



ROB BRYER

ACCOUNTING FOR HISTORY IN MARX'S *CAPITAL*

The Missing Link



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List of Abbreviations

DEB	Double-Entry Bookkeeping
FASB	Financial Accounting Standards Board
FMP	Feudal Mode of Production
GAAP	Generally Accepted Principles of Accounting
IASB	International Accounting Standards Board
IFRSs	International Financial Reporting Standards
MELT	Monetary Expression of Labor Time
MOP	Means of Production
MOS	Means of Subsistence
NCB	National Coal Board
NPV	Net Present Value
NUM	National Union of Mineworkers
<i>P. Oxy</i>	Oxyrhyncus Papyri
PEA	Political Economy of Accounting
PV	Present Value
RC	Replacement Cost
RCA	Replacement Cost Accounting
ROI	Return on Investment
SEA	Social and Environmental Accounting
SMP	Slave Mode of Production
SPE	Special Purpose Entity
TSSI	Temporal Single Systems Interpretation
UAW	United Automotive Workers

Chapter 1

The Missing Link

The two “discoveries” that made Marx a “man of science,” Engels (1989, 467–68) claimed, were his theories of value and history, but today many Marxists routinely reject both.¹ Many economists, historians, sociologists, philosophers, and others, criticize Marx’s theories, but the question—partly addressed in *Accounting for Value* (Bryer 2017), and pursued further here—is whether, if we understand them as explanations of capitalist and pre-capitalist accounting, the criticisms are justified. *Accounting for Value* built on the Temporal Single System Interpretation’s (TSSI’s) refutation of the criticism that Marx’s theory of value is inconsistent (Kliman 2007), by showing that Marx used it, the ‘invisible essence,’ to explain the ‘phenomenal forms’ of ‘capital,’ ‘profit,’ ‘cost price,’ and so on, he found in reality and in capitalists’ accounts, which supported his claim to have ‘proved’ it.² *Accounting for History* builds on that conclusion. Discovering he could explain capitalists’ accounts, it argues, led Marx to significantly revise and develop his theory of history. Recognizing that accounts provide visible representations of the changing underlying social realities he sought to explain, the book concludes, reveals a ‘missing link’ in Marxists’ interpretations, reclaims his theory from their criticisms, and allows us to test it against historical evidence.

Marxists usually call Marx’s theory of history ‘historical materialism,’ a phrase invented by Engels even though he knew that “the word materialism grates upon the ears of the immense majority of British readers” (1990b, 283), many of whom would assume it meant the philosophical assertion “that everything is made out of matter” (Eagleton 2016, 8). He complained “of the prejudices of British ‘respectability’” against all philosophy (except agnosticism) (Engels 1990b, 283), insisting that his and Marx’s history were grounded in the “*economics* of each epoch” (Engels 1987, 254), and some (notably, Seligman 1901, 613) have argued it is an economic theory of history.

Marxists, however, generally agree that Marx's historical materialism is more than economics. Marx preferred "more precise but longer phrases, such as 'the mode of production in material life'" or others such as "'material base,' 'dialectical method,' 'history and its process'" (Dunayevskaya 2003 [1973], fn.106, 302). "Orthodox" (Stalinist) Marxism, we will see, hijacked "historical materialism" and distorted its meaning, but as Dunayevskaya (2003, fn.106, 302) says, humanist Marxists can reclaim it as a "shorthand term to express what Marx meant."

To explain and test what Marx meant, *Accounting for History* builds on *Accounting for Value* in two ways. First, by interpreting Marx's historical materialism as a world accounting history that explains changing methods of bookkeeping, forms of accounts and their uses, from the earliest civilizations to capitalism, defending it against its critics, and testing it against surviving accounts. 'Accounting history' is a branch of academic accounting research that studies "the nature, roles, uses and impacts of accounting and accounting change in historical context" (Gomes et al. 2011, 391), often employing economic and social theories, sometimes adopting a Marxist perspective (Gomes 2008), but not Marx's theory of history. Accounting historians also often necessarily depend on the work of specialist historians, but seek to contribute by deploying a detailed understanding of historical and modern forms of accounting, the aim here. Only a few Marxists, we will see, have seen any links between accounting and Marx's theory of history, but none have proposed an accounting interpretation or tested it.

Second, the book uses the accounting interpretations of Marx's theories of history and value to explain and defend his much-criticized prediction of the 'inevitability' of socialism as the end of 'history.'³ In addition to the technological and institutional development of advanced capitalism, the key necessary conditions, it argues, are that workers see through capitalist 'ideology,' understand that Marx's theory of value explains why the phenomenal forms appearing in capitalist accounts are distortions of the underlying social reality, and that demystified accounting is integral to his concept of socialism on Day 1. To get to Day 1, the book concludes, Marx left Marxists the task of 'critical accounting.'

ACCOUNTING, HISTORY, AND MARX

Accounting is important for interpreting and testing Marx's theory, the book argues, because for as long as differential property rights over the means of production have existed, from the earliest 'class' societies, the owners of these rights have used accounts to advance and defend them. Apart from the smallest enterprises, the scale or complexity of production usually compelled

owners to entrust its management to agents, whom they required to produce accounts. What the agent had to account for, therefore, provides a window into how the owners viewed the production process, what they considered important or insignificant, which the book argues allows accounting historians to identify what Marx called society's 'economic base' or 'mode of production,' the concept at the heart of his theory of history, by observing its phenomenal forms.

