The history of accounting and the transition to capitalism in England. Part one: theory

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Abstract

To appreciate the social significance of accounting today we must study it in changing socio-historical contexts and understand its ideas and techniques as products and producers of history. This paper (Part One) and a subsequent paper (Bryer, The history of accounting and the transition to capitalism in England. Part two: evidence, in press) argue for a social history of accounting change. In social history no theme has been more important than the meaning of modernity, and no explanation more debated than Marx’s theory of the transition to capitalism in England. The papers argue that historians of accounting can make a major contribution to this debate. Part One uses accounting ideas to explain Marx’s theory. Many believe his theory is ambiguous or relies on teleology or economic determinism. Sociologists often repeat Weber’s argument that Marx overlooked the cultural foundations of socio-economic action; the need for a transition to the calculative mentality of modern capitalism. Marxist historians dispute whether the primary cause was the rise of trade or class conflict in agriculture. While historical evidence broadly supports the class conflict view, controversy continues. This paper shows that, when translated into accounting ideas, Marx’s theory is unambiguous; relies neither on teleology nor economic determinism; is historically testable; includes class conflict in trade and agriculture, and calculative mentalities as necessary and sufficient causes of capitalism and, we argue, modern accounting. Part Two provides evidence consistent with Marx’s theory from accounting records produced during the English agricultural, commercial, and bourgeois revolutions. It concludes that accounting for the transition to capitalism should have a high priority on the research agenda of accounting historians. © 2000 Elsevier Science Ltd. All rights reserved.

To grasp the social meaning of accounting we must engage with the “important theoretical and historical debates which have traversed the social sciences” (Miller & O’Leary, 1987). In these engagements, not only may we understand more of modern accounting, but its historians may contribute to our understanding of social history. In social history no theme has been more significant than the question of ‘modernity’,¹ and no theory of social change has aroused more controversy than Marx’s explanation of the transition from feudalism to capitalism in England. Only Marxists debated this in the nineteenth century. However, following the publication of Moderne Kapitalismus by Sombart in 1902, and Weber’s articles on The Protestant Ethic and the Spirit of Capitalism in 1905, the words feudalism and capitalism became common currency among historians and sociologists. As Holton says, they “became important reference points in a wide-ranging debate over the origins of modern Western society, a debate in which Marxists and non-Marxists alike increasingly

¹ That is, identifying and explaining the differences between the economic and social structures and mentalities of the present and the past.
came to think of capitalism as the phenomenon whose historical appearance was to be explained” (Holton, 1985, pp. 12–13). There is still no agreement as to precisely what these words mean.

Contributors to the transition debate have used three theoretical approaches. Neo-classical economics in the tradition of Adam Smith; Marx’s idea of the mode of production; and Weber and Sombart’s idea of calculative mentality. No approach commands general support, and there has been no synthesis. The aim of this paper is to use Weber’s link between calculative mentalities and accounting to explain Marx’s theory of the transition to capitalism as a history of accounting.² Part Two (Bryer, in press-c) argues that Marx’s theory is consistent with the accounting evidence available.

From the perspective of this paper, implicitly or explicitly all explanations of the differences between past and current accounting presume a theory of the transition to modern capitalism. Theoretically, if not always in practice, ‘traditional’ historians of accounting mirror neo-classical economic explanations of the transition (Miller & Napier, 1991; Napier, 1998). Their central problem is explaining the apparently long delay in England from charge and discharge accounting in the thirteenth century to the general appearance of double entry bookkeeping and cost accounting during the industrial revolution. Explicitly or implicitly traditionalists explain the apparently slow evolution of accounting, followed by an apparently sudden change, by the absence or presence of economic ‘pressures’ from an ‘environment’ operating on presumed, transcendental ‘economic needs’ (Carnegie & Napier, 1996; Hopwood, 1987). Where traditionalists are not teleological, their failure to specify the social mechanisms behind accounting change reduces their explanations to naive functionalism (Bryer, 1998b; Hopwood). In short, we cannot use the traditional approach to write “a history of the emergence of accounting as it now is” (Hopwood, p. 211).³

To avoid these problems, historians of accounting have increasingly turned to the work of philosophers, sociologists and historians for models and approaches to help uncover accounting as a social reality. The work of Michel Foucault in particular has inspired some important contributions (Napier, 1989). However, while his approach addresses the question of social meaning, its totalising discourses and its disdain for the material world undermine its potential contribution to a history of accounting change (Armstrong, 1994; Neimark, 1994). Furthermore, Foucault’s framework is not an obvious choice for the historian who seeks to implicate accounting in broad social changes. Unlike Marx and Weber, to whom Foucault is otherwise indebted, global social processes are of no concern (Smart, 1983, p. 125, 1985, p. 16). His view that economics is an empirical science (e.g. Foucault, 1970, p. 345) also undermines the applicability of his approach to accounting. Although he does not say what he means by economics, it is likely that Foucault included Marx’s political economy.⁴ Like Marx, he identified its object as labour and production. He openly accepted “it is not possible at the present time to write a history without using a whole range of concepts directly or indirectly linked with Marx’s thought” (Foucault, 1980, p. 53). He levelled his criticisms at Marxists rather than Marx.⁵ If he includes Marx’s political economy within economics, and if, as I argue here and elsewhere, it

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² Note that I include methods of bookkeeping and auditing within the domain of accounting. Although I shall use the phrase ‘Marx’s theory’, this is to be understood as my reading of Marx. As I give a novel reading for a particular purpose I only selectively interrogate or call upon the Marxist literature in this paper. Whether my reading helps to reveal the ‘true Marx’ is beyond its scope.

³ For historical and sociological criticisms of the Smithian economic approach to the transition see, for example, Holton (1985, Chapter 2).

⁴ Foucault’s interest shifted away from Marx’s ‘historical materialism’, and presumably his political economy, when he was a student (Smart, 1985, p. 15).

⁵ Although Foucault did not think Marxism was a new science (Smart, 1983, p. 79), he did appear to think it was scientific in his sense, at least in the nineteenth century. Responding to the “reproach” that “You seem to have kept your distance from Marx”, Foucault retorted that although he used Marx’s ideas he did not feel the need to quote him. “When a physicist writes a works of physics, does he feel it necessary to quote Newton and Einstein?” (Foucault, 1980, p. 52).
provides a plausible theoretical foundation for accounting, then we should not try to understand it as one of Foucault’s inherently subjective and unsystematic ‘human sciences’. Many historians of accounting would agree that, as Foucault has argued for other social practices, we must understand accounting in its social context as an instrument of power and domination. However, the above reading of Foucault suggests that we should not, as Carnegie and Napier put it, necessarily only perceive “accounting as one social practice among many” (Carnegie & Napier, 1996, p. 7). From the perspective developed here, accounting is a practice whose social foundations are objective and systematic (Bryer, 1998a, 1998b, in press-a, in press-b). It is, therefore, amenable to empirical scientific inquiry in Foucault’s sense.

Only Hoskin and Macve (1986) try to explain the transition to modern accounting using Foucault’s approach. It offers, they say, a coherent explanation of the appearance of “full-scale accounting...in...refined single-entry systems like charge-discharge, and especially in the new double-entry systems (in the thirteenth and fourteenth centuries)” (Hoskin & Macve, p. 107). At the same time, it explains why double-entry and cost accounting remain “sporadically used until the nineteenth century” (Hoskin & Macve, p. 107). Hoskin and Macve accept the traditional view that, as they put it, there was a “long delay” in the development of the “modern discursive obsessions with two now familiar constructs: accountability and profitability” (pp. 108, 123). They explain “the much later social development of a discourse of accountancy...in the nineteenth century” (Hoskin & Macve, p. 106) by the invention of a new disciplinary technology in education. Until then, they say, these two constructs were “absent” (Hoskin & Macve, pp. 123, 124). The history of accounting advanced here undermines the traditional chronology and, therefore, Hoskin and Macve’s explanation. It shows the obsessions of modern accounting emerged over a much longer period of transition through intermediate forms. Their roots lie in the obsessions of their parents — feudal lords and merchants. Their history embraces the social upheavals in agriculture from the end of the fourteenth century; the commercial revolution of the sixteenth century; the civil wars in the mid-seventeenth century; and the agrarian revolution that followed. The modern obsessions with profitability and accountability did not suddenly appear in the nineteenth century. Part Two (Bryer, in press-c) shows they appeared during the early seventeenth century, and argues they became firmly established in the discourse of the English bourgeoisie from the middle of that century.

Missing from the accounting literature is engagement with the historical theories of Weber and Marx. Starting to fill this gap is the primary purpose of this paper. The well-known ‘Weber-Sombart’ debate promoted by Yamey (1949) almost ignores Weber. Modern scholars only rarely highlight that accounting and its history are central to his work (see, for example, Burchell et al., 1980; Miller & Napier, 1991). He is of relevance to all historians of accounting who eschew economic determination; all those who “regard accounting as predominantly a cultural phenomenon rather than a technique” (Carnegie & Napier, 1996, p. 16). The predominant basis of social action in his sociology is economic culture, his ‘sociological categories of economic action’, or

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6 Predictably in this interpretation, Foucault makes no attempt to apply his approach to business as a discipline, and therefore says nothing about accounting (Miller & O’Leary, 1987, p. 237; Hoskin, 1994, p. 73).

7 Hoskin and Macve (1986) say the Oxford English Dictionary’s first citation of the written use of the word ‘accountability’ in 1794; its the absence from Johnson’s 1754 dictionary; and its presence in Webster’s 1828 dictionary, supports their case that the idea appeared around 1800. However, as we shall see, the meaning of the word in Hoskin and Macve’s sense of “Calculability, i.e. the use of the accounting record as a means for predictive control”, is as old as the word ‘account’. Use of the words “accountable” and “accountableness” from the sixteenth and seventeenth century also undermine their case. Hoskin and Macve say these words have distinctly different meanings from accountability. However, they appear identical. Accountability means ‘the state of being liable to answer for one’s conduct’ and ‘accountableness’ means the ‘quality of being accountable’ (1986, fn. 8). The Oxford English Dictionary lists ‘accountable’ used in the sixteenth century to mean ‘Liable to be called to account; responsible (to, for)’. I discuss the historical meanings of accountability later.

8 Part Two analyses Yamey’s contribution to this debate.
calculative mentalities. His history of modern capitalism is a history of the transition from a pre-capitalist calculative mentality of ‘budgeting’ to that of ‘profit-making activity’. His “rationality theme...provides the focal point for all Weber’s socio-historical interests” (Cohen, 1981, p. XVIII). Central to this theme is “a form of monetary accounting which is peculiar to rational economic profit-making; namely, ‘capital accounting’...” (Weber, 1947, p. 191). Capital accounting provides the concrete foundation for both elements of Weber’s idea that modern capitalism has a calculative mentality embodied in the ‘economic culture’ of capitalist enterprises, and the ‘spirit’ of their entrepreneurs.

Weber traces the origin of the spirit of capitalism to the unintended consequence of certain aspects of Protestant teaching, particularly its unique idea of the calling — that success in earthly work is visible evidence of salvation. The Protestant ethic of diligent and methodical labour, of frugality and improvement is, Weber argues, appropriated by pre-modern capitalists as their organising principle, production for profit. Weber claims the Protestant ethic has an ‘elective affinity’ with the spirit of modern capitalism. Weber says there is an affinity between the continuous psychological pressure exerted by the Protestant calling, with its ‘moral accounting’ by reference to earthly works, and the defining feature of modern capitalism, the rational organisation of labour in production. Although only an elective affinity, Weber clearly implies that “the Protestant ethic was in some sense responsible for the spirit, then the form of capitalism” (MacKinnon, 1993, p. 211). Weber, however, provides us with no theoretical or historical link. He contents himself with the assertion that Calvinism activated the spirit of modern capitalism and that capitalists appeared when the economic preconditions (free wage labour, technology, commercial law, trade, etc.) were also present. Sociologists recognise this is the most important yet the weakest and least examined element in Weber’s argument (Marshall, 1991, pp. 192–193). Some have accepted that accounting could be a prime source of evidence of the calculative mentalities of sixteenth and seventeenth century businessmen. For example, as Holton says, “evidence of systematic expansionism linked to book-keeping is...consistent with Weber’s argument about more modern forms of the spirit of capitalism” (1985, p. 116). The paper explores Weber’s capital accounting in some depth. Given its central role in his sociology it is “of great importance to understand what is involved in this phenomenon”, as Cohen says (1981, p. XXXIII). Weber claimed his sociological categories of economic action “entirely avoid the controversial concept of value” (1947, p. 158). He presumably meant Marx’s labour theory of value, as Weber’s only criticism of neo-classical economics was the presumed self-evidence of its assumptions. His objective was to reconceptualise neo-classical economic action as a system of rational social action. However, Weber avoids labour value by embracing the neo-classical idea of value. His understanding of rational capital accounting turns out to be a version of economic income accounting. This conclusion undermines the claim by Weberians, that, by providing a cultural explanation of capitalism, he delivered a fatal blow to Marx. As Weber put it, “the view of historical

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9 Note that by culture Weber “intends to deal with economy and society...not with economy and Kultur — literature, art, science” (Holton, 1985, p. 65; Roth, 1978, p. LXXXIII). Note also the contrast between Miller and Napier’s (1991) Foucaultian “genealogies of calculation” that refer to “multiple and dispersed surfaces of emergence of disparate practices of economic calculation” (p. 631), and Weber’s and our concern with general, socially determined, calculative mentalities.

