'the greatest period of unemployment and industrial dislocation which any economy has ever faced.'³²⁰ When Roy Harrod (1939), and independently Evsey Domar (1945), sought the conditions for full employment in the long-term, their conclusions were far from cheery. Not only was capitalism as unstable as Marx had shown but it would achieve full employment only

³¹³ Marx, *Capital*, I, Penguin, p. 97; Moscow, p.14; Ian Bowen, 'Country Banking, The Note Issues and Banking Controversies in 1825', *Economic History*, 3 (13), February 1938, pp. 68-88; Harris, 1997, pp. 675-96.
³¹⁴ H.M. Boot, 'James Wilson and the Commercial Crisis of 1847', *History of Political Economy*, 15 (4), Winter 1983, pp. 567-84.

³¹⁵ J.L. Van Zanden thought it 'striking that historians of the Kuznets curve have made various subtle distinctions in the analysis of the actual development of inequality while the concept of "modern economic growth", the other "variable" in Kuznets's hypothesis, has been left aside', 'Tracing the Beginning of the Kuznets Curve: Western Europe during the Early Modern Period', *Economic History Review*, New Series, 48 (4), November 1995, p. 644.
³¹⁶ Simon Kuznets, 'Retardation of Industrial Growth', *Journal of economic and business history*, 1 (4), August 1929, pp. 534-60.

³¹⁷ Fisher, 1935, p. vii.

³¹⁸ Keynes, 1936, chapters 13-15.

³¹⁹ Wolfgang Schivelbusch, *Three New Deals, Reflections on Roosevelt's America, Mussolini's Italy, and Hitler's Germany, 1933-39*, Picador, New York, 2007.

³²⁰ Paul A. Samuelson, 'Full Employment After the War', S. Harris (ed.), *Post-War Economic Problems*, McGraw-Hill, New York, 1943, p. 51.

by chance. For Harrod, the system lived on a knife's edge. 321 Despite the Marshall Plan's stimulus of U.S. exports to Europe and the Korean War Boom, fears of a return to the 1930s hovered into the early 1950s. ³²² Domar introduced his 1957 collection of essays by admitting that it may appear strange 'that of the nine essays, at least four ... published between 1944 and 1948, treat growth as a remedy for unemployment rather than an end in itself.'323 Growth intensified during an 'affluence' underpinned by consumer credit, welfare systems and warfare states – a stream-lining shadowed by 'public squalor'. 324 Eisenhower-era spending on highways became part of a warfare Keynesianism shielded by an academic-industrial-legislative-mediamilitary cabal. 325 In 1957, however, the U.S. Mandarins were shocked into a new round of planning to overtake the Soviet Sputnik by landing Phineas Barnum on the moon.

Relief on the ideological front was already at hand to counter the appeal of Soviet-style central planning and to derail indicative planning in India, Japan and France. In 1956, W.W. Rostow extrapolated 'take-off' out of his study of the British economy during the nineteenth century into a universal account of how to industrialise anywhere, anytime. He spelt out his Cold-War intentions for the neo-colonised by adding 'a non-Communist Manifesto' to the titlepage of the 1960 book-length version while its back cover blurb proclaimed yet another demolition of Marx. 326 By reinstating dynamics and unevenness into explanations of growth, Rostow's 'take-off' challenged the interwar conservatives who had comforted themselves that industrialisation had not been a 'revolution' because it sprawled over several centuries. Economic historians again had to cope with the possibility that a spurt had re-set the clocks. Some of Rostow's mainstream critics moved the timing from the late 1700s to the railway age of the 1840s.³²⁷ Marxists were dismissive, pointing out how little in Rostow was original and that a cataloging of stages explains nothing about how to get from one to the next. 328 Bogged down in their 'transition' debate about what might have happened 200 years before the capitalist mode became dominant, they failed to consider whether 'take-off' encoded the revolution through which capital had become the product of its own reproduction.