Marx's historical materialism explains the evolution of humanity's 'forces of production' or 'productive powers,' its ability to produce, through a series of historical epochs—ancient slavery, feudalism and capitalism—distinguished by qualitatively different modes of production, which the book explains as a world accounting history, an explanation of the historical evolution of qualitatively different methods of accounting and control. The overlooked 'missing link' with accounting is that Marx defined modes of production as different ways of extracting 'surplus labor,' labor over that necessary for the workers' subsistence, which 'correspond to' different 'levels of development' of the forces of production, which the book argues underlie the different methods we find in slave masters, feudal lords, and capitalists' accounts.

The book is not an accounting history of *the* world. It says nothing about Africa, China, India, Russia, or South America. It tests Marx's theory against accounting evidence from c. 3100 BC to AD 1300, from the earliest bookkeeping in Egypt and Mesopotamia, through classical Greek and Roman accounts, to ninth-century Francian 'polyptychs' and thirteenth-century English 'charge and discharge' accounts. Its focus is the transition from the slave mode of production in the ancient Near East, Greece and Rome, to the feudal mode of production in Western Europe, the most criticized part of Marx's theory, his 'pre-capitalist modes of production,' what they are, whether they existed, and when and why, if at all, a transition occurred. Historians generally accept there was a transition to capitalism, which is qualitatively different from the pre-capitalist world, as Marx had argued, even though they disagree about what he meant. Because agriculture remained the main form of production in all pre-capitalist societies, the book's focus is analyzing the history of land management, which the ruling classes of large landowners throughout the period necessarily delegated to responsible agents, and discussing the significant evidence of their accounts that has survived.

This evidence, the book argues, contradicts the prevalent view that it is "anachronistic" to claim that "a distinctive and defensible 'Marxist history' . . . exists" (Blackledge 2006, ix). Against the "abstract empiricists," whom Marx dismissed for their "crass" notion of history as the accumulation of "facts," the book supports the minority of Marxists who continue to argue that historical materialism's strength is "offer[ing] a defensible basis for the

selection of evidence” (Dunayevskaya 2003, 76; Blackledge 2006, 23, ix). Its interpretation of Marx’s “general answer to the problem of the historical method,” however, goes beyond concluding, “the fundamental questions to ask of any historical period would include those regarding the nature of production,” seen as a “social, political and historical process” (Blackledge 2006, 24, 22). The defensible evidence of the changing nature of production highlighted by Marx’s theory, the ‘missing link’ in Marxists’ understanding, it argues, is changing methods of accounting.

Whereas Western Marxists see no link between Marx’s theory and accounting, Bailey’s (1984) survey of the Soviet Union’s “Marxian theory of accounting,” which did, suggests that it did not get beyond generalities. Bailey (1984, 23) highlighted Vasilenko’s (1971, 8) argument that when the “socio-economic formation,” mode of production, changed, “changed also are the essence and character of accounting as an instrument of management and control.” The book agrees, and explains why, according to Marx, the “socio-economic formation” “determin[es] the character of accounting, its contents, aims and tasks,” which has “a class character, being a tool which the ruling class uses in its own interests” (Bailey 1984, 24). Based on Bailey’s survey, however, Soviet accounting theorists did not explain why the “class character” of accounting changed, what its changing “contents, aims and tasks” were, nor provide any evidence. Bailey concluded, prematurely the book contends, “the historical evidence . . . is not sufficient to test satisfactorily the Marxian theory of accounting” (1984, 28).

World accounting history is important to interpreting and testing Marx’s theory, but not because it is an economic theory. Marx called it ‘materialist’ to contrast it with Hegel’s idealism, but accounting is important because Hegel’s philosophy of history, his ‘dialectical’ method, plays a fundamental role within Marx’s theory (Therborn 1976; Dunayevskaya 1973, 2003; Blackledge 2006, 23). Marx embraced Hegel’s dialectical method, but “stood him on his feet” (Dunayevskaya 2013 [1958], 38), transcended his philosophy by conceptualizing it as a materialist theory of history. Marx, as Dunayevskaya (2013, 35; 2003, 10) says, never abandoned “the deeply rooted historical content of Hegelian philosophy,” the dialectical unfolding self-consciousness of Hegel’s “Subject,” his “animating spirit” of freedom (‘World Spirit,’ ‘Absolute Mind’) through history, “the dialectic as a continuous process of self-development, a process of development through contradiction, through alienation, through double negation,” as a material historical-dialectical process.

What Marx found particularly attractive in Hegel’s philosophy was that Subject, when faced with “absolute negativity,” as Dunayevskaya (2003, 10) puts it, is “adamant” there will be a “new beginning,” not a synthesis but a “double-negation,” a “transcendence,” because Subject “never stops

its ceaseless motion, not even at its apex, Absolute Knowledge.” To reunite Hegel’s philosophy with reality, Marx argued, required recognizing that the “hidden *Subject*—the driving force of the revolutions,” in history as well as those “to be”—was class conflict, the driving force of a rising and ultimately victorious dominant class, which in capitalism would be “the Proletariat” (Dunayevskaya 2013, 10). Marx, in short, “singled out absolute negativity as so overpowering a ‘result’ that, though the vision was ‘abstract’ and ‘estranged,’ nevertheless one could not escape ‘the movement of history,’ ‘world history,’ which was ‘to Hegel a history in the ‘progress and consciousness of freedom’” (Dunayevskaya 2003, 11–12), as in its materialist form it always was for Marx.