10 Weber’s rationality theme is his overarching concern with the penetration of a “peculiar and unprecedented rationality” into all aspects of western society. For Weber, this is a ‘formal rationality’ based on “technical means involving precise calculations and abstract principles”, that has supplanted all ‘substantively rational’ ethical values (Cohen, 1981, pp. XXVI–XXVII).

11 In other words, historical actors could choose (elect) to see a likeness (affinity) between Protestant teaching and the economic ethic of modern capitalism.

12 “[A]ccording to his wife at least, he expressed ‘great admiration’ for...[Marx’s] ‘brilliant construction’...” (Marshall, 1982, p. 151). However, as Cohen says, “While Weber does emphasize the relationship between wage labor and capital, the surplus theory of value plays no central role in his conception of modern capitalism” (Cohen, 1981, p. XXIV).
materialism, frequently espoused, that the economic is in some sense the ultimate point in the chain of causes is completely finished as a scientific proposition” (quoted in Marshall, 1982, p. 151). I argue that Weber’s misunderstanding of modern accounting renders his theory irrelevant, either as a critique of Marx or as an explanation of the economic culture or spirit of capitalism.

The reluctance of accounting historians to engage with Marx is understandable given the apparently insuperable obstacles, particularly his supposed economic determinism (e.g. Hoskin, 1994; Keenan, 1998). Weberians also criticise Marx’s explanation for ignoring subjective human meaning, for Weber the foundation of all social action (Weber, 1968, p. 4). For example, Holton’s view:

[O]ne of the most serious consequences of the Marxist theory of society has been to treat the emergence of ‘capitalism’ on the level of culture and ‘mentalities’ as relatively unproblematic. In this way rational economic man, while seen as a historical product, is nonetheless interpreted as the product, or at best facilitator of an already pre-existent material process of capitalist development. For since ‘ideas’ are viewed as but a reflex rationalisation of a material system, they cannot pre-date the existence of such a system (1985, p. 101).

If we understand Marx’s theory of the transition as a social history of accounting, this problem disappears in the same way that it does for Weber. Even though Weber’s explanation recognises the need for economic preconditions before modern capitalism appears, he avoids determinism because “rational accounting...[is] presuppositional to [his] institutional view of modern capitalism in the same formal sense that the surplus theory of value is presuppositional to Marx’s view” (Cohen, 1981, p. XXXVI). However, whereas Weber presupposes the appearance of capitalist rationality and accounting, Marx does not presuppose his theory of surplus value but provides a historical explanation of its emergence. Furthermore, Marx’s theory of value provides a remarkably insightful theory of modern capital accounting (Bryer, 1993a, 1993b, 1994b, 1998a, 1998b, in press-a, in press-b). The paper draws on this work to show that Marx’s ideas of the feudal and capitalist modes of production embody distinctive economic cultures or calculative mentalities. It follows that Marx is not an economic determinist, as we shall see.

If Weberians accepted Marx’s accounting is superior to Weber’s, they would still claim Weber’s implicit critique holds. Namely, that Marx does not explain how, in Weber’s terms, the historical process that dissolved the feudal mentality created the capitalist mentality. On this fundamental point many Marxist historians agree, at least implicitly. At the centre of the inconclusive debate following Dobb (1946) (e.g. Aston & Philpin, 1985; Hilton, 1976) is whether Marx’s prime mover, the necessary and sufficient cause of the transition, was the rise of trade or class conflict between peasants and lords. As Brenner (1977, 1989) shows, those who have argued for trade have relied on Marx’s early work based on Adam Smith’s view that it promoted the division of labour. By contrast, those who have argued for class conflict in agriculture rely on the idea of the mode of production developed in his later works — Grundrisse (written in 1858) and the volumes of Capital (Marx, 1973, 1976b, 1978, 1981). However, even those who accept that Marx’s later theory is broadly consistent with the historical record, believe he did not fully explain the transition. For example, Brenner thinks he “did not systematically analyse the operation of pre-capitalist systems, as he did that of capitalism; nor did he explain how their own functioning could bring about a transition to capitalism” (1989, p. 293; see, also, for example, Holton, 1985, pp. 70–71, 105; Rigby, 1998, pp. 157–158). The paper draws upon the close links between accounting and Marx’s political economy to reject this view. It builds on Weber’s insight into the

13 Whether Weber directed this at Marx or Marxists is unclear. However, as Marshall says, “irrespective of the genealogy of Weber’s argument, one of its inescapable results is...to challenge directly the Marxist account of the relationships between ideology...and the...productive base, and between ideas, interests and actions in general” (Marshall, 1982, pp. 150, 152).
importance of accounting for understanding calculating mentalities. It argues that we must organise the history of the transition to capitalism around the history of accounting. As Weber put it in the German edition of his *General Economic History*, “The current economic system is... rationalised to a high degree, owing to the penetration of bookkeeping, and in a certain sense, and within certain limits the entire economic history is the history of economic rationalism, which is based on accounting and today has attained a triumph” (quoted in Cohen, 1981, pp. LII–LIII).

Only if we take the accounting implications of his political economy seriously is Marx’s theory of the transition visible. This theory develops his insight that the essential difference between the feudal and capitalist modes of production is their way of extracting surplus value from labour. I argue elsewhere that feudal and capitalist modes of accounting correspond to these ways (Bryer, 1994a). Using these ideal-types, the paper derives the transitional forms of accounting that should appear from Marx’s discussions of the transition. In outline, his theory suggests a transition from the feudal mentality of maximizing consumable surplus, through a transitional ‘capitalistic’ mentality. In its developed form, the capitalistic mentality maximizes what I shall call the feudal rate of return on capital. This is feudal surplus (the consumable surplus) divided by the initial capital advanced. In Marx’s theory, capitalistic tendencies appear in both agriculture and trade. For capitalism to appear, Marx says, the peasants must become ‘free’ wage labourers, and face ‘free’ capital. For Marx, a class of farmers becomes capitalist in the fifteenth and sixteenth century with the appearance of wage labour. While these farmers, like modern capitalists, focus on the exploitation of wage labour in production, they continue to maximize feudal surplus. They are, Marx says, only ‘formally’ capitalists. Capitalistic tendencies appear in trade with the first joint stock companies and pursuit of the feudal rate of return. By contrast, the modern mentality aims to maximize Marx’s capitalist rate of return, profit divided by capital employed in production. In Marx’s theory this emerges from the historical interaction of the capitalistic mentalities in agriculture and trade. From the middle of the sixteenth century, landed and mercantile interests pooled their wealth in international trade. Following social conflict culminating in the ‘bourgeois revolution’ of the mid-seventeenth century when overseas capital gained its freedom from feudal control, the rate of return on capital became the dominant economic ethic. This capital from trade flowed back onto the land, bringing with it the capitalistic rate of return mentality. Harnessing this to capitalistic farming produced the modern capitalist mentality. In short, in Marx’s theory capitalism resulted from the fusion of the calculative mentality of the capitalistic farmer, itself derived from the feudal lord seeking the maximum feudal surplus from labour in production, and the calculative mentality of merchant capitalists seeking the maximum feudal rate of return on their capital. In this paper I argue that Marx’s theory provides a clear historical chronology and non-determinist explanation of the emergence of capitalism, and that accounts provide objective signatures to test it. Table 1 below summarises the signatures our history of accounting must identify and explain. In Part Two (Bryer, in press-c) I show the available accounting evidence is consistent with Marx’s theory. I conclude it provides a framework for a plausible history of accounting in England from the Middle Ages that we should thoroughly test against the evidence that lies untouched in many archives.

We proceed as follows. Part One first links Marx with accounting. It argues that his idea of

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the mode of production embraces a socially determined calculative mentality. Second, it provides an accounting critique of Weber’s spirit of capitalism. Third, the theoretical core of the paper, it explains Marx’s theory of the transition as a history of accounting during the English agricultural, commercial, and bourgeois revolutions, and highlights key confusions in the transition debate. Part Two provides evidence on farmers’ account books from the late fifteenth century to the end of the sixteenth century on the appearance of Marx’s capitalistic farmers. It outlines the history of accounting by merchants during the commercial revolution from the mid-sixteenth to the late seventeenth century. This evidence is consistent with Marx’s theory that only when merchants pooled or ‘socialised’ their capital in partnerships and joint stock companies did they become capitalistic. The centrepiece of Part Two is a case-study of changes in accounting by the English East India Company (EIC) from 1600 to 1657. This shows accounting change embroiled in escalating socio-economic conflicts within the company ultimately resolved by a bourgeois revolution that abolishes its feudal directorate. Modern managers replaced these great merchants, specialised wage workers accountable to a ‘social capital’. This evidence is consistent with Marx’s view that a society-wide bourgeois revolution occurred in mid-seventeenth century England. Finally, Part Two (Bryer, in press-c) analyses available farmers’ accounts and agricultural texts and literature from the seventeenth and eighteenth centuries. It concludes that this evidence is consistent with Marx’s view that the modern capitalist mentality began to spread in agriculture from the later seventeenth century. In the concluding remarks I emphasise the potential importance of the history of accounting for understanding modern society and modern accounting, and outline some opportunities for archival research.

1. Marx and accounting

1.1. Modes of production and calculative mentalities

While “the concept of the mode of production is accepted by all Marxist historians as an essential tool in undertaking historical investigation”, there is, as Hilton says, continuing debate about its precise meaning (1985, p. 6). It has become accepted by some Marxists that in his early works Marx left himself open to the charge of economic determinism (e.g. Baechler, 1971; Brenner, 1977, 1989; Walton & Gamble, 1972). However, this charge is unfounded for the mode of production idea in his later works. At the core of Marx’s mode of production is a calculative mentality.

To understand a mode of production and how one changes into another, it is necessary to understand Marx’s “forces of production”; his “social relations of production”; and their “inter-relations” (Hilton, 1985, p. 6). By a society’s forces of production, Marx means its “productive power”, the potential “means of production” available (1971, p. 215). This includes not merely material resources but “the main force of production...of society”, or “men” and “their material forces of production” (1971, pp. 20–21, emphases added). In Marx’s writings “A productive force...
is the collective power of social production” (Marsden, 1998, p. 104). It is “the organization of consciousness and human activity” (Avineri, 1971, p. 76). In short, the social forces of production define the material and social resources available for production and its limits. Marx’s social relations of production define the organising principle of production. In activating the social forces, the social relations themselves become forces of production. They are, Marx says, “forms of development of the productive forces” (1971, p. 21). The forces and relations of production, therefore, while distinct, have a “dialectical connection” (Marx, 1971, p. 215).

In his early (pre-Grundrisse) works Marx clearly “reject[s] in theory Smith’s working conception of the human being as homo economicus” (Brenner, 1989, p. 282). However, his stress on the role of trade in fostering the division of labour and class conflict, has opened Marx’s early formulations to criticism for their implicit reliance on Adam Smith (Brenner, 1977, 1989).17 In his later works Marx developed his political economy as a critique of Smith (and others). There he clearly elaborates why, in the face of unprecedented developments in the social forces of production, owners of wealth changed from lords into capitalists. Marx freed himself from Smith by arguing that driving the transition was changing class interests, not individual economic self interest. Marx’s definition of class interests comes from his insight that the important difference between the social relations of feudal and capitalist production is the way of extracting surplus. The following section shows that these different ways correspond with different calculative mentalities, with different calculative mentalities. If a mode of production embodies a calculative mentality it is easy to dismiss the charge of ambiguity and economic determinism regularly levelled at Marx’s classic passage where he summed up his “general conclusion” from 15 years study.