Neal and Harley's respectful nods towards Marx suggest that, in the turbulence since 2007-8, even the conventionally wise suspect that all is not well. Still, the Cambridge authors register no awareness that a de-valorisation of capital has always been essential for markets to clear after the creation of the excess capacity from each bout of growth. The Bank for International Settlements warned again in June 2014 that the day of reckoning awaits both those corporates yet to deleverage and governments shuffling along on death-support systems by pushing debt-to-GDP ratios towards 300 percent. 329

Recent visitations by fictitious capital³³⁰ return us to the crux of capitalism: 'growth of what?' Some of its acolytes still think in terms of commodities, but rarely in terms of the value embodied in them by the application of human labour. Marx proved that 'growth' is the distinguishing mark of modern capitalism by demonstrating that it can be sustained only through 1,001 ways of intensifying the extraction of relative surplus-value. Slavery and serfdom had

³²¹ F.H. Hahn and R.C.O. Matthews, 'The Theory of Economic Growth: A Survey', *Economic Journal*, 74 (296), December 1964, pp. 779-902.

The Proceedings of the Annual Meeting of the American Economic Association record uncertainties within the highest echelons on how to secure their system's future, American Economic Review, 40 (2), May 1950. Evsey D. Domar, Essays in the theory of economic growth, OUP New York, 1957, p. 5.

³²⁴ Galbraith, *The Affluent Society*, 1957; Paul A. Baran and Paul Sweezy, *Monopoly Capital*, Penguin, Harmondsworth, 1965, chapters 5 and 10.

³²⁵ Gregory Hooks, 'The United States of America: the Second World War and the Retreat from New Deal Era Corporatism', Wyn Grant et al., (eds), Organising business for war, Berg, Providence RI, 1991, pp. 75-105; A.E. Holmans, 'The Eisenhower Administration and the Recession, 1953-5', Oxford Economic Papers, New Series, 10

^{(1),} February 1958, pp. 34-54. ³²⁶ Walt W. Rostow, *British Economy in the Nineteenth century*, Oxford at the Clarendon Press, 1948, and *The* Stages of Economic Growth, Norton, New York, 1960; Afanasyev et al., 1986, pp. 267-84.

327 Carlo M. Cipolla (ed.), *The Emergence of Industrial Societies*, vol. 1, Fontana, London, 1973, pp. 10-28.

³²⁸ review by Paul Baran and E.J. Hobsbawm, *Kyklos*, XIV, 1961, pp. 234-42.

www.bis.org/publ/arpdf./ar2014e.htm; for a seventy-year perspective see Wolfgang Streeck, Buying Time, The delayed crisis of democratic capitalism, Verso, London, 2014.

³³⁰ See my 'Fictitious capital' www.surplusvalue.org.au

expanded geographically to secure the means of production that those modes needed to survive – more slaves and virgin soil. The capitalist mode continues to expand spatially, perpetuating its genocides from the Amazon basin to Papua Barat, but far more of its success comes from colonising at home to induce needs through mass marketing before satisfying them – for the moment - courtesy of wallets replete with credit cards. Then the crash. World war redeemed the system during the early 1940s, an option less likely to succeed these days with an excess capacity in weapons of global destruction.

Conclude

Chalk up *The Cambridge History of Capitalism* as one more triumph for marketing. The University Press, or the volume's editors, spotted a gap in the 'Companion' market which is now so crowded that it would be possible to fill one with the back-cover blurbs of the 'Companions, Dictionaries, Guides and Histories to this, that and the other thing' from Cambridge, Oxford and Routledge. Once commissioned, their editors herd cats to cover as many bases as possible, taking care to be nice to the natives, though, with only one woman out of twenty contributors, Neal and Williamson fail the gender-equity test. Maxine Berg, Linda Colley, Leanore Davidoff, Elizabeth Fox Genovese, Sandra Halperin, Lisa Jardine, Rosa Luxemburg, Barbara L. Solow, Joan Thirsk, Ellen Meiksins Wood and Heide Wunder do not qualify even for the References where Phyllis Deane is the token female.