Modes of production have qualitatively different ‘social relations of production,’ which change ‘dialectically,’ Marx argued, from the contradiction between master and slave, the first ‘negation’ of freedom, to the contradiction between lord and peasant, the second ‘negation of the negation,’ still a contradiction, but a qualitative step toward freedom. Marx’s theory, Engels controversially claimed, had thereby done for society what Darwin did for the biological world, but not by producing a form of social Darwinism based on natural selection (Blackledge 2006, 37). Marx’s evolutionism, Callinicos (1999, 103) suggests, “is closer to the developmental model of Lamarck than it is to Darwin’s variational model,” but whereas Lamarck’s was an evolutionary model of inheritable acquired characteristics, Marx’s evolves from ‘new beginnings’ that make the evolutionary stages related to, but qualitatively different from, what went before. World accounting history is therefore an important ‘missing link’ in Marxist understanding of Marx’s theory of history because, the book argues, it allows us to observe his materialist reinterpretation of Hegel’s “absolute negativity,” to observe the “double-negation” in the “new beginning.”

‘Missing link’ is a popular evolutionary metaphor that paleontologists use to describe important evolutionary discoveries, the general sense intended here. Accounting history reveals Marx’s evolutionary discovery, the book argues, by allowing Marxists to articulate and test his theory of history by studying changing forms of exploitation, the calculated extraction of surplus labor. By understanding capitalist and pre-capitalist forms of accounts as written records in which we can observe changing forms of exploitation, see ‘signatures’ of underlying ‘calculative mentalities,’ different ways of calculating surplus (Bryer 2000a), we can elucidate and test Marx’s theory of history as a dialectical-historical theory of social evolution through the progressive transcendence of contradictions. Marx’s pre-capitalist and capitalist modes of production conceptualize these contradictions as *qualitatively* different ways of calculating and controlling the extraction of surplus labor, the ‘invisible essence’ (or ‘hidden basis’), he called it,

that determine different social relations of production, that are dialectical, evolutionary steps toward social and economic freedom. The social relations determine the visible phenomenal forms (or 'economic categories') that, according to the accounting interpretation, determine the aim and therefore the method of accounting. In short, qualitatively different methods of accounting represent qualitatively different calculative mentalities and social relations that, as they evolve, absolutely contradict earlier ones because they have qualitatively different aims.

The slave mode of production's mentality or underlying aim, Marx argued, was producing maximum 'use values' to maintain the way of life of the 'best citizens,' whereas feudalism's aim was maximum 'directly' appropriated 'surplus labor,' and capitalism's aim was maximum 'indirectly' appropriated 'surplus value.' These mentalities underlie the phenomenal forms of 'production,' 'rent,' and the 'rate of profit,' that he argued appear in the slave, feudal and capitalist modes, respectively, which identify the qualitatively different aim we should find in their method of keeping accounts. In short, according to Marx's theory, slave owners should account for production, feudal lords for rent, and capitalists for the rate of profit.

The accounting evidence, the book argues, supports Marx's theory. It shows that the slave mode of production dominated throughout ancient history to the end of the Roman Empire, and beyond in some eastern regions, whether as 'chattel' (legal) slavery that was common only in classical Greece and Rome, or as 'effective' slavery. Marx defined a slave as a 'laboring machine,' chapter 2 shows, who like a machine was not free to leave and forced to work, receiving in return only sufficient to maintain its operating capacity, and critically, was coercively accountable for production, that is, subject to physical punishment for its non-achievement. An 'effective' slave in Marx's theory, therefore, is a legally 'free' worker who is nevertheless coercively accountable for production. Pre-capitalist accounts do not always show us the degree of coercion experienced by workers, or their share of production. However, by confirming that the agents of the ruling class were accountable for production, what they unfailingly do show is that Marx's slave mode of production, as he argued, existed for several thousand years.

For skeptical historians, estate accounts produced under chattel slave regimes during the Roman Empire (discussed in chapters 4 and 5) can provide a benchmark for earlier or later calculations of surplus, because historians do not dispute that this was 'real' slavery, whereas, we will see, they often dispute the degree of 'unfreedom' of workers in other historical contexts. The evidence shows that Roman accounts focused on production, that is, calculated surplus labor in the form of production, which remained essentially unchanged from the earliest accounts from c. 3100 BC through to the end of the Roman Empire from AD c. 400 in the west and AD c. 700

in the east. The power of large landowners in Northwestern Europe sharply declined when Roman rule collapsed, but from AD c. 800, when it had revived, proto income calculations of various forms of what Marx called 'labor rent,' that he identified as the feudal form of 'primeval profit,' 'rent' calculated as receipts minus expenses, started to emerge in 'charge and discharge' accounts. To an accounting historian these accounts are significant because they held agents accountable to the proprietor for the *net* product of the production operations, a concept not apparent in the accounting evidence surviving from ancient Egypt, Mesopotamia, Greece, or Rome. From Marx's perspective, we will see, they are significant because they signature the feudal mode's mentality, its distinctive method of calculating surplus labor, which was large landowners' 'new beginning,' a mode of production qualitatively different from the earlier slave mode.