In the social production of their existence, men inevitably enter into definite relations, which are independent of their will, namely relations of production appropriate to a given stage in the development of their material forces of production. The totality of these relations of production constitutes the economic structure of society, the real foundation, on which arises a legal and political superstructure and to which correspond definite forms of consciousness. The mode of production of material life conditions the general process of social, political and intellectual life. It is not the consciousness of men that determines their existence, but their social existence which determines their consciousness. At a certain stage of development, the material productive forces of society come into conflict with the existing relations of production or — this merely expresses the same thing in legal terms — with the property relations within the framework of which they have operated hitherto. From forms of development of the productive forces these relationships turn into their fetters. Then begins an era of social revolution. The transformation in the economic foundation leads sooner or later to the transformation of the whole superstructure (Marx, 1971, pp. 20–21).

In terms of calculative mentalities this reads as follows. Production is a social activity, it does not depend on individuals. To each social basis of production ‘correspond definite forms of consciousness’, that is, definite calculative mentalities ‘appropriate’ to the social material forces available. In other words, the capitalist mentality is not compatible with feudal material forces, and the feudal mentality is not compatible with capitalist material forces.18 The calculative mentality

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17 Marx’s early works are almost invariably the source of quotations at which to level the charge of ‘economic determinism’ or causal ‘ambiguity’ (e.g. Holton, 1985, pp. 67–68).

18 From our perspective, Marx summarised this thought in his much debated aphorism that “The hand-mill gives you society with the feudal lord; the steam mill, society with the industrial capitalist” (Marx, 1976, p. 166). From an accounting point of view its meaning is clear: capitalist accounts could not control feudal forces of production, and vise versa. As we shall see, capitalist accounts presuppose that labour, the means of subsistence, and the means of production are available as commodities on competitive markets — Marx’s general commodity production. Feudal accounts presuppose the availability of self-sufficient peasants.
embodied in the social relations of production ‘conditions’ general consciousness, that is, provides the framework within which a ‘superstructure’ of general forms of mentality is built. For example, it conditions the legal regulation of property relations, who gets what from production. The calculative mentality develops the forces of production. However, eventually the existing social relations and their calculative mentality impose an unacceptable limit to the acquisition of surplus by the owners of the means of production. When this limit becomes recognised, a process of class conflict begins which leads to a social revolution. This process undermines the existing social organisation of production and its calculative mentality, and a new social organisation and mentality emerge. The social organisation of production around a particular calculative mentality is, we shall argue, what Marx meant by the ‘economic foundation’ of society.

1.2. Accounting for feudalism and capitalism

For those who accept that Marx was no economic determinist, the problem remains that no one has derived testable hypotheses from his idea of the mode of production. Hilton highlighted this in the first transition debate. As he said, the test is “not whether or no[t] it sounds convincing, but whether it helps to interpret the facts and solve some of the problems which confront the historian of the middle ages” (Hilton, 1976, p. 150). The primary problem is “how far older forms of economic structure and social organisation persisted, and how far they remained dominant” (Hilton, 1981, p. 150; see also Dobb, 1946; Dyer, 1991; Glennie, 1988; Rigby, 1998). The persistence of older forms remains undecided because the question “what is a capitalist?” remains unanswered (Tribe, 1978, p. 19). Neither the expansion of commodity production, nor the expansion of population, of trade, of wage labour, nor the size of enterprises, have provided generally accepted measures. The Marxist Historians’ Group suggested “degree of separation of the producer from his means of production” (Tribe, p. 20). Hilton suggested observing the development and use of production techniques, and the way of employing labour (1976, pp. 152–154). No-one has elaborated which aspects of Marx’s idea of the mode of production these measures test, nor what to observe.

Historians and Marxists have overlooked the possibility of observing Marx’s mode of production by its accounting signature. Marx’s distinctive ways of extracting surplus value are the essence of his social relations of production; his different ways of organising and controlling the process of production. They are the defining feature, or ‘economic base’, of a society. As Marx put it, “The specific economic form in which unpaid surplus labour is pumped out of the direct producers determines the relationship of domination and servitude as this grows directly out of production itself and reacts back on it as a determinant” (1981, p. 927). He stressed this was where “we find the innermost secret, the hidden basis of the entire social edifice” (1981, p. 927). These different ways of extracting surplus correspond to historically distinctive modes of accounting (Bryer, 1994b). It follows that where we find the feudal mode of accounting, we have evidence of Marx’s feudal relations of production. Furthermore, as “profit assumes capital” (Marx, 1981, p. 1022), where we find modern capitalist profit we have evidence of the social relations of capitalism.

From Marx’s perspective, accounting is a political intervention in production. If we organise production to extract surplus value, for Marx we organise it politically. As Meiksins Wood says, Marx’s idea “treats the economy itself not as a network of disembodied forces, but like the political ‘sphere’, as a set of social relations”. For Marx, therefore, “the productive base itself exists...
in the shape of social, juridical, and political forms — in particular forms of property and domination” (1981, pp. 68, 69). These different forms are his different ways of surplus extraction. When he says different modes of production describe different ‘economic’ systems, what he means is different systems of “social production, whose relations we call, precisely, economic relations” (Marx, 1973, p. 489). In short, economics is not about man’s relation to the material world, but about the political organisation of the social relations of production. Central to this is a mode of accounting that provides a foundation for the social control of production (Bryer, 1994b, 1998a,b, in press-a, in press-b). Modes of accounting are organic elements of their modes of production. This makes the history of accounting useful because accounting evidence can provide an objective test of Marx’s theory.

1.3. Capitalist and feudal modes of accounting

According to Marx’s method, an accounting history of the transition must start from a clear understanding of modern capitalism.

Bourgeois society is the most developed and the most complex historic organization of production. The categories which express its relations, the comprehension of its structure, thereby also allows insights into the structure and the relations of production of all vanished social formations out of whose ruins and elements it built itself up, whose partly still unconquered remnants are carried along with it, etc... The bourgeois economy thus supplies the key to the ancient, etc... Capital is the all-dominating economic power of bourgeois society. It must form the starting point as well as the finishing point, and must be dealt with before landed property [i.e. the feudal mode of production]. After both have been examined in particular, their interrelation must be examined (Marx, 1973, p. 105).

Absent from the transition debate is the recognition that Marx’s history of capitalism culminated with the hegemony of ‘total social capital’, a world where investors collectively own all production and trade and control it by means of the general rate of profit (Bryer, 1994b). Marxists and non-Marxists alike appear to believe modern capitalism is dominated by individual capitalists (e.g. Dobb, 1946, p. 18; Gerth & Mills, 1948, p. 68; Hilton, 1976, p. 145; Holton, 1985, p. 66; Kriedte, 1980, p. 9; Mandel, 1981, p. 76; Steedman, 1977, p. 16). By contrast, Marx recognised that in its developed form “Capital shows itself more and more to be a social power, with the capitalist as a functionary — a power that no longer stands in any possible kind of relationship to what the work of one particular individual can create, but an alienated social power which has gained an autonomous position and confronts society as a thing” (Marx, 1981, p. 373). For Marx the epitome of modern social capital is the joint stock company. Here the manager replaces the individual capitalist. A manager is a worker whose job is to administer capital — to control production and the generation of surplus — in the interests of social capital (Marx, 1981, p. 512).

The social nature of capital is a critical element in Marx’s explanation of the appearance, development, and functioning of capitalism. As he explained in a letter to Engels in 1858, his planned book “On Capital” was to include sections on “Credit, where capital, as against individual capitals, is shown to be a universal element...[and] Share capital as the most perfected form” (Marx & Engels, 1983, p. 298). Share capital epitomises the “social character of capital”, revealed, Marx says, by the fact that “the average profit of the individual capitalist, or of any particular capital, is determined not by the surplus labour that this capital appropriates first hand, but rather by the total surplus labour that the total capital appropriates, from which each capital simply draws its dividends as a proportional part of the total capital” (Marx, 1981, p. 742). In joint stock companies,

20 Although Marx often writes about “individual capitalists” he sees them and individual workers as “simply embodiments and personifications of capital and wage-labour — specific social characters that the social production process stamps on these individuals, products of these specific social relations of production” (Marx, 1981, p. 1020).
he says, the owners of wealth become alienated from the process of production, which now appears to them an “icy water of egotistical calculation” (Marx & Engels, 1967, p. 82), and this becomes the basis of their social solidarity. As Marx put it in 1868, “What the competition among various masses of capital — invested in different spheres of production and differently composed — is striving for is capitalist communism, namely that the mass of capital employed in each sphere of production should get a fractional part of the total surplus proportionate to the part of the total social capital that it forms” (Marx & Engels, 1988, p. 23). In short, the social owners of capital demand that ‘all capital is equal’, that all investors get the same (e.g., risk-adjusted) rate of return on their capital. Within modern capitalism every investor holds the market portfolio. As an anonymous fraction of total social capital each investor gets the same rate of return. Assuming 100% payout, this equals the rate of return on the capital invested in all enterprises, the general rate of profit, or required rate of return on capital for the average firm (Bryer, 1994b). This, we shall see, is what Marx means by ‘free’ capital, capital that was free to socialise around the maximum rate of return on capital, for him the hallmark of the bourgeois mentality. From Marx’s perspective, the signature for the social character of capital is double-entry bookkeeping (DEB) employed to provide the means for calculating the rate of return on capital (Bryer, 1993a). However, there is more to modern capitalism than social capital, and more to capitalist accounting than DEB. The other distinctive features for Marx are the ubiquity of wage labourers and general commodity production within competitive markets. To understand Marx’s calculative mentality of modern capitalism it is, therefore, necessary to contrast the appropriate mode of accounting when wage labour is free with that appropriate when labour is unfree.

From Marx’s perspective the key to understanding the feudal mode of production is that, unlike free wage labourers, peasants possessed their means of production. To get a surplus, therefore, the lords had, ultimately, to physically coerce their peasants to perform additional labour over that necessary for their subsistence (Brenner, 1977, 1985a; Dobb, 1946, 1976; Hilton, 1976, Takahashi, 1976). Within feudalism there was no idea of capital as money or equivalent to be invested in production and recovered with a surplus. ‘Labour rent’ was the generally accepted form of surplus — the consumable commodities or cash directly appropriated in various ways (less collection costs).21 The peasants produced any means of production the lord needed on his demesne. To the lord, therefore, the construction of ‘fixed assets’ appeared as consumption. Given the focus on maximizing consumption, it was, Marx noted, so far as feudal lords were concerned, “Not exchange value as such, not enrichment as such, but life appropriate to a certain status or condition — this was the purpose and result of the exploitation of the labour of others” (Marx, 1976b, p. 1030).22 Here, therefore, the appropriate mode of accounting is income and expenditure (or receipts and payments) accounts, and this is exactly what English lords received (Bryer, 1994a). By contrast, capitalist profit is the value of unpaid labour indirectly appropriated through the production and sale of commodities. Here cost-based accruals or ‘capital-revenue’ accounting is appropriate (Bryer, 1993b, 1994b, 1998a, 1998b, in press-a, in press-b). As Marx says, under the capitalist mode of production the “annual product”, or turnover, “is divided into capital on the one hand and revenues on the other” (1981, p. 1018). The capitalist must account not simply for revenues and expenses, but also for the cost of producing the commodity — including an element for fixed capital — and for the circulation of capital and its return with a satisfactory surplus. As Marx put it, a “capitalist must calculate the price of the individual commodity, that is, he must represent the exchange-value of the individual commodity in terms of money of account” (1976b, p. 969). Marx concluded, therefore, that for the

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21 ‘Labour rent’ is Marx’s general form of surplus in feudalism. It may come from forced labour or levies of commodities or money (serfdom or peasantry); from plunder (‘privateering’); or by right (Royal prerogatives and monopolies).