The chosen few tell us a lot about their specialties. Collectively they know next-to-nothing about capital-within-capitalism so that anyone who harvests their details will be scarcely better informed on the volume's designated subject. Instead, we will have evidence – were any more needed - of the intellectual bankruptcy consequent upon every attempt to deal with how our species reproduces itself under the rule of capital if we elide that second-by-second contest for possession of the product of our labours known as the class struggle. The volume, therefore, confirms the charge that Marx levels against John Stuart Mill, who, on realising that wage-slaves must advance their labour-power to capitalists before being paid, concludes that the propertiless are also capitalists: 'On the level plain', Marx tolls, 'mere mounds look like hills. We can measure the imbecile flatness of the modern bourgeoisie by the altitudes its "great intellects" can reach.' Transposing that dismissal onto the Cambridge authors would be too comforting for Marxists.

First, bourgeois scholarship was not always as blighted as in this collection. 333 We have noted the Germans around 1900 and the insightfulness of the conservative Joseph Schumpeter as they viewed capitalism through lenses ground and polished by historical materialists. No less a figure than the Downing Professor of the Laws of England at Cambridge, F.W. Maitland, recognised in 1897 that scholars could no longer 'rear the fabric of political and constitutional history without first laying an economic foundation ... the day for such castles in the air is passing. The theological historian Ernst Troeltsch lamented in 1912: 'The "Marxist" method, especially those elements within it which seem clearly justified, is gradually transforming all our historical conceptions and naturally it also transforms all our ideas about the present and the future. Leaders in every branch of the humanities and social scientists could nod: 'We are all

³³¹ Michael A. Lebowitz, 'Capital and the Production of Needs', *Science & Society*, 41 (4), Winter 1977-78, pp. 430-47, on www.surplusvalue.org.au

³³² Marx, *Capital*, I, Everyman, p. 562; Penguin, p. 654; Moscow, p. 518.

for instance, Frank E. Huggett, *The Land Question and European Society since 1650*, Thames & Hudson, London, 1975; N.J.G. Pounds, *An Economic History of Medieval Europe*, Longman, London, 1974; Jan de Vries, *The Economy of Europe in an Age of Crisis, 1600-1750*, Cambridge University Press, Cambridge, 1976; and von Tunzelmann, *Steam Power and the Industrial Revolution*, 1978.

³³⁴ F.W. Maitland, *Domesday Book and Beyond*, Fontana, London, 1960, pp. 416-7.

³³⁵ Ernst Troeltsch, *The Social Teachings of the Christian Churches*, vol. II, Harper Torchbook, New York, 1960, pp. 1002-4, quoted Paul Peachy, 'Marxist Historiography of the Radical Reformation: Causality or Covariation?', *Sixteenth Century Essays and Studies*, 1, January 1970, p. 8.

Marxists to this extent.'336 Solomon F. Bloom made the point in a manner which Marx would have enjoyed:

Some countries may escape the stage of capitalism, and some may perhaps avoid socialism, but none has so far been able to escape a stage of 'Marxism'. Each great cultural area of the globe seems fated to live through an absorbing and usually bitter controversy over the merits and relevance of the doctrines of Karl Marx. 337

From the Institute of Advanced Studies at Princeton, Felix Gilbert declared in 1971 that Marx had initiated the overthrow of 'an idealistic world outlook':

Whatever view one might have about the relation of the material to the ideal world and the degree of their dependence on each other, it is no long possible to see ideas as determining events or floating freely above them. After Marx the existence of a close relation between ideas and interest can no longer be doubted and only careful analysis can determine the function of ideas in social life ... ³³⁸

Marxism had offered progressive scholars a star to steer by. Think William J. Baumol, Mary and Charles Beard, Simone de Beauvoir, Fernand Braudel, M.I. Finley, Germaine Greer, Le Roy Ladurie, Wassily Leontief, C.B. Macpherson, Henri Perrine, Karl Popper, Joan Robinson, Oscar Spate, R. H. Tawney, Richard Titmuss and Thorstein Veblen. To compare that galaxy to the Cambridge crew is Hyperion to a satyr.