By explaining capitalist accounting using his theory of value, *Accounting for Value* argued, Marx supported his claim to have produced a "science" of capitalist society (1996, 33). *Accounting for History* supports Engel's claim that he had produced a 'scientific' theory of history. It gives an accounting interpretation of Marx's theory, contrasts it with leading Marxist historians and philosophers' interpretations, defends it against some important contributions to a large critical literature, and tests it against a world accounting history. It does not engage with the 'linguistic turn' in historiography, the 'cultural' or postmodernist view that history has no 'grand narrative,' no social or economic structure, just particular 'discourses' or 'stories,' that attack a "Stalinist interpretation" of historical materialism that many Marxists reject (Blackledge 2006, ix). Clearly, as Blackledge says, simply "by disassociating Marxism from the legacy of Stalinism Marxist historiography need not retreat before these [post-modern] criticisms" (2006, ix), but only by articulating Marx's theory and confirming it empirically can Marxism advance. Chapters 2–6 explain, defend, and empirically support Marx's historical materialism, his claim that slavery, feudalism, and capitalism were evolutionary, qualitatively different modes of production, by showing that in the historical epochs he identified the ruling class used qualitatively different methods of accounts to control the extraction of qualitatively different forms of surplus labor.

The final three chapters support Marx's prediction of the 'inevitability' of socialism as the end of 'history,' the last change in the mode of production driven by class-conflict, building on the accounting interpretations of his theories of value and history to specify the necessary conditions, the key one being widespread 'scientific' understanding of history and capitalism. Given this understanding, the accounting interpretation rejects the dominant view that Marx advocated central planning, and argues instead that he supported a particular form of what is known today as 'market socialism.'

Marx's scheme, chapter 8 argues, involves replacing all existing joint stock companies on Day 1 after the revolution with a universal system of publicly owned worker cooperatives, accountable to workers and society, initially for value, with the interim aim (goal, target) from Day 1 of developing the forces of production so that every labor hour 'directly' produces equal social value. The book concludes by outlining a possible scheme for socialist accounting to implement Marx's concept under current conditions and exploring the necessary tasks of 'critical accounting' to get to Day 1.

MARX'S THEORY AND ITS CRITICS

Marx's theory is a history of humanity that progressively increases its ability to produce by the accumulation of knowledge and a series of evolutions through different modes of production defined by different 'social relations of production,' based on different ways of extracting surplus labor that, he argued, 'correspond to' different 'levels of development' of the 'forces of production.' The level of development of the forces of production—the use-values (human and physical) available to society for production, its productive potential—in other words, 'determines' the dominant social relations of production—between master-slave, lord-peasant, and capitalist-wageworker—which together define the mode of production. The social relations in turn 'determine' society's 'social consciousness,' its controlling 'superstructure' of ideas and institutions, its customs, ideology, laws, and the state. Modes of production change through 'class conflict' when the forces of production 'contradict' the social relations.

Almost all aspects of Marx's theory are controversial. His core concept of the mode of production is "accepted by all Marxist historians as an essential tool in undertaking historical investigation" (Hilton 1985, 6), but there has been a long and inconclusive debate about its precise meaning. To understand Marx's explanation of how they appear, function, and change, we clearly must understand what he meant by the forces and social relations of production, particularly how together they 'determine' the 'economic base,' the nature of their 'interrelations,' and how they 'determine' the superstructure (Hilton 1985, 6).

Marx inherited the phrase "forces of production" (also called "productive forces" or "productive powers") from classical political economy, a purely quantitative measure of "productivity or productive capacities," which he "transformed" into a "new concept" (Therborn 1976, 355). Marx included the political economists' "means of production" or material resources available, but added what for him was "the main force of production, the human being himself" (1971, 215; 1973, 422). Human forces are not just the numbers and

capacities of workers, but their collectively accumulated knowledge of production techniques, of ‘technology,’ the human and technical organization of production. Marx often wrote of “material productive forces,” but these were always “of *society*,” or of “*men*” and “*their* material forces of production” (1971, 20–21, emphases added). His productive force “is the collective power of social production” (Marsden 1998, 104), “the organization of consciousness and human activity” (Avineri 1971, 76). In short, most Marxists agree, the forces of production define the physical and human resources available for production, and their limits, the qualitative dimension, their “level of development,” “a definite stage in the developments of the methods of labour” (Marx 1998, 777–78), which means it “is part of a conceptual couple, the forces and relations of production. The latter either correspond to the former, or are in contradiction with them” (Therborn 1976, 358).

There is, however, little agreement about precisely what Marx meant by the social relations of production, how they ‘interrelate with,’ ‘contradict,’ or ‘correspond to,’ the forces, to “qualitatively different technical forms of labour,” to the “technical organization and labour process” of production at a particular “level of development” (Therborn 1976, 363, 364). There is no agreement over how to solve the “problem of their structural incompatibility” (Therborn 1976, 364), what it means for them to be “in contradiction,” and therefore none over what we should seek to observe in studying the change from one mode of production to another. Marx’s idea of the social relations of production, not found in classical economics, many Marxists agree, is “the single most important concept of historical materialism,” but they often find it “a very complex concept” (Therborn 1976, 365), and its interpretation has provoked continuing controversy. Marxists agree, “At the heart of Marxist theory lies a particular strategy for classifying societies,” that “in one way or another, all Marxists root their typologies of social forms in the concept of class structure, which is itself based on the concept of mode of production” (Wright 1983, 17). However, there are “substantial disagreements over how the concept of mode of production should be defined and precisely how class structures should be distinguished,” with many critics questioning its “logical coherence, ambiguity or shifts of emphasis” (Holton 1985, 64). Giddens, for example, influentially argued, it was “deeply flawed” (1995, xiv).