22 Which does not rule out a ‘status or position’ with a huge appetite for surplus.
feudal lord to become a capitalist, “He need only transform his workers into wage workers and produce for profit instead of revenue” (1973, p. 277). In other words, the lord need only employ wage labour and change his calculative mentality. He must become obsessed with the maximum rate of return on the capital invested in production — with ‘relative surplus value’, as well as with ‘absolute surplus value’.23

Marx’s mode of production embodies “a mode of exploitation”, “a relationship of power” (Meiksins Wood, 1981, p. 79). This implies a mode of production should have a corresponding mode of accountability — a form of accounting appropriate to the type of power being exercised. In what senses do accounts hold the steward or the manager accountable? There are at least two meanings of the word ‘account’. In one sense it means ‘counting, calculation, reckoning’ — to ‘render an account’, to ‘narrate’, to relate, recount, give an account of’.24 To be held accountable in this sense means requiring the steward to provide an objective calculation of the feudal rent, and the manager an account of the circulation of capital and the profit or loss. In another sense, to be accountable means the requirement ‘to explain, to answer for’ some behaviour, result or state of affairs. In this sense the steward or manager is accountable by being judged, and punished or rewarded. How does being accountable induce the agent to control the process of production in the interests of his or her principal; to take the same decisions as the principal would have? The agent expects judgement against the principal’s target (e.g. against a required feudal rent or required return on capital) and scrutiny of his or her behaviour and explanations. The requirement to produce accounts constrains the agent’s behaviour to those actions justifiable to the principal. To satisfy the principal, and avoid punishment or gain rewards, the agent must select behaviour which in the circumstances they can justify to their lord or to social capital was best calculated to pursue their target.

The different power relationships under feudalism and capitalism should be manifest in different forms of accountability. For Marx, feudal production was coercive. As Brenner puts it, “to secure a rent — that is, to get the peasants to hand over part of their labour or product — the lords had to be able to exert a degree of control over peasants’ persons” (Brenner, 1985b, p. 228). Usually through agents, individual lords had to directly control the process of production. Therefore, feudal accountability meant the Lord’s agents and, therefore, their peasants, were, ultimately, personally accountable to their lord. In England, the steward was personally ‘charged’ with responsibility for the incomes received, and ‘discharged’ with responsibility for expenditures and disbursements judged by the lord to be necessary. In contrast, for Marx capitalism is the epoch of the social rule of capital, and its accountability is ‘economic’. Capitalist profit comes indirectly from wage labour, and is distributed ‘fairly’, according to the size of the capital advanced by each capitalist. Management is therefore accountable to social capital for the realised rate of return on capital employed in production, and investors are accountable to each other, by means of profit and loss accounts and balance sheets.25 While the lord could directly determine the steward’s collection of a specified surplus, modern managers are free to choose actions they believe are in their own interests (for example, slacking). However, because accounts expose the manager to questioning and to rewards or punishment, although a “free agent”, “He learns to control himself” (Marx, 1976b, p. 1033). With the transition to capitalism the “mode of compulsion [is] not based on personal

23 To increase absolute surplus value, the total value of unpaid labour, the lord and the capitalistic farmer extend the working day and cut wages. The uniquely modern addition to this is capitalism’s obsession with relative surplus value, the ratio of surplus value to variable capital (the total cost of productive workers). To increase relative surplus value, to secure surplus profits over the required rate of return, the capitalist must invest to reduce necessary labour time per unit of output below the social average. I discuss the importance of the accounting correlates of these ideas for understanding Marx’s theory of the transition later.


25 In Marx’s framework in capitalism the principal is total social capital whose economic interest is earning at least the long-term required rate of return on capital.
relations of domination and dependency” (Marx, 1976b, p. 1021). In Marx’s view, free wage labour becomes “subordinated” to capital by means of “an economic relationship of supremacy and subordination, since the consumption of labour-power by the capitalist is naturally supervised and directed by him” (1976b, p. 1026). Therefore, a change in the mode of accountability of labour from a largely political relationship to, Marx says, “a relationship of sale and purchase, a purely financial relationship”, marks the transition to capitalism. This is a relationship of supremacy and subordination which “is objective in nature, voluntary in appearance, purely economic” (Marx, 1976b, pp. 1027–1028). It follows that the history of accountability should mirror the transition from political control under feudalism to the economic control of capitalism. Part Two provides evidence from the EIC consistent with this prediction.

Modern accounting is also central to Weber’s theory of the transition. The appearance of capital accounting is for Weber a precondition of modern capitalism. Its techniques provide him with an objective representation of its economic ethic and its spirit. For us it provides a way to evaluate his theory. In the following section I argue that, whereas Marx’s theory is consistent with modern accounting, Weber’s capital accounting is off-target, being derived from neo-classical economics, the focus of Marx’s critique.

2. An accounting critique of Weber’s ‘spirit of modern capitalism’

Weber argues that we cannot treat the profit-maximizing mentality of economic man as an ahistorical essence. The traditional mentality of producing use-values for consumption, he says, plainly contradicts this view. We must, therefore, explain the origins of this new calculative mentality (Marshall, 1991, pp. 191–192). For Weber, like Marx, production for profit, and not commerce or finance, is the key to understanding modern capitalism (Gerth & Mills, 1948, p. 68). Also like Marx, Weber broadly characterised its calculative mentality as the composition of two elements: ‘profit’, which is his accounting sign for capitalism ‘in general’, and the systematic organisation of labour in production, which is specifically modern. Capitalism is identical with the pursuit of profit, and forever renewed profit, by means of continuous, rational, capitalistic enterprise. For it must be so: in a wholly capitalistic order of society, an individual capitalistic enterprise which did not take advantage of its opportunities for profit-making would be doomed to extinction (Weber, 1992, p. 17).

But in modern times the Occident has developed, in addition to this, a very different form of capitalism which has appeared nowhere else: the rational capitalistic organization of (formally) free labour (Weber, 1930, p. 21; see also, p. 185).

On the surface Weber targets his Protestant Ethic and the Spirit of Capitalism at Sombart who depicts the spirit of modern capitalism as the combination of the ancient ‘spirit of enterprise’, the spirit of ruthless acquisition (e.g. piracy), with the modern ‘bourgeois spirit’. In Sombart’s view the bourgeois spirit arose with the growth in the exchange of commodities for money and developments in rational bookkeeping that encouraged precise calculation. Capitalism appeared from this quantum leap “in the capacity to think in the universe of figures and to transform these figures into a well-knit system of income and expenditure” (Sombart, 1915, p. 125). Although he traces its origin to the Jews and Judaism, the appearance of DEB in northern Italy in the fourteenth and fifteenth centuries perfectly captured this spirit: “Florence was ‘the Bethlehem of the capitalist spirit’…” (Holton, 1985, pp. 106–107). In response, Weber criticised Sombart’s spirit and traced its origin to Calvin’s teachings in the sixteenth and seventeenth centuries.

Against Sombart Weber insisted, like Marx, that “the mere practice of trade for profit would not have been sufficient to produce the modern capitalist spirit” (Holton, 1985, p. 111). He criticises Sombart’s view that the spirit of capitalism is simply systematically pursued economic greed. This type of economic behaviour he calls ‘capitalism
in general’. The mentality underlying it has, he says, existed in all previous civilisations throughout known history. Associated with it is capital accounting in general, that is, any calculation of profit by comparing opening and closing balances of capital.

The important fact is always that a calculation in terms of money is made, whether by modern book-keeping methods or in any other way, however primitive and crude. Everything is done in terms of balances: at the beginning of the enterprise and initial balance, before every individual decision a calculation to ascertain its probable profitableness, and at the end a final balance to ascertain how much profit has been made. ... [A]ll that matters is that an actual adaptation of economic action to a comparison of money income with money expenses takes place, no matter how primitive the form. Now in this sense capitalism and capitalistic enterprises, even with considerable rationalisation of capitalistic calculation, have existed in all civilized countries of the earth (Weber, 1992, pp. 18–19).

Weber agrees with Sombart that rational accounting is a precondition of modern capitalism, but he insists this must embrace the rational organisation of free wage labour in production. As Holton puts it, for Weber “Exact calculation — the basis of everything else... is only possible on the basis of free labour” (Holton, 1985, p. 125). The unique cultural distinctiveness of the West lay, not with capitalism in general, but in “sober bourgeois capitalism, with its rational organisation of free labour” (Holton, p. 126). As we shall see, for Marx, a capitalistic focus on the rate of return on capital only emerges with the socialisation of capital in trade.26 By contrast, for Weber capitalism in general exists whenever there are calculations of ‘profit’. Therefore, for him, the “great merchant princes of the Renaissance and the medieval period were fully capitalist” (MacKinnon, 1993, p. 213) whether they were individuals operating on their own, or they socialised their capital.27 Nevertheless, in Weber’s view they were not “authentic”, that is, modern capitalists, because they did not systematically pursue profit as an end in itself with a spiritual sanction for methodical labour.

For Weber the distinctive spirit of modern capitalism only came to life by harnessing DEB to the rational organisation of labour in production for profit. Here, in his distinction between the general capitalist ‘form’ and the ‘spirit’ of modern capitalism, Weber mirrors in outline Marx’s distinction between the ‘formal’ and the ‘real’ subsumption of labour under capital. In Marx’s view, those with capitalistic tendencies at first only ‘formally’ take control of production with free wage labour. This means they do not attempt to change the process. They pursue absolute and not relative surplus value.28 Consistent with this, Weber characterises the continental putter-out as not an authentically modern capitalist (1992, p. 67). However, other than refer to the views of Benjamin Franklin, he provides no systematic evidence of the motives and worldviews of his medieval

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26 Recall that early calculations of the rate of return on capital are ‘capitalistic’ because at first this is defined as the feudal rate of return, feudal surplus divided by the initial capital advanced.

27 Weber accepts that what will become the most ‘perfect’ form of rational bookkeeping, DEB, only emerged when groups of individuals pooled their capital (Weber, 1981, pp. 223, 225, 227). Even so, Weber has no equivalent to Marx’s idea of social capital. He puts “an emphasis on... ‘commercialisation’... the formation and operation of joint-stock companies [with]... negotiable instruments and securities, which represent a means for the rational assembly of capital... ” (Poggi, 1983, p. 33). For Marx social capital was the ‘communism of capitalism’, a social ‘conspiracy against society’, and in Germany “The stock exchange had become a symbol of the iniquity of capitalism in the political agitation of the 1890s” (Bendix, 1966, p. 23). By contrast, Weber thought this view was naive and he set out to counter it. He accepted there was “irresponsible speculation”. He counters by emphasising that “The stock market provides a mechanism whereby a businessman, through use of rational planning, can facilitate the progress of his enterprise” (Giddens, 1971, p. 122). In other words, that the function of the stock exchange is to help individual ‘businessmen’ raise the capital they need to allow them to plan ‘rationally’, not to promote the formation of a total social capital.

28 I discuss this distinction later.
businessmen. As Marshall says, this omission is significant because “The neo-Calvanist and Protestant sectarian business communities ought, according to Weber’s thesis, to display an unambiguously ‘modern capitalistic’ orientation towards economic activity” (Marshall, 1982, p. 100). Marshall summarises some of the “traits” that in Weber’s view would “count as evidence” for the modern outlook, the attitude to ‘profit’ figuring strongly.

In the productive sphere itself the individual would continuously be seeking to ‘improve’ his or her performance: rational expansion would be pursued; less profitable lines of economic activity would be abandoned in favour of more profitable ones; a continual balance of costs against returns would be kept so that policies could be adopted which increased productivity and utilized resources in the most efficient manner. Investments would result from careful costings and informed predictions as to the profitability of projected enterprises (Marshall, 1982, p. 101).

Marshall confesses this sort of “data [is] difficult to unearth and ambiguous where it exist[s]” (1982, p. 45). For example, when is expansion rational? What does profitable mean? What are costs and returns? What does it mean to be careful in costings, and informed in predictions? No help is forthcoming from Weber. As Marshall concludes, “A few generalizations based on ‘what we all know’ about the state of mind of pre-capitalist merchants, alongside the illustrative quotations from Franklin’s texts, are scarcely sufficient documentation of Weber’s argument” (Marshall, 1982, p. 45). Unfortunately, Weber’s understanding of modern capital accounting is ambiguous. This is the source of the impossible empirical problem that Weber left for sociologists. As Marshall laments, “whatever the ‘elective affinities’ between ‘form’ and ‘ethos’ at the rhetorical level, there is nothing in the organizational basis of any form of economic transaction which automatically calls forth a specific meaning for the profits that are accrued and so permits us to conclude that the practitioners are or are not interpreting their conduct as the diligent application of a calling” (Marshall, 1982, p. 117). In short, can we read the social motivation of the preparer from their accounts? We shall see that Weber insists this is essential to the task of the sociologist. In fact it is impossible with his understanding of modern accounting.

Weber makes claims for bookkeeping and accounting that modern scholars would discount, particularly his view that DEB was a ‘technical’ precondition of capitalism.