The Moments of Marxism were more than an intellectual achievement. German professors had ignored Marx's 1859 Contribution to the Critique of Political Economy but attended to Capital in 1867. The difference was not because Marx had refined his critique but because of practical criticism from an organised working-class allied to Socialist parties which preached a trinity of truths: first, the irreconcilable gulf between capital and labour; secondly, that the state is a class dictatorship; and thirdly, the impossibility of a fair day's pay under the rule of capital. For the first time in human history, mass action on a global scale strove to put an end to chattel-slavery, wage-slavery, war, the oppression of women and colonial subjugation. This two-pronged surge of workplace militancy and counter-hegemonic critique threw bourgeois ideologues onto the defensive. In reaction, the vulgar economists shifted their focus from production built on exploitation to consumption in the hope of calculating, as Joan Robinson quipped, the price of a cup of tea as determined by what goes on inside its buyer's brain. 339 The neo-liberal triumphalism in today's academe is the nadir of an age-old subordination of the intelligentsia to the needs of capital. 340 Faculties of Economics are re-badged Schools of Business in which the disciplines of Economic History and the History of Economic Thought turn out to have been non-subjects since genetic determinism reveals that competition and the market, like the hierarchies of class, ethnicity and gender, are as natural as capitalism, leaving nothing to investigate. The decline is blatant in the enthusiasm for making ideas the motor for economic change. David S. Landes went from a technical determinism of machines and clocks to privileging ideas as the prime driver, ³⁴¹ while Joel Mokyr slid from a broadly materialist account to one in which intellectual forces drive his industrial revolution. The Enlightenment now casts a pall over a scientific treatment of the relations between processing and capitalism. 342

³³⁶ Quentin Skinner, 'Meaning and Understanding in the History of Ideas', *History and Theory*, 8 (1), 1969, p. 53.

³³⁷ Solomon F. Bloom, 'Man of his Century: A Reconsideration of the Historical Significance of Karl Marx', *Journal of Political Economy*, 51 (6), December 1943, pp. 494-505.

³³⁸ Felix Gilbert, 'Intellectual History', *Daedalus*, 100 (1), Winter 1971, pp. 87-88.

³³⁹ Joan Robinson, *Collected Economic Papers*, Basil Blackwell, Oxford, 1977, vol. 4, p. 267.

³⁴⁰ See my 'Professions of Power', Tim Bonyhady and Tom Griffiths (eds), *Prehistory to Politics*, *John Mulvaney*, *the Humanities and the Public Intellectual*, Melbourne University Press, Carlton, 1996, pp. 216-40.

David S. Landes, *The Wealth and Poverty of Nations: why some are so Rich and some so Poor*, W.W. Norton, New York, 1998.

³⁴² Joel Mokyr, *The Gifts of Athena, Historical Origins of the Knowledge Economy*, Princeton University Press, Princeton, 2002, and *The Enlightened Economy*, 2009.

For reminders of how to weave ideas through material and political practices see Benjamin Farrington, *Greek Science*, Penguin, Harmondsworth, 1953; Dirk J. Struik, *Yankee Science in the Making*, Collier Books, New York, 1962; David F. Noble, *Forces of Production, A social history of Industrial Automation*, Knopf, New York 1984; and Witold Kula, *Measures and Men*, Princeton University Press, Princeton, NJ, 1986.

The revolutionary impulses that fell away after the 1940s revived in the 1960s only to be shattered before the Wall came down in 1989. Again, the sources for that outcome lie within the prolonged if disrupted post-war boom and the moral and material disasters of the centrallyplanned economies. The academic Left lost sight of class in a blizzard of Whiteness studies; 343 labour history shrivelled to labour-process studies with no valorisation process and hence no exploitation;³⁴⁴ environmentalists blinded themselves to the need that capital has to expand by plundering the wealth of nature and shifted the blame for planetary despoliation onto the greed of consumers afflicted with Affluenza.

Marxists, meanwhile, were self-destructing. 345 Neo-Ricardians denied the labour theory of value;³⁴⁶ technological determinists marginalised class struggle; no-bullshit Marxists reinforced that mechanistic mind-set; the wizardry of E.P. Thompson reduced class to the existential, opening the gate onto a slough of social history; the linguistic turn posited thinking as primary and the world as a text; shame-faced materialists trailed behind the science-deniers who replaced the possibility of relative knowledge about objective truths with 'truth-statements'; parlour Leninists saw Imperialism as a stricture against latter-day colonialism in the Third World and not as a call to analyse and smash monopolising capitals everywhere; cultural critics diverted their gaze from the brutalities of nation-market-states to the intricacies of an imagined community, and even more inanely to an imaginary one.