Marxists’ main criticisms focus on the link in Marx’s theory between the forces and social relations of production. Marx famously argued in *Preface to A Contribution to the Critique of Political Economy*, that “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” (1971, 20), a claim most Marxists flatly reject. Most conclude it gives unwarranted causal primacy to the forces of production because it is “not self-evident that

economic tendencies have this clear predominance in history, or indeed that anything has it . . . , but it is difficult to say precisely what empirical facts would verify or falsify the materialist hypothesis. This point is widely recognized by Marx's critics" (Wood 2004, 103). Marxists accept that an adequate defense of the hypothesis would depend ultimately "on the evidence of history," but conclude, "it is still not sufficiently clear what would be involved in supporting or infirming historical materialist claims" (Wright et al. 1992, 12). In the face of these difficulties, Marxists often argue for replacing Marx's claim for the 'primacy' of the productive forces with the 'primacy' of the social relations of production (Blackledge 2006, 118).

In doing so, however, they overlook that Marx also argued in the *Preface* that the social relations develop the forces of production, are "forms of development of the productive forces," and that the forces and relations of production, while distinct, have a "dialectical connection" (Marx 1971, 21). Marx rejected Hegelian idealism, but did not exclude ideas from being a "material" force in history, which means not only physical matter but also "of much consequence," "important for the purpose at hand."⁴ He argued in the *Contribution to Critique of Hegel's Philosophy of Law* (1843–44), "The weapon of criticism cannot, of course, replace criticism by weapons, material force must be overthrown by material force; but theory also becomes a material force as soon as it has gripped the masses" (Marx 1975, 182). In his later work, in addition to technology and the capacities of workers, the 'material' forces of production include the method of extracting surplus labor, the social relations and appropriate forms of organization and methods of controlling production, signatored, we will see, in accounts.

Finally, but not least, ever since Marx claimed in the *Preface* that "the economic structure of society" forms the "real basis" of societies on which "arises its legal and political superstructure" (1971, 20), "Marxists have been arguing about the statement": "What is the 'base'? . . . What is included in the superstructure . . . [and] what is the relation between the 'base' and 'superstructure'" (Harman 1998, 8). The "mechanical, determinist view of history," "Stalinist Marxism," which argued that the 'base' was the forces of production that caused the social relations and superstructure, became Marxist orthodoxy from the late 1920s (Harman 1998, 9, 11). After Stalin's death the 'New Left' of the 1950s rejected this interpretation. They argued, "the 'reciprocal' influence of the superstructure on the base meant that 'determination' was not to be seen as a strict causal relationship," which other Marxists criticized because it "opened the door to a great dose of voluntarism" (Harman 1998, 12, 13). Continuing theoretical disagreement and confusion has "created a sort of 'common sense' among Marxists which holds that any talk of base and superstructure is really old hat" (Harman 1998, 14).

The book, however, supports Marxists who continue to argue for “a revolutionary alternative to either mechanical materialism or voluntarism,” agrees that there is a “non-mechanical, non-voluntarist version of historical materialism,” which “can easily be found” in Marx’s works (Harman 1998, 14), but only if we appreciate the unique lens accounting provides in this search. Marx emphasized, “regulation and order are themselves indispensable elements of any mode of production, if it is to assume social stability and independence from mere chance and arbitrariness” (Therborn 1976, 400). Because his mode of production regulates and orders exploitative relations of production, the ruling class’s system of accounting, its system for measuring and controlling the extraction of surplus labor, is an important part of any superstructure, which we will see allows us to observe what method of extraction operates in the process of production.

CAPITALIST ACCOUNTING AND HISTORY

Marx developed his theory of history over his working life, mainly but not exclusively in the *Economic Manuscripts of 1844*, *The German Ideology* (1846), *Grundrisse* (1858) and the volumes of *Capital* (from 1867). A major development coincided with progress in his critique of political economy in the late 1850s and early 1860s, when he also, chapter 2 shows, replaced his and Engel’s notion of forms of ‘commercial intercourse’ with the mode of production defined as the way or method of extracting surplus labor corresponding to the level of development of the forces. Marx abandoned the idea that the market was the motor of history, began his historical investigations again, this time specifying a distinctive underlying ‘essence’ or calculative mentality for each epoch. This shift coincided with the discovery of his theory of surplus value in the late 1850s while writing *Grundrisse* (Dunayevskaya 2003, 64), which was when he became seriously interested in capitalists’ accounts (Bryer 2017, chapter 3).