[The estimation of profitability... is made particularly clear by the form of bookkeeping, the double entry type, which is most highly developed from a technical point of view. For here, in the system of accounting, there is introduced the fiction of exchange transactions between the different parts of a single enterprise; or, between different accounts in order to develop a technique of estimating the bearing of each particular measure on the profitability of the enterprise (Weber, 1964, p. 195).

Weber is right that DEB makes the impact of transactions and events on the rate of return on capital clear, but it makes no contribution to estimating profitability. This requires forecasts of future transactions and events. Weber claims that “The modern rational organization of the capitalist enterprise would not have been possible without...the separation of business from the household,...and closely connected with it, rational book-keeping” (Weber, 1992, pp. 21–22). However, first, DEB is not necessary to separate the household from the business. Second, it introduces no fiction of exchange transactions between different parts of an enterprise “thus permitting a check in the most technically perfect manner on the profitability of each individual step or measure” (Weber, 1978, p. 93). In a technical sense, DEB was not a precondition of modern capitalism. Thus, the mere existence of accounts kept by DEB provides no basis for identifying the authentically capitalist mentality. Although for different

29 This claim implies accounting at net realisable value (NRV), as we shall see.
reasons, Weber also accepts this by his distinction between the form of an enterprise and its spirit (1992, p. 67). In Weber’s theory, traditional enterprises employing free labour could use DEB. For him, any calculation of ‘profit’ by means of ‘balances’ is evidence of capitalism in general, and the use of DEB only signifies the modern capitalist mentality if it is being used to rationally organize labour in production for profit. From Marx’s perspective, by contrast, only if DEB calculates the feudal rate of return on capital is there evidence of the capitalist mentality, and use of DEB is only evidence of the capitalist mentality if it produces the return on capital employed in production.

Marshall unconsciously illustrates the imprecision of Weber’s ideas when he uses them to tentatively identify early modern capitalists. Marshall examines accounting and other data and identifies Sir John Clerk, late seventeenth and early eighteenth century Scottish mine owner, as an authentic capitalist. However, despite the ‘highly calculative approach’ to production, and the apparent use of DEB, the accounts suggest Sir John’s aim was feudal surplus and feudal accountability.30 The so-called profit seems to be net cash flow. Every third Saturday the grieve who ran the mine was to have Sir John “clear accounts with me and...receive the Said balance”. Or, if he could not come, “to have the Said balance always in readiness and to pay it in to his order, or to Send it to him”. The accountability was personal. The grieve agreed, “remarkably, to be personally liable for any losses which he incurred through the ability of customers or colliers to transact with him a bargain unfavourable to Sir John” (Marshall, 1991, pp. 205–206, emphases added). Marshall’s other example is the Newmills Cloth Manufactory, Haddingtonshire, from the middle to the end of the seventeenth century, formed as a joint-stock company in 1681. From Weber’s viewpoint, use of DEB and other evidence, again suggests to Marshall the authentically modern mentality. However, from Marx’s viewpoint this company is capitalistic. Newmills had a socialised capital and used DEB to calculate the feudal rate of return. The ‘profit’, revenues less wages and materials costs (Marshall, 1980, p. 143), is feudal. There is no apparent allowance for depreciation, merely a focus on prime cost (see: Scott, 1951, Vol. 3, pp. 138–158). Using Weberian accounting, it is indeed “by no means an easy task to distinguish the modern capitalist attitude from the ‘spirits’ of all other capitalisms” (Marshall, 1991, p. 195).

It is not the method of bookkeeping that makes modern accounting socially rational, but the rules for valuing assets and liabilities and the idea of surplus, capitalist profit. Unlike Marx and modern accounting, Weber makes no distinction between the rules for productive capital and capital of circulation. Nor does he distinguish between the rules for fixed and circulating capital. Weber, like neo-classical economists, believes the general valuation rule is net realisable value (NRV). In his view, “rational money accounting presupposes the existence of effective prices and not merely fictitious prices conventionally employed for technical accounting purposes” (Weber, 1964, p. 194, emphasis added).31 As Poggi puts it, according to Weber, profit-seeking enterprises “monitor their profitability in a most sophisticated manner by means of double-entry bookkeeping, an accounting device whereby prevailing market prices are attached also to internal, non market transactions between separate parts or phases of the enterprise’s activities” (Poggi, 1983, p. 20).32 From Marx’s viewpoint, NRV as a general rule is consistent with the feudal idea of surplus, which is reducible to actual and expected net cash flow. NRV is not acceptable as a general rule in modern capitalist accounting. Weber says he is only “repeat[ing] generally known things...[in] standard textbooks of accountancy, which are, in part, excellent” (Weber, 1964, p. 195). At the time Weber was

30 The contract between the grieve (Scottish steward) and Sir John spoke of “Debite & Credite” (Marshall, 1991, p. 205), but this is not conclusive evidence of DEB.

31 Weber mentions fixed capital and working capital, but he does not tell us their valuation rules. These items are, says Poggi, along with liabilities, “evaluated” (1983, p. 20).

32 Poggi also believes “typical modern capitalist unit[s]...operations are controlled through double-entry bookkeeping”, and that it “separate[s] the business’s accounts from those of the entrepreneur’s or his family’s wealth” (Poggi, 1983, pp. 32, 42).
writing, following some spectacular stockmarket frauds, under the *Stock Corporation Act* of 1884. German accounting required historical cost as the upper valuation limit. This replaced the previous *Prussian General German Commercial Code* of 1861. The latter had required Weber’s “inventory and balance sheet at the close of each financial year”, and had allowed most assets and liabilities to be accounted for at “current value” (Ballwieser, 1995, p. 1402). Following the 1884 Act, during the late nineteenth and early twentieth centuries there was in Germany ‘The Great Argument’ whether the balance sheet or the profit and loss account was more important. In this argument, it seems, Weber sided with the jurists from whom a “new point of view appeared” (Schmalenbach, 1959). This was that the balance sheet was most important. As Schmalenbach put it, as “the object of the balance sheet was the ascertainment of the status of capital”, assets were at “the value in the open market, i.e. the value on sale” (pp. 19–20).

Weber’s capital maintenance rule (CMR) also reveals contrasts between modern and Weberian accounting. There is, says Weber, a close elective affinity between the Protestant ethic of frugality and accumulation, and the modern idea of capital maintenance. As he says, the CMR is based on the modern desire — to the traditional mind a wholly irrational basis for economic action — to “increase... capital only to increase capital further, not to consume it” (Marshall, 1991, p. 195). However, while from Marx’s perspective Weber is right about the importance of this shift in attitude, he again fails to grasp the realities of the CMR. Weber advances a notion of financial capital maintenance with a strong affinity with Adam Smith’s neo-classical economics. Weber helpfully outlines for us his understanding of the essential features of rational capital accounting.

In order to test the usefulness of the present accounting term, which is increasingly employed in scientific writings, again, it is only necessary to ask the following simple questions: (1) What does it mean when we say that a company has an original capital of a million pounds? When (2) that capital is ‘written down’? When (3) laws dealing with

financing make rules which lay down what may and may not be included in original capital? The first question means that when profit is being divided, it is only when the excess of credits over debits as stated in the balance sheet exceeds one million pounds, that it can be treated as profit and divided among the shareholders... The second question concerns the situation where there may have been heavy losses. It means the division of profit need not be postponed until a surplus of over a million pounds has been accumulated but that the division of profits may begin at a lower figure. ...Finally, the purpose of rules as to how capital liability can be ‘covered’ by acquisition of assets and when and how it can be written down or up is to give creditors and shareholders a guarantee that the division of profits will be carried out...in such a way...that profitability is maintained and...the security of the creditors is not impaired (Weber, 1964, pp. 195–196).

In traditional capitalist accounting the role of the CMR is to reveal the source of any payments to shareholders and creditors, whether from capital or profit, to facilitate the smooth functioning of the social relations of capital.33 The contrasts between Weberian and traditional accounting are stark. First, the CMR does not provide security for creditors, merely information that capital is in circulation for profit. Second, whereas Weber adopts a simple financial capital CMR, from Marx’s and the traditional viewpoint the CMR should use replacement cost for nonmonetary productive assets, and requires capital maintenance adjustments. Third, Weber says losses of capital that do not impair the maintenance of the enterprise’s profitability may be written-down so that dividends can continue. This way, he says, dividends become “available for consumption... without prejudice to... future chances of profit making” (Weber, 1964, p. 192). This was the

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33 By ‘traditional’ I mean the dominant view of accounting in late nineteenth century Britain, a view I argue underlies modern practice (Bryer, 1993b, 1998a,b, in press-a).
basis of the decision in the important English case of 
Lee v. Neuchatel (1889), shown elsewhere to be a judicial elaboration of Adam Smith’s analysis of fixed and circulating capital (Bryer, 1998a, 1998b). Weber, like Smith, imagines that some capital, for Smith fixed capital, earns no profit and therefore its loss, as we shall see below, does not in Weber’s terms prejudice future chances of profit making. This would only arise, according to Smith and, presumably, Weber, by losing circulating capital, as only this type of capital earns profit. By contrast, in Marxist and traditional accounting, whether fixed or circulating, capital advanced is only written-down when it is not recoverable, and the court approves. In short, in capitalist accounting the purpose of the CMR is not to allow dividends by the write-down of capital for heavy losses. Fourth, the aim of the CMR is not to control dividends so that ‘profitability is maintained’. From Marx’s perspective and in traditional accounting, management is accountable for the circuits of capital, for a materially and socially objective world (Bryer, 1998a, 1998b, in press-a). By contrast, in Weber’s accounting, just as in the decision-relevance school today, management is accountable for the ‘future chances of profit making’. He reveals this when he expands on the meaning of ‘profitability’.

A profit-making ‘enterprise’... is a system of action capable of autonomous orientation to capital accounting. This orientation takes place by means of calculation. On the one hand, there is calculation, prior to actual action, of the probable risks and chances of profit; on the other hand, at the conclusion of a measure, verification of the actual profit or loss resulting. ‘Profitability’... means, in the rational case, one of two things: (1) the amount of profit estimated as possible by previous calculations, the attainment of which is made an objective of the entrepreneur’s activity; or (2) that which an audit shows actually to have been earned in a given period and which is available for consumption uses of the entrepreneur, without prejudice to his future chances of profit making. In both cases it is usually expressed in ratios — today, percentages — in relation to the capital of the initial balance (Weber, 1964, p. 192, emphasis added).

In other words, Weber says the auditor judges the acceptability of dividends by whether or not it prejudices future chances of profit making. This, for Weber, determines whether the profit has ‘actually... been earned’. However, it is not possible to hold management objectively accountable for the future chances of profit making. Traditional accountants have, therefore, consistently shunned this vision of accounting (Bryer, 1993b, 1998a, 1998b, in press-a). Nevertheless, it is possible to agree with Weber that within capitalism accountability means that “Each individual operation undertaken by rational profit-making enterprise is oriented to estimated profitability by means of calculation” (Weber, 1964, p. 192). However, it makes a world of difference whether we measure earnings using NRV or the valuation rules of modern accounting.

I conclude that Weber did not penetrate the mysteries of modern capitalist accounting, and hence does not adequately theorise its calculative spirit. Contrary to the views of sociologists, Weber’s elective affinity between the Protestant ethic and the spirit of modern capitalism is not “adequate at the level of meaning” (e.g. Holton, 1985, p. 109). It follows that Weber fails his test of what counts as scientific sociology. As Weber explains,

A motive is a complex of subjective meaning which seems to the actor himself or to the observer an adequate ground for the action in question. The interpretation of a coherent course of conduct is ‘subjectively adequate’ (or ‘adequate at the level of meaning’), insofar as, according to our habitual modes of thought and feeling, its component parts taken in their mutual relation are recognised to constitute a ‘typical’ complex of meaning.... An example of adequacy of meaning in this sense is what is, according to our current norms of calculation or thinking, the correct solution of an arithmetical problem (Weber, 1978, p. 11).
Thus, he says, if we observe someone writing down the “proposition twice two equals four”, or “engaged in balancing a ledger or making a scientific experiment”, “we understand what make him do this at precisely this moment and in these circumstances” (Weber, 1978, p. 8). In short, “we understand in terms of motive the meaning an actor attaches” to his actions (Weber, 1968, p. 8). If we see someone engaged in an action whose ideal-typical rationality or ‘complex of meaning’ we understand, we can hypothesise its motive for the actor, its subjective meaning. It follows, as Weber says, that “for a science which is concerned with the subjective meaning of action, explanation requires a grasp of the complex of meaning in which an actual course of understandable action thus interpreted belongs” (1978, p. 9). For the scientific sociologist it is, therefore, vitally “necessary to know what a ‘king’, an ‘official’, an ‘entrepreneur’, a ‘procurer’, or a ‘magician’ does, that is, what kind of typical action... before it is possible to undertake the analysis itself” (Weber, 1978, p. 18). Clearly, therefore, to analyse the motives of an accountant it is necessary to understand what one does — within what complex of meaning he or she balances the ledger. This Weber has singularly failed to do.