When the kissing stopped in 2007-8, the remnant Left lacked the nous to accept that the Tower of Pisa might be toppling. An implosion of capital was too much for an intelligentsia dependent on Post-ist pap or rigidified by a sectarianism from grouplets and cults unable to seek a crisis theory beyond a single chapter in volume three of *Capital* which, by shearing off its tendential law, they reduce to a falling rate of profit.³⁴⁷ A sprinkle of *Capital* reading groups has done little to put an end to the twaddle about governments making ideological attacks on education, health, housing, transport, power and water utilities when Neo-Liberalism justifies the necessity that capital has to expand, in these instances by colonising at home. To think that the sell-off of government assets is the result of a bad idea in the heads of nasty people is to blind oneself to the fact that Neo-Liberalism is a splendid idea for the corporates. Moreover, to suppose that an 'idea' can determine reality is to flounder in the swamp of German Idealist philosophising of the 1840s when 'a valiant fellow had the idea that men were drowned in water only because they were possessed by the idea of gravity.'348

The gap between the generations of bourgeois intellectuals who had been challenged by proletarian militancy and by materialist dialectics, on the one hand, and the authors of the 600 pages assembled under the false covers of a *History of Capitalism* is not half so dispiriting as its mirror image of the Marxians who straggled into the twenty-first century without having opened Capital. Even if we look no further than the matters broached in the volume under review, historical materialists can take heart from Harry Braveman, Robert Brenner, Suzanne de Brunhoff, V. Gordon Childe, Geoffrey de Ste Croix, K.M. Dallas, Maurice Dobb, Benjamin Farrington, Christopher Hill, Rodney Hilton, Eric Hobsbawm, Witold Kula, Bruce McFarlane, Ronald Meek, Rodney Needham, David Noble, Maxime Rodinson, Bernard Smith, Albert Soboul, Dirk J. Struik, Paul Sweezy, Takahashi Kohachiro, George Thomson, Eric Williams,

³⁴³ For two exemplary studies of race and class, David R. Roediger, *The Wages of Whiteness, Race and the Making* of the American Working Class, Verso, London, 1991; Marc Linder, Wars of Attrition, Vietnam, the Business Roundtable, and the Decline of Construction Unions, Fanpihua Press, Iowa City, 2000, chapter 9.

³⁴⁴ Contrast Marx, *Capital*, I, Everyman, chapter 5; Penguin and Moscow, chapter 7, with Raphael Kaplinsky, 'Restructuring the capitalist labour process: some lessons for the car industry', Cambridge Journal of Economics, 12, 1988, pp. 452-3; David Harvey davidharvey.org/2010/08/the-enigma-of-capital-and-the-crisis-this-time is far from being alone in sidelining the valorisation process as Rob A. Bryer documents for both critics and supporters of Harry Braveman's Labor and Monopoly Capital, and indeed for its author, 'Accounting and control of the labour process', *Critical Perspectives on Accounting*, 17, 2006, pp. 551-598. ³⁴⁵ For an early riposte to this round of *le trahison des clercs*, see, Ralph Miliband and Leo Panitch (eds), *The*

Retreat of the Intellectuals, Socialist Register 1990, Merlin Press, London, 1990.

³⁴⁶ Andrew Kliman, 'The disintegration of the Marxian school', *Capital & Class*, 34 (1), 2010, pp. 61-68.

³⁴⁷ Lebowitz, 1976, pp. 232-54 on www.surplusvalue.org.au

³⁴⁸ Karl Marx and Frederick Engels, 'The German Ideology', *M-ECW*, vol. 5, 1976, p. 24.

Eric R. Wolf and Ellen Meiskins Wood. The Cambridge collection is no occasion for gloating but one to goad ourselves on to conceptually-informed struggles against the Grand Narrative which is the expansion of capital and which again threatens to end in the 'common ruin of the contending classes.' 349

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 349 Marx and Engels, $\ensuremath{\textit{M-ECW}}$ vol. 6, 1976, p. 484.