Marx fully worked out his theory of history in *Grundrisse* and *Capital*, but there was no “epistemological break,” the complete “rupture” that Althusser (1970) saw between the “early” and “mature” Marx (post *The German Ideology*). Rather, as Marx investigated the “new continent of thought” (Dunayevskaya 2003, xxxi), he had discovered in 1844, he corrected and developed his ideas, and the book distinguishes between the early and mature Marx (post *Grundrisse*) in this sense. In writing *Grundrisse*, Marx discovered that in capitalism labor had a use-value, ‘labor power,’ the power of generating ‘value’ for capitalists, as well as an exchange value, wages. By buying labor power, the capitalist could therefore have workers produce a commodity that cost less than its exchange value and realize a surplus

value, because the measure of its value was “time” (Marx 1986a, 532). The preoccupation of capitalist accounting was precisely measuring and tracking the ‘socially necessary labor time’ contained in a commodity, Marx also discovered, and in *Capital* he explained its phenomenal forms using his theory of value, the ‘inner essence,’ that provided the foundation of his theory of capitalist control (Bryer 2017).

Using his theory of value to explain the phenomenal forms appearing in capitalist accounts had important implications for Marx’s theory of history. It was no coincidence, according to this interpretation, that it was “during his discussion of the relationship of ‘free’ labor as alienated labor to capital” in *Grundrisse* that he “pose[d] the question of, and [made] an excursion into, pre-capitalist societies” (Dunayevskaya 2003, 66), broke off from his analysis of capitalism to discuss ‘Forms Preceding Capitalist Production.’ Deducing capitalism’s underlying method of extracting surplus labor from its social relations of production meant the same had to be true for pre-capitalist modes, that they had distinctive social relations and should therefore have had distinctive underlying ways of extracting surplus labor, differences that distinguished their modes of production. By identifying their ‘hidden essence’ Marx could explain the transitions to capitalism as the consequence of individual actions, but occurring unconsciously ‘behind their backs,’ as the result of ‘revolutionary’ class conflict over the method of surplus extraction because its social relations ‘fettered’ or restricted the surpluses available to the ultimate victors from ‘higher-level’ forces of production ‘already present.’ In short, the social relations ‘contradict’ the forces when they limit the surpluses of the ultimately dominant class.

Marx’s theory of social evolution, in brief, was that class conflict ‘determines,’ that is, “puts to an end,” “settles or decides,”⁵ the method of surplus extraction, the underlying calculative mentality, which determines its social relations of production, which determine its phenomenal forms and superstructure of stabilizing ideas and institutions, its laws, including the customs or laws of accounting, and politics. Evolutionary progression from slavery-to-feudalism-to-capitalism occurred because through class conflict the new feudal and capitalist methods of extracting surplus labor, their unconscious ‘invisible essence,’ determined new social relations of production that individuals from the ultimately dominant class calculated would increase the phenomenal forms of their surpluses, which developed the forces of production, leading to further conflict to remove the next contradiction. The book elaborates this interpretation, argues that the phenomenal forms we find in ancient and medieval accounts support Marx’s theory of history, and defends it against criticisms by historians and philosophers of its ‘economic determinism,’ ‘evolutionism,’ and ‘functionalism.’

HISTORIANS AND PHILOSOPHERS

Historians and philosophers often criticize historical materialism for its economic or productive force ‘determinism,’ for assuming external causality by a given ‘economic reality.’ However, it does not rely on economic determinism if underlying the social relations is the calculative mentality of the ruling class, a distinctive way of calculating and controlling the extraction of surplus labor, underlying a distinctive accounting system, which as the victor of class conflict it determines or decides to increase its surpluses, which develop the forces. This, chapters 2 and 3 argue, was Marx’s answer to the apparent “structure-agency” problem in historical materialism. Marxists dispute how to interpret his “formal” statement in the *Eighteenth Brumaire* (1852) (Blackledge 2006, 153) that “men make their own history, but they do not make it just as they please; they do not make it under circumstances chosen by themselves, but under circumstances directly encountered, given and transmitted from the past” (Marx 1979, 103). This, according to the accounting interpretation, means that “men” can freely choose to resist or seek to overthrow the dominant mentality, social relations, and superstructure, but they exist, and as a system of social accountability for the production of surplus labor, Marx’s mature theory clarified, they constrain them. Understanding this, chapter 3 argues, also answers historians and philosophers’ criticisms of the evident ‘evolutionism’ and ‘functionalism’ in Marx’s theory.

The ancient economy, its historians like to stress, “is an academic battle-field” (Rathbone 2002, 156), fuelled by a shortage of facts and the so-called ‘economic rationalism’ debate, focused on the implications of surviving ancient accounts, whether their relative simplicity compared to capitalist accounts proves that the ancients were not ‘economically rational.’ However, once we understand accounts as evidence of evolving modes of production, as evidence of changing systems of social accountability, key facts become available, the fog of battle lifts, and the historical eras, transitions, and ‘economic rationality’ of the ancients become clear. Finding Marx’s theory of history is ‘easy’ (Harman 1998, 14), the book argues, but only if Marxists take his theory of value seriously, which following the supposed demonstration of its internal inconsistency most have unadvisedly rejected (see Kliman 2007). Marxist historians have therefore failed to find his theory of history, we will see, because not understanding his theory of capitalism’s method of surplus extraction means they cannot understand his pre-capitalist methods. Marxist historians rely heavily on surviving accounts for evidence of various aspects of antiquity and the early middle ages (e.g., de Ste. Croix 1981; Banaji 2001; Wickham 2005; Sarris 2006). However, they overlook that these accounts provide evidence of modes of production and their transitions,

following chapters argue, of world accounting history, the history of how the ruling classes in different eras calculated and controlled the extraction of surplus labor.