Weber’s Protestant ethic theory has been subject to widespread criticism for other failings (e.g. Giddens, 1992). Nevertheless, many argue he at least avoided the tautology that infects Marx — that modern capitalism is simply the Hegelian realisation of the idea of modern capitalism (Holton, 1985, p. 105; Marshall, 1982). Many believe Marx does not explain the “transition from feudalism to capitalism” — how class conflict within feudalism created the calculative mentality of modern capitalism (Holton, pp. 8, 142). To show that Marx does explain this we must understand his theory as a history of accounting that encompasses the calculative mentalities of feudal merchants and lords and their interactions. While the socialisation of capital in trade is Marx’s origin of the rate of return on capital mentality, its historic encounter with farmers employing wage labour is responsible for the uniquely modern approach of maximizing the rate of return on capital by maximizing labour productivity. Marx called this the real subsumption of labour under capital. Although he does not provide a detailed history of this encounter, when we translate his views into a history of accounting we find a clear chronology and an outline of the process.

3. The history of accounting and Marx’s theory of the transition

Marx said the appearance of modern capitalism “presupposes a historic process... which... forms the history of the origins of capital and wage labour” (1973, p. 489, emphasis added). Many historians have acted on Marx’s advice that it was necessary to understand the “historic presuppositions needed before the worker can be found as a free worker” (Marx, 1973, p. 498). However, few historians understand exactly why it was just as important to understand the history “required so that he finds himself up against a capital” (Marx, 1973, p. 498). Following Marx’s advice, a Marxist history of accounting must embrace two interconnected histories. We shall see that, according to his history, it must begin in the sixteenth century with the English monopoly trading companies, and trace their transition to joint-stock companies through changes in their systems of accounting. It must also trace the emergence of the capitalist mentality in agriculture in farmers’ accounts over the same period.

3.1. Accounting for the freedom of capital

Facing free workers must be a “free fund”. Both appear simultaneously. The fund was created when, from the sixteenth century, English peasants began to be deprived of their “land and soil, raw material, necessaries of life, instruments of labour...[and] money”. Although the peasants lose their possessions,

They are still there on hand, but in another form, as a free fund, in which all political, etc. relations are obliterated. The objective conditions of labour now confront these unbound, propertyless individuals only in the form of values, self sufficient values. The same process which placed the mass of workers face to face
with the objective conditions of labour as free workers also placed these conditions, as capital, face to face with the free workers... — the (potentially) free worker on the one side, capital (potentially) on the other (Marx, 1973, p. 503).

The same historic process of class conflict that obliterates all feudal relations on the land also produces capital as a ‘free fund’ in trade. Capital first gains its freedom as commercial capital in the international trading cities of northern Italy in the fourteenth and fifteenth centuries, where it becomes socialised and investors demand an equal return for equal capital (Bryer, 1993a). This “commercial capital is the first independent mode of existence of capital in general” (Marx, 1981, p. 455). In other words, capital that was “independent” of any particular individual; pooled or socialised capital. The Italian communes, protecting trade above all, appeared as a new social formation in conflict with would-be feudal rulers, and rose to previously undreamed of heights based upon trading and money-dealing capital accumulated in socialised forms. I argue elsewhere that their use of DEB is consistent with Marx’s view that the significance of the Italian communes for the development of modern capitalism was the appearance of socialised capital and the rate of return mentality (Bryer, 1993a). Brenner says it was only in his early work that Marx saw “an initial rise of — or at least movement toward — capitalism in the ancient commercial society of the Mediterranean” (Brenner, 1989, p. 282). He suggests this view was part of the Smithian baggage Marx later jettisoned. However, it was not just in his early works that Marx “was drawn to emphasize, theoretically and historically, the importance of the medieval communal revolution for the consolidation of bourgeois society and for engendering its long-term evolution” (1989, p. 283). While Smith’s framework was abandoned, Marx’s “interest...[on] discover[ing]...that the term ‘catalla, capitalia’, capital, came into being with the rise of the communes” (Marx & Engels, 1983, p. 474), never was. Marx also emphasised Italy’s critical contribution to the development of modern capitalism in his later work. In volume three of Capital he says “feudalism was... (broken through by exceptional urban development...in Italy” (Marx, 1981, p. 937). Central to this urban development was the commercial revolution (Lopez, 1976, 1987), for Marx the beginnings of an international system of public credit that would eventually form the foundation of total social capital.

The system of public credit, i.e. of national debts, the origin of which are to be found in Genoa and Venice as early as the Middle Ages, took possession of Europe as a whole during the period of manufacture. The colonial system, with its maritime trade and its commercial wars, served as a forcing house for the credit system. Thus, it first took root in Holland. The national debt...marked the capitalist era with its stamp. ...Public credit becomes the credo of capital (Marx, 1976b, p. 919).

The modern credit system, the capital market, is the foundation of total social capital. Today, public debt provides a virtually riskless rate of return on capital enabling investors to invest in risky ventures and yet manage their total portfolio risk to acceptable levels. In Marx’s history, “the credit system... is itself on the one hand an immanent form of the capitalist mode of production and on the other hand a driving force of its development into the highest and last possible form” (Marx, 1981, p. 742). In particular, as he put it, “the national debt has given rise to joint stock companies, to dealings in negotiable securities of all kinds, and to speculation: in a word, it has given rise to stock-exchange gambling and the modern bankocracy...whose full development dates from the founding of the Bank of England in

34 From Marx’s point of view, the demand for an ‘equal return for equal capital’ is the core ‘bourgeois value’, the necessary change in ‘substantive values’ which Weber rightly argues must underlie any sustainable and generalisable change in formal rationality (Kalberg, 1980, p. 1171). This is why socialised capital in trade is a precondition of modern capitalism. Marx would agree with Weber that “Only ethical rational action, not simply the thrust of interests, possessed... (the potential effectively to rupture traditional ways of life and attitudes”. As we have seen, Marx does not “endow...economic interests with a generalized significance” (Kalberg, 1980, p. 1171), in the positivist manner in which Weber understands ‘economic'.
1694” (Marx, 1976b, pp. 919–920). Just like the credit system, the simultaneous development of commercial capital, although a “powerful lever”, was “only one element in connection with other large-scale organic revolutions in the mode of production itself” (Marx, 1981, p. 743). Nevertheless, for Marx it was to prove a critical element because “one of the latest forms of bourgeois society, joint-stock companies...appear...at its beginning, in the great, privileged monopoly trading companies” (1973, p. 108). As we have seen, joint-stock companies are, for Marx, the epitome of social capital.

As we shall see in Part Two (Bryer, in press-c), the history of accounting allows us to trace how socialised and social capital eroded and eventually overthrew “the socio-political limits in which capital was confined” (Marx, 1976b, p. 1030). Modern joint stock companies emerged from a process of class struggle within feudalism, beginning with the voyages of exploration in the late fifteenth century, over who would reap the rewards on international trade. First, conflict with Portugal and Spain culminating in the Spanish Sea Wars of the sixteenth century, over who would reap the rewards on international trade. First, conflict with Portugal and Spain culminating in the Spanish Sea Wars of the sixteenth century, over who would reap the rewards on international trade. Second, conflict in the late sixteenth and early seventeenth century between the great, privileged monopoly trading companies, and the new class of capitalistic merchants who had emerged, and who went from strength to strength with socialised capitals trading and producing commodities in North America and the Caribbean. However, the monopoly granted the EIC in 1600 excluded the new merchants from the most lucrative far Eastern trade. In Marx’s theory, class conflicts culminate in mid-seventeenth century England in the bourgeois revolution. In our interpretation this results in victory for the demand for an equal return for equal capital, the beginning of the creation of modern industrial capital as a social force driven by the rate of return.

To be consistent with this interpretation, the individual English merchants who predominated before the bourgeois revolution should be as feudal as lords, conceiving their ‘profit’ as consumable surplus. Like the lords, the merchants should want to maintain their lifestyles, not to maximize the rate of return on their capitals. These merchants should, therefore, also use receipts and payments or income and expenditure accounts. Part Two (Bryer, in press-c) presents evidence consistent with this prediction. We shall see sixteenth and early seventeenth century merchants using elements of DEB to calculate feudal surplus. However, the new merchants who socialise their capital should evince the rate of return mentality in their accounts by the full application of DEB. In Part Two we show that there is evidence of an association between the use of DEB to allow the calculation the return on capital and the socialisation of merchant capital. Our prime example is the EIC, which appeared to introduce DEB sometime in the 1630s to foster the socialisation of its capital, but here we go beyond associations to a detailed analysis of the critical role accounting played in eroding and redefining the socio-political limits of its capital. We show the EIC’s accounting system changed in a process of conflict between the great feudal merchants who dominated it from its foundation, and the generality of its investors who demanded its ‘governors’ be accountable as managers. The social history of accounting by the EIC will enable us to trace its bourgeois revolution. This climaxed in 1657 with the declaration that henceforth the Company would only pay money dividends from its ‘profit’. This implied a revolutionary change in its system of accounting that signated a revolutionary change in its social relations, the creation of the first modern joint stock company in England.

The transition literature is devoid of the idea that by the freedom of capital Marx meant its freedom to socialise on equal terms, to pursue the rate of return on capital. To many scholars it signifies only that the means of production are available as commodities on the market (e.g. Dobb, 1946, pp. 7, 183). Capitalism does mean this, but for Marx generalised commodity production was only possible given a total social capital. Brenner recognises that “both capital and labour power [must be] ‘free’ to make possible their combination at the highest possible level of technology”. He is also aware that “Only under such a system, where both capital and labour power are thus commodities — and which was therefore called by Marx ‘generalized commodity production’...” is modern
capitalism possible. However, by freedom of capital Brenner means “the means of production become commodities” (1977, pp. 32–33). Kriedte attempts to explain the transition in a way “acceptable both in neo-classical and neo-Marxist terms” (Hagen, 1988, p. 14). In his view, even an individual merchant’s capital has its own internal “dynamism” (Kriedte, 1980, p. 1), is inherently capitalist. Once merchants have made “a profit by selling goods at a higher price than they had purchased them”; “Once this cycle of exchange had been completed, it made sense [sic] to continue on a larger scale and thus to accumulate capital” (Kriedte, p. 9). Kriedte does not recognise socialised capital, and always writes of individuals. For example, “This kind of economic behaviour was all the more attractive to the merchant as an expansion of his business promised economies of scale” (Kriedte, p. 9, emphases added). For Kriedte the mere “deployment and accumulation of commercial capital became the decisive stimuli to the development of the non agricultural economy until the onset of industrialization” (Kriedte, p. 9). Likewise, in his view, when in England in the sixteenth century “Merchant capital became landed capital...[c]apitalist ground rent and the system of feudal rents became inextricably intermeshed” (Kriedte, p. 10). He again implies merchant capital was itself capitalist — that the ex-merchant’s mere presence on the land was sufficient to turn feudal rent into capitalist ground rent.35 As we shall see in Part Two (Bryer, in press-c) contrary to Kriedte, the accounting evidence shows the merchants of the sixteenth centuries were feudal in their calculative mentality, and only become capitalistic as commercial capital becomes socialised from the mid-seventeenth century, pursuing the feudal rate of return.36

3.2. Accounting for free wage labour and capitalistic agriculture

Capital is first formed as commercial capital, “But the merchant and usurer encounter the conditions where free labour can be purchased only when this labour has been released from its objective conditions of existence through the process of history” (Marx, 1973, p. 505). Although the appearance of farmers employing wage labour from the end of the fifteenth century is an essential step, in Marx’s theory they are not modern capitalists. To understand why not, Marx explains how we can identify the first appearance of capitalistic behaviour in English agriculture. Significantly, at this critical juncture in his exposition, he directs us to the farmer’s calculative mentality, and to his accounts.

[T]o the extent to which agriculture... becomes a capitalistically run branch of industry (capitalist production sets up its stall in the countryside), to the extent to which agriculture produces for the market, i.e. produces commodities, articles for sale and not for its own immediate consumption — so too, and to the same degree, it calculates its costs, treats each item as a commodity (regardless of whether it buys it from another or from itself, i.e. from production). ...Apart from the service they perform as use-values in the process of production, all the means of labour... serve as ingredients in the valorization process. Where they are not changed into actual money, they are converted into accounting money; in short, they are used as exchange values and the element of value they add to the product in one way or another is precisely calculated (Marx, 1976b, p. 952).

According to Marx’s theory, even if early farmers do precisely calculate costs and profit, we could only call them capitalists if they also calculated the rate of return on their capital in production. Until then, they are only ‘capitalistic’. As Marx says, with the dissolution of serfdom, certain tendencies arise among the “better-off rent-paying peasants, of exploiting agricultural wage-labourers on their
own account”, of a concern with “the proportion of production cost”. The possibility exists of a surplus over rent for the peasant proprietor. However, until farmers calculate the cost of production and account for capital they are, in Marx’s sense, merely “future capitalist[s]”. All that existed in the late fifteenth and sixteenth centuries was a “seed-bed for the nurturing of capitalist farmers” (Marx, 1981, pp. 933–935, emphases added).

To understand why a farmer who employs wage labour, produces for the market, and precisely calculates costs, is not an authentically modern capitalist, it is necessary to appreciate the accounting implications of Marx’s distinction between the formal and real subsumption of labour under capital. If Marx is right, this distinction should appear as transitional forms between the capitalist and feudal modes of accounting, indicating transitional forms of the social relations of production. In his theory, capitalistic tendencies in agriculture emerged within a feudal shell, at a point where “the disintegration of the feudal mode of production had already reached an advanced stage” (Dobb, 1946, p. 20), but still held sway. In this context, capital only formally takes hold of production, and this is precisely how the capitalistic farmer sees his embryonic ‘profit’ — any surplus he earns over his rent — as the direct appropriation of a feudal surplus. As Marx puts it,

The labour process is subsumed under capital (it is its own process) and the capitalist intervenes in the process as its director, manager. For him it also represents the direct exploitation of the labour of others. It is this that I refer to as the formal subsumption of labour under capital. It is the general form of every process of capitalist production; at the same time it...[is] a particular form (Marx, 1976b, p. 1019, emphasis added).

It follows that when capital only formally takes control of production we should expect to find profit in farmer’s accounts still defined as feudal surplus, the result of the direct exploitation of the labour of others. Feudal surplus persists, Marx says, because the formal subsumption of labour under capital only involves “the take-over by capital of a mode of production developed before the emergence of capitalist relations” (Marx, 1976b, p. 1021). The farmer no longer extracts a surplus by direct coercion, or, “let us say, by political constraints”. He relies on and develops ‘economic’ constraints. However, without grasping and revolutionising the process of production, “surplus value can only be extracted by lengthening the working day, i.e. by increasing absolute surplus value”, and “this is common to both forms” (Marx, 1976b, pp. 1025, 1021). That is, common to feudal and formal capitalistic relations. It follows that the landlord and the capitalistic farmer should both calculate their surplus as income minus expenditures. The essential difference being only that one deploys political coercion based on personal power, and the other the power of markets and the prerogatives of capital. Only when commodity production becomes general does capital transform the process of production, that is, pursue relative surplus value by cheapening labour cost per unit of output below the social average. Here surplus arises only after recovering the costs of fixed and circulating capital, and the farmer defines the rate of return on capital as capitalist profit (revenues minus expenses) divided by the capital employed in production. Only when we find such accounts have we identified “the specifically capitalist mode of production in its developed form”. As Marx said, “To these two forms of surplus-value there correspond two separate forms of the subsumption of labour under capital, or two distinct forms of capitalist production” (1976b, p. 1025), each implying a distinctive form of accounting. Only with the appearance of the modern capitalist farmer does the general idea of surplus change from feudal rent to capitalist profit.

With the intervention of the capitalist farmer...[the nature of rent thereby changes, not only as a matter of fact and accidentally, which happened in places already under the previous forms, but rather normally, in its acknowledged and dominant form. From the normal form of surplus-value and surplus labour, it declines to the excess of this surplus labour over and above the part of it that is appropriated by the exploiting capitalist in the
form of profit... Instead of rent, the normal form of surplus-value is now profit, and rent now counts as an independent form only under special conditions, not a form of surplus-value in general but of a particular offshoot of this, surplus profit. ... [T]his transformation corresponds to a gradual transformation of the mode of production itself... It is no longer land, but capital, that has now directly subsumed even agricultural labour under itself and its productivity (Marx, 1981, pp. 935–936).

Understanding the accounting signatures of Marx’s formal and real subsumption contradicts the common view that he thought capitalist farmers appeared in the sixteenth century. For example, Cooper believes that Marx “saw an ‘agricultural revolution’ in which enclosures, sheep farming, rising prices and long leases created ‘a class of capitalist farmers’ and expropriated labourers by the end of the sixteenth century” (Cooper, 1985, p. 146; see also Beckett, 1990, p. 1). Marx certainly thought an agricultural revolution had occurred by then, but this was only the formal subsumption of labour. He also thought a class of capitalist farmers existed. However, in the translation of Volume One of Capital that Cooper references (the Everyman edition first published in 1930), “capitalist farmers” are in quotation marks (see Marx, 1933, p. 825). Arguably, Marx intended these quotation marks to highlight that qualifications are necessary to grasp the precise meaning of this phrase, whereas Cooper omits them (as do other translations). Although Cooper also references the Moscow edition of Volume 3 of Capital, where Marx describes the sixteenth century as “a nursery school for capitalist tenants” (1959, p. 799), this is overlooked, and Marx’s chronology is dismissed as “somewhat...vague” (1985, p. 147).

The interpretations of Marx offered by Marxists have certainly been somewhat vague. Dobb proposed “a period of two hundred years within which no mode of production can be said to be dominant” and an unspecified “process of transition to capitalism” (Tribe, 1978, p. 14). Dobb “date[s] its opening phase in England... in the latter half of the sixteenth and early seventeenth century when capital began to penetrate production on a considerable scale” (Dobb, 1946, p. 18). Saville says Marx thought the “historical processes which created the landless labouring class also involved the emergence of a class of capitalist farmer by the end of the sixteenth century... and the development of a capitalistic agriculture” (Saville, 1969, p. 266). Saville does not distinguish between capitalistic and capitalist. Marx’s chronology is somewhat more vague in Brenner’s interpretation. Brenner says he uses Marx’s definitions (Brenner, 1985a, fn. 3, p. 11). However, his chronology is actually based on the claim that “From the late fifteenth century... in England we find the landlords consolidating holdings and leasing them out to large capitalist tenants who would in turn farm them on the basis of wage labour and agricultural improvement” (Brenner, 1985a, p. 46). Brenner implies that Marx thought there was real subsumption in agriculture from the late fifteenth century — that, for example, Kerridge has shown the existence in Wiltshire of “a system of capitalist farms in operation from the early sixteenth century” (Brenner, 1985b, p. 308). Brenner appears to define capitalism as an inherent property of large farms. In his reply to his critics he emphasizes that his “argument is for the primacy of the social–property relationships and not — as I may not have made clear enough — the size of the farms per se” (Brenner, 1985b, p. 300). However, his understanding of the capitalist surplus–extraction relationship is superficial. Brenner “characterizes the capitalist economy... [as one where] the working class must sell their labour power to the capitalists for a wage in order to survive. In the process they must alienate a surplus (profit) to the employers, precisely because they do not possess the means of production” (1985b, p. 228). All this achieves is the equation of wage labour with profit and the equation of profit with capitalism. As we have seen, in Marx’s theory wage labour is consistent with feudal surplus. Kriedte’s chronology is also vague. As Hagen puts it, in Kriedte’s view, a crucial development during “the long sixteenth century and afterward, w[as] the commercialization of agriculture” (Hagen, 1988, p. 17). For Kriedte commercialisation means modern capitalist farming began at the end of the fifteenth century when, following enclosures and the appearance of wage
labour, “The market became the mechanism which regulated the relationship between the landowner and those who rented his land. The feudal rent had been transformed into a capitalist ground rent” (Kriedte, 1980, p. 75). Kriedte thinks this although Marx says capitalist ground rent only appears when, with the development of total social capital, the general form of surplus is capitalist profit. Only then does capitalist ground rent become a monopoly surplus over the general rate of profit. As Marx put it, “in forms of society where it is not yet capital that performs this function of extracting all surplus labour...— i.e. where capital has not yet subsumed society’s labour or has done so only sporadically — there can be no question at all of rent in the modern sense, of rent as an excess over and above average profit, i.e. over and above the proportionate share of each individual capital in the total surplus value that the total capital produces” (Marx, 1981, p. 918).

As we shall see in Part Two, there is accounting evidence of capitalistic farmers from the late fifteenth to the late sixteenth century, and some evidence of real subsumption in the early seventeenth. However, there is none to support the existence of a class of modern capitalist farmers at this time. Marxists have recognised the problems for Marx’s explanation of the transition created by locating modern capitalist farmers at the end of the sixteenth century. First, the absence of an economic basis for the conflicts leading to the bourgeois revolution in the mid-seventeenth century, as capitalism had already arrived. Second, the unexplained gap that appears between “the social changes in the agrarian structure” in the sixteenth century, and the generalised “technical transformation of farming methods” from the middle of the eighteenth century (Saville, 1969, p. 252). Clearly, under this reading of Marx, “The timing of these two revolutionary changes do not coincide” (Saville, p. 252). However, in our reading of Marx’s theory the bourgeois revolution arises from class conflict in trade and is a necessary precondition for the real subsumption of labour, for harnessing the driving force of the rate of return on capital to the exploitation of wage labour in production. Part Two shows the accounting evidence is consistent with Marx’s theory and with the prevailing view amongst agricultural historians that the technical revolution in agriculture began in the second half of the seventeenth century. In this reading, therefore, the timings of the social and technical revolutions in farming do coincide. To support this reading we must understand the accounting signatures underlying Marx’s explanation of the commercial revolution and the real transition in agriculture.

3.3. Accounting for the commercial revolution and the real transition

In Marx’s mind,

There [was] no problem at all in understanding why commercial capital appears as the historic form of capital long before capital has subjected production itself to its sway. Its existence, and its development to a certain level, is itself a historical precondition for the development of the capitalist mode of production (1) as precondition for the concentration of monetary wealth, and (2) because the capitalist mode of production presupposes production for trade (transforming products more and more into commodities). Even so, this development, taken by itself, is insufficient to explain the transition from one mode of production to the other (Marx, 1981, p. 444).

The development of trade to a certain level requires socialised and social capital. This is the only feasible basis for the necessary concentration of monetary wealth to exploit opportunities that new social forces of production had presented (Marx, 1981, pp. 449–450). As Marx says, “This

37 In this context, Marx means the appearance of wage labour in agriculture and new social forces of trade, the discovery of the world. For example, the doctrine of du secret commercial (punishable by death in Venice) “ceased to be tenable in the sixteenth century. Prince Henry’s cartographical school at Sagres, in the fifteenth, had done much to render available the then existing stock of knowledge regarding the undiscovered world. But it was the application of the Flemish printer’s and engraver’s art to mapping at the beginning of the sixteenth century that gave the death-blow to secret commerce” (Hunter, 1899, Vol. 1, p. 219). To this must be added the many developments in shipping that allowed mariners to face the oceans.
enlargement of scale constitutes the real foundation on which the specifically capitalist mode of production can arise if the historical circumstances are otherwise favourable, as they were for instance in the sixteenth century” (Marx, 1976b, p. 1022). He notes that price inflation from the mid-sixteenth century and, initially, sticky rents that did not increase as fast as prices, aided the transition to capitalist farming. However, he says that to continue the transition to the real subsumption of labour, the country concerned must ‘dominate the world market’. The transition only occurs where lords lease to farmers who employ wage labour, and the gentry and merchants accumulate large amounts of capital from overseas trade and reinvest it in agriculture. Only then can the rate of return mentality from trade fuse with the mentality of exploiting labour in production and real subsumption occur. As Marx put it:

[O]nce rent takes the form of money rent and the relation between rent-paying peasant and landowner becomes a contractual relation — a transformation which is only possible given a certain relative level of development of the world market, trade and manufacture — land inevitably starts to be leased to capitalists, who were formerly outside rural limits and who now transfer to the land, and to the rural economy, capital that has been obtained in the town, together with the capitalist mode of operation which has also been developed there: the production of the product as a mere commodity and solely as a means of appropriating surplus-value. As a general rule, this form can come about only in those countries that dominate the world market during the transition period from the feudal to the capitalist mode of production (Marx, 1981, p. 935).38

England played the decisive role. Its commercial revolution began in the sixteenth century with a flourish of socialised capital in exploration and privateering that, from the mid-seventeenth century, gave England commercial domination of the world. Given the relatively small scale of capital required in agriculture, there was little need for socialised capital, except for risky experiments (Thirsk, 1985).39 Nevertheless, from the middle of the seventeenth century capital ‘obtained in the town’ was likely to be from trade with socialised and social capital, and with it would come that crucial element of the modern mentality, a fixation on the rate of return on capital.40

Harnessing the rate of return on capital to the exploitation of wage labour in production underlay and drove real subsumption. This provides Marx’s answer to “the key problem” in the transition debate, namely, “why England was the first country to develop a form of agrarian capitalism” (Rigby, 1998, p. 146).