Historians often criticize Marx's view that "different modes of production need correspondingly different kinds of superstructure" (Therborn 1976, 401). They reject his claim that the social relations of production 'determine' ideologies, laws and politics, and so on, spheres they typically argue have an independent, dominant, or determining influence on history. World accounting history, however, supports Marx's response to a critic of his theory who, like many historians today, while accepting that the material world dominates modern society, saw 'politics' or 'religion' dominating the ancient and medieval worlds. Marx replied, "the Middle Ages could not live on Catholicism, nor the ancient world on politics"; "On the contrary, it is the mode in which they gained a livelihood which explains why here politics, and there Catholicism, played the chief part" (1996, 92–93). The accounting evidence supports his claim that there were distinct ancient slave and feudal modes of production, distinct modes of exploitation, not simply distinct forms of ideological control. Politics dominated the ancient world because with low-level forces of production and a preoccupation with war, a mode of production where masters coercively extracted surplus labor from slaves was appropriate, which gave rise to a political economy of agriculture and war, and accounts focused on the control of production. Catholicism dominated the middle ages because, with an increased level of forces, the feudal mode where lords coercively extracted surplus labor from self-sufficient peasants was appropriate, and gave rise to a political economy of landed property and ordained hierarchy, and accounts focused on the control of rent. Accounting history, chapter 6 argues, supports Marx's claim that feudalism was a progressive evolution from slavery's focus on production, to rent as 'primeval profit.'

THE INEVITABILITY OF SOCIALISM

The accounting interpretation of Marx's theories of value and history has important implications for how we understand his theory of capitalist ideology and his concept of socialism, particularly his heavily criticized claim of its 'inevitability' as the end of class-drive history, the "close," as he put it, of the "prehistory of human society" (Marx 1971, 22). Marx used his theory of capitalist control (Bryer 2017) and theory of history, the final three chapters argue, to specify the necessary conditions that would make socialism 'inevitable.' When these conditions exist, Marx's theory of history predicts, workers will change the social relations of production by abolishing capital and 'free' wage labor, replacing them with social

ownership and control of the means of production, to remove the ‘feters’ of capitalist control to increase the social surplus by developing the forces of production.

Having discovered his theories of value and history, Marx could then predict that the final change to socialism was inevitable because, uniquely, the new ‘inner essence,’ the underlying ‘real relations,’ would be conscious, and the change would therefore not result from a gradual transition, but an immediate class-conscious change in mentality and social relations of production. A key necessary condition, Marx argued, is dispelling capitalist ideology, overthrowing its superstructure of legitimation and control, an essential element of which, chapter 7 argues, is capitalist accounting. If we accept that Marx’s theory of value explains capitalists’ traditional accounts (Bryer 2017), it is nevertheless clear that capitalists, their agents, political economists, and workers do not understand their ‘essence,’ and his theory of ideology explained why. Capitalist ideology distorted the appearance of its social relations of production, the reality that they were exploitative, Marx argued, by treating capitalist categories as transhistorical, eternal realities, while they were actually the product of a long history of changing forms of exploitation, and penetrating history and capitalist categories was ‘difficult,’ requiring the work of ‘science.’ Explaining capitalist ideology was the “project of Marx’s science,” to explain capitalism’s phenomenal forms by its social relations of production, and why their appearance is deceptive (Sayer 1979, 9, 10), why they hide exploitation, even from capitalists.

Marxists routinely criticize Marx’s theory of ideology for its ‘economic determinism.’ However, if Marx’s theory of history explains all economic categories historically, the causality in his theory of ideology runs: class conflict → calculative mentality → social relations of production → phenomenal forms → ideology. Class conflict decided capitalism’s calculative mentality of maximizing surplus value, which determined its social relations of capital exploiting ‘free’ wageworkers in production. These relations produced the phenomenal forms of ‘capital,’ ‘profit,’ ‘rate of profit,’ ‘cost price,’ and so on, which is what capitalists and workers see, to control which capitalists keep accounts, which represent their ideology, which Marx argued is real and rational, but ‘inverted.’ Because he claimed that explaining capitalist ideology would change the world, chapter 7 rejects the criticism that Marx left Marxists with a ‘problem’ by failing to explain nationalist, populist, religious, and other ideologies, which, if he is right, are by comparison insignificant. Instead, the book concludes, Marx bequeathed Marxists an accounting theory and left them the tasks of ‘critical accounting,’ which include using his theory of value to dispel capitalist ideology by explaining the causes and consequences of capitalists’ accounts.

Marxists engaging in ‘critical accounting’ to demystify capitalist accounts is consistent with Dunayevskaya’s (2003, 80–1) interpretation that in Volume 1 of *Capital* Marx shifts from theory to practice, “shift[s] from the history of theory to the history of production relations—the class struggles at the point of production—[that] became *the* theory,” “the *concretization* of Marx’s philosophy of liberation.” Capitalists’ accounts represent ideologically distorted quantitative histories of production relations that, nevertheless, because Marx’s theory of value explains them, *Accounting for Value* argued, give Marxists public financial reports they can explain as records of the creation and distribution of value. ‘Critical accounting’ is, therefore, an integral element of Marx’s theory of class struggles and revolutionary practice and, according to the accounting interpretation, is integral to his concept of socialism.