In Marx’s view, not only did the rate of return mentality appear with socialised merchant capital, it also appeared in agriculture during the substantial expansion of the land market from the late sixteenth and early seventeenth century. Then, for

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38 The translation of this passage from the Penguin edition of volume three of Capital is misleading. It appears to contradict the theory of the transition presented here — that the ‘capitalist mode of operation’ results from the fusion of capital ‘from the town’, socialised capital from trade, and capital from agriculture. The Moscow edition’s translation is consistent with our theory: “the capitalists...hitherto stood beyond the rural limits...and now carry over to the country-side and agriculture the capital acquired in the cities and with it the capitalist mode of operation developed — i.e. creating a product as a mere commodity and solely as a means of appropriating surplus value (Marx, 1959, p. 799, emphasis added). In short, whereas this plainly says that capital obtained in the town went to agriculture and then the capitalist mode of operation developed, the Penguin translation says capitalist production came from the town!

39 Large farms “were called in the eighteenth century capital farms, or merchant farms” (Marx, 1976a, p. 886). Some farms may have had socialised capital. Marx quotes an authority that in the later eighteenth century “It is no uncommon thing for four or five wealthy graziers to engross a large enclosed lordship” (1976b, p. 887).

40 As Marx says, anything other than “relatively weak” capital formation in agriculture “assumes the concentration and existence of a class of rich idle capitalists” (1981, p. 947), that is, passive investors living off the returns from social capital in trade. Marx describes the “beginnings of the conquest and plunder of India” as one of the “chief moments of primitive accumulation”. In his view, “The treasures captured outside Europe by undisguised looting, enslavement and murder flowed back to the mother-country and were turned into capital there” (Marx, 1976b, pp. 915, 918). For both propositions there is ample historical evidence, some of it reviewed in Part Two.
the first time, landlords begin to capitalise their rents. The consequence, in Marx’s view, redolent with accounting signatures, was an acceleration of the processes of transition.

Not only can the former rent-payer transform himself in this way into an independent peasant proprietor, but also urban and other holders of money can buy plots of land with a view to leasing them either to peasants or to capitalists, and to enjoy the rent on their capital thus invested as a form of interest. This factor, too, helps to promote the transformation of the former mode of exploitation, of the relationship between the owner and actual tiller, and of the rent itself. ...For the buyer...[the capital parted with] functions in his accounts as interest-bearing capital, since he reckons the income he receives — as rent from the land or as debt interest from the government [or dividends on a share] — as interest on the money that it cost him to purchase the title to this revenue (Marx, 1981, pp. 938, 946).

Reckoning income as a rate of interest gives the rate of return on the capital advanced. As it happened in trade, so it happened on land. Part Two (Bryer, in press-c) shows this fascination with interest in seventeenth and eighteenth century farmers’ accounts. It was also the demand of the generality of the EIC’s investors to enjoy their surplus as a form of interest that underlay the transformation of their accounts and its merchant elite from 1600 to 1657. As Marx says, “the relation of labour to capital...presupposes a process of history which dissolves the various forms in which the worker is proprietor” (1973, p. 497), not merely the transition from peasant to wage labourer and lord to capitalist. The generality of investors who pooled their money in the EIC would not tolerate its mastery by the feudal elite who secured an additional surplus only on the basis of “politically-formed property” (Brenner, 1993). That is, because of their legal monopoly of international trade. The EIC’s investors would have agreed with Marx that “The authority that the capitalist assumes in the immediate production process, as a personification of capital, the social function he dons as manager, and ruler of production, is essentially different from authority...as political or theocratic rulers as in earlier forms of production” (Marx, 1981, p. 1021). The accounts are also essentially different. As the personification of the generality of its investors, the EIC’s managers became accountable to, and required to serve, capital as their sole purpose in life. This economic ethic appeared not only in the EIC. Marx thought it appeared throughout Europe. As he said,

Today, industrial supremacy brings with it commercial supremacy. In the period of manufacture it is the reverse: commercial supremacy produces industrial predominance... It was the ‘strange God’ who perched side by side with the divinities of Europe on the altar, and one fine day threw them all overboard with a shove and a kick. It proclaimed the making of profit as the ultimate and sole purpose of mankind (Marx, 1976b, p. 918).

Marx gives his chronology of the appearance and spread of the modern capitalist mentality in agriculture in Volume 3 of Capital. In his view, it is only between the “latter third of the seventeenth century” and the “first half of the eighteenth century” that “the new mode of agriculture...extend[s] beyond the mere subsumption of agriculture under capital” (Marx, 1981, p. 938, see also, p. 943). As we shall see in Part Two (Bryer, in press-c), the accounting evidence is consistent with this prediction. Farmers begin to calculate the rate of return on capital employed in the seventeenth century, and this becomes common by the middle of the eighteenth.

In contrast to Marx’s insistence on the critical role played by commercial capital, Brenner gives all causal force to economic necessity within a system of property relations determined by class-conflict. As Hagen says, in Brenner’s account capitalist tenant farmers “seem to descend from heaven” (Hagen, 1988, p. 42). After the breakdown of direct feudal control of production, Brenner says, “the organizers of production and
the direct producers were separated from direct, non-market means of access to their means of reproduction or subsistence. ... [and] they had no choice... but to buy and sell on the market. This meant that they were compelled to produce competitively by way of cost-cutting and, therefore, that they had as a rule to attempt to specialize, accumulate and innovate” (Brenner, 1985b, pp. 214–215; see also, p. 297). Similarly, in Brenner’s view, in the late fifteenth and sixteenth centuries, “Lacking the ability to reimpose some system of extra-economic levy on the peasantry, the lords were obliged to use their remaining feudal powers to further what in the end turned out to be capitalist development” (Brenner, 1985b, p. 293). Brenner’s claim that the English lords were “forced... to seek novel ways out of their revenue crisis” has been challenged, for example, by Hoyle (1990). He shows that the early move to leases was a traditional feudal response to cash shortage. It was not until later in the sixteenth century when prices began to rise that the lords took the initiative, only to meet with court-backed peasant resistance to the change (see also Overton, 1996, p. 205). As Croot and Parker say, the “core” of Brenner’s argument is that in England class conflict created “capitalist landlords who...leased to a capitalist tenant” (Croot & Parker, 1985, p. 79). However, these lordly initiatives are not those of a modern capitalist as their objective was higher feudal surplus. The consequence was not necessarily capitalist as the lessees could have knuckled under and returned to effective serfdom, or resisted the lords’ demands, etc.41 Brenner’s critics are right to object to “his failure to allow for the consolidation of land and the appearance of capitalist forms of agriculture among the tenants, both leasehold and copyhold...quite independently of the manorial lords” (Hoyle, 1990, p. 2). However, they are wrong, first, in that these tenants are not modern capitalists. Secondly, they are wrong in supposing that capitalist agriculture could be simply the “result of processes of differentiation within the peasant themselves” (Hoyle, p. 2), processes that had existed as long as the peasantry. As we shall see in Part Two, the accounting evidence contradicts the common view, expressed by Croot and Parker, that “pioneering capitalist farmers... had begun to emerge in the fourteenth and fifteenth centuries” (1985, p. 87). It also contradicts their claim that this is supported by “an awareness of profit...apparent wherever farmers have left accounts or diaries” (Croot & Parker, p. 80). It is not until the early seventeenth century that there is any accounting evidence of an awareness of profit in a capitalist sense, and not until after the mid-eighteenth century that this awareness is relatively common.

Socialised and social capital in trade and real subsumption in agriculture set the stage for the industrial revolution. As Saville puts it, “Marx, in his model of primitive accumulation, seems to assume that around the middle of the eighteenth century the basic framework for industrialization was already completed” (1969, p. 269). The accounting evidence presented in Part Two (Bryer, in press-c) supports Saville’s view that “It was a society in which the penetration of the capitalist ethos had reached into all important sectors of economic life, in which economic affairs were closely articulated to the balances of profit and loss” (Saville, p. 269), and also to the capital employed. Much of the capital for the English industrial revolution must have come from surpluses from the employment of capital in agriculture and trade. To achieve the necessary magnitudes in the nineteenth century required the appearance of total social capital (Bryer, 1991, 1993b). As Marx said, ultimately “Capital must increase the value of its operations to the point where it assumes social dimensions, and so sheds its individual character entirely”, and this, as we have seen, only happens “once labour and capital have been set free” (Marx, 1973, p. 1035). This is why, even with socialised capital, lacking free wage labour in agriculture, the transition to modern capitalism did not occur in late medieval Italy.

41 Why, without invoking the growth of the market and economic necessity, in Brenner's model reversal of this particular breakdown of feudal control was not possible, whereas the breakdown in the twelfth century was, is not clear. In Brenner's account, the lords simply and irretrievably “lost their capacity to take a rent by extra-economic compulsion and the peasants were separated from their possession of the means of subsistence” (1989, p. 273). While the former may be true, and the latter is indisputable, neither makes capitalism inevitable.
As Marx said, “Manufactures may develop sporadically, locally, in a framework which still belongs to a different period, as e.g. in the Italian cities alongside the guilds. But as the sole predominant forms of an epoch, the conditions for capital have to be developed not only locally but on a grand scale” (Marx, 1973, pp. 505–506). To achieve this grand scale in England required not only a capitalist agriculture, but a bourgeois revolution in trade. Part Two argues that embroiled in these social revolutions were revolutions in accounting.

4. Conclusions

The paper has argued that historians of accounting have much to gain from an engagement with Weber and Marx’s theories of the transition to capitalism. We found that although the accounting focus of Weber is explicit, and his idea of calculative mentality avoids economic determinism, his vision of capital accounting is a dim and distorted reflection of reality. While accounting is usually only implicit in Marx, its recognition also allows him to avoid determinism, and his vision is richly realistic. Recognising the accounting in Marx allowed us to interrogate his historical writings for his explanation of the transition.

According to Marx’s theory the calculative mentality of modern capitalism appears in a historical process, unique to England, where in the sixteenth century merchant capital was pooled with capital derived from a formally capitalist agriculture. Investment of surpluses from socialised and social capital from overseas trade in agriculture followed the bourgeois revolution of the mid-seventeenth century. This revolution establishes the demand for an equal return for equal capital as the dominant economic ethic. In this historical process, the rate of return mentality combines with the mentality of maximizing surplus labour within production, to produce the modern capitalist mentality, that pursues the maximum rate of return on capital employed in production. When we understand Marx’s explanation of the transition as a history of accounting, it is not the deus ex machina many have claimed (see: Holton, 1985; Martin, 1983). Furthermore, it is open to historical investigation. Marx’s theory does not posit the pre-existence of modern capitalism — either as commerce or exchange relations or wage labour, or as a calculative mentality — as an external driving force in the dissolution of the feudal mode of production. Rather, Marx explains capitalism as the outcome of the pursuit of monetary wealth within feudalism — the “historic process is not the product of capital but the presupposition for it” (Marx, 1973, p. 505). This interpretation contradicts the common view that “the identification of the dissolution of feudalism with the necessary rise of capitalism...[was] a view which Marx was well known for” (Tribe, 1978, p. 15).

The question, of course, is the evidence. To what extent does the history of accounting support Marx’s theory? Part Two (Bryer, in press-c) tests his theory against the available evidence. It outlines social histories of accounting for the agricultural, commercial and bourgeois revolutions, and shows they are consistent with Marx’s theory of the transition. The paper calls for extensive archival research.

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References