Marxists dispute what Marx said about socialism as the ‘first phase’ of the transition to the ‘higher phase’ of communism. Some argue he maintained a consistent view, from the early discussions in the *Economic Manuscripts of 1844*, the *Communist Manifesto* (1848) through to his comments in *Grundrisse*, *Capital*, and the *Critique of the Gotha Programme* (1875). The accounting interpretation supports Marxists who argue that Marx revised his concept, arguing that he did so when he revised his theory of history in *Grundrisse*, from when he argued, unlike in the *Manifesto* where he foresaw the gradual transition from capitalism, that the ‘dictatorship of the proletariat’ would immediately abolish capitalist social relations and replace them with socialist relations. Whereas all previous changes in the mode of production had been unconscious class conflict–driven transitions in dominance, from one dominant mode to another, the change to socialism would be conscious, comprehensive, and immediate. Marxists often argue that Marx’s concept of socialism means central planning from Day 1 after the revolution, the abolition of all markets and forms of money. The accounting interpretation of his mature concept of socialism on Day 1, its method of controlling the production of surplus labor, contradicts these interpretations. When we understand his explanation of capitalist accounting control (Bryer 2017), it is clear, chapter 8 argues, that he likewise saw socialism as a system of accounting control, starting from the capitalist system on Day 1, as the means of operationalizing the *Manifesto*’s vision of a “vast association” controlling production. Understood as a problem of accounting control, Marx argued in *Grundrisse*, *Capital*, and the *Critique of the Gotha Programme*, that the foundation of socialism was the accountability of cooperative enterprises to workers and society for value from Day 1, but with the interim aim of producing “directly” equal social value from every labor hour.

The book concludes by exploring the tasks of ‘critical accounting’ in the light of the accounting interpretations of Marx’s theories of value, history,

ideology, and socialism. These tasks, in addition to research and education, are engaging in class conflicts over the rate of exploitation, calculating surpluses foregone from capitalist fettering of the forces of production, and most importantly developing Marxian accounting standards as the foundation of corporate governance from Day 1 of socialism. An additional necessary task for critical Marxist accountants today is exposing the radical ideological distortion introduced into modern financial reporting in America from the 1970s by the Financial Accounting Standards Board's (FASB') adoption of the neoclassical economics theory of accounting, first promulgated by Irving Fisher (1906) as a criticism of Marx's theory of value (Bryer 2013b). Fisher's theory goes beyond 'inverting' capitalism's phenomenal forms to changing them, radically distorting the underlying reality, which creates challenges and opportunities for critical Marxist accountants, the book concludes, to engage in revolutionary praxis.

OVERVIEW

Chapter 2 explains Marx's theory of history as a world accounting history. It analyzes its development, defends the mature version against the Weberian 'culture' critique, and provides an accounting interpretation of Marx's statement of historical materialism in the *Preface* and his discussions of 'pre-capitalist economic formations' in *Grundrisse* and *Capital*, which later chapters test against accounting evidence. The chapter focuses on giving the accounting interpretation of what Marx said, answering only a few well-known criticisms as it progresses. In particular, it answers Giddens's (1995) influential criticism in *A Contemporary Critique of Historical Materialism* that Marx had not clearly distinguished between the slave and feudal modes and had therefore failed to specify an evolutionary theory of pre-capitalist history. This evolutionary step is the key 'missing link' in Marxists' understanding, subsequent chapters show, which Giddens and others fail to recognize because, like him, they "discard" (1995, xiv) Marx's theory of value, the foundation of his theory of capitalism, which discards his conceptual benchmark for understanding the qualitatively different pre-capitalist modes.

Chapter 3 provides an accounting critique of some influential Marxist interpretations. It uses the accounting interpretation from chapter 2 to answer criticisms of Marx's pre-capitalist modes of production and the logic of his theory of historical change, his 'productive force determinism.' The chapter focuses on Hindess and Hirst's widely discussed critique, *Pre-Capitalist Modes of Production* (1975), and Cohen's *Karl Marx's Theory of History: A Defence* (2000 [1978]), whose "highly sophisticated statement and defence"

is today “identified with . . . the strongest formulation” of “orthodox historical materialism” (Callinicos 2005, 57). The chapter rejects the criticism that Marx’s pre-capitalist modes are underdeveloped, criticizes the subjectivity and incongruity of the proposed alternatives as empirically unsupportable, defends the ‘functionalism’ and ‘evolutionism’ of his theory of dialectical historical change, and rejects the charge of ‘economic determinism. It supports Cohen’s defense by reinstalling Marx’s theory of value and class conflict, which Cohen, his supporters, and most of his critics, reject.

Chapters 4–6 turn to world accounting history. Chapter 4 uses Marx’s concept of the slave as a ‘laboring machine,’ coercively accountable for production, to reexamine the accounting histories of ancient Mesopotamia, Egypt, Greece, and Rome from c. 3100 BC to AD 400, drawing on surviving accounts and works on estate management that, it argues, support Marx’s claim that the slave mode was dominant throughout antiquity. Chapters 5 and 6 engage with Wickham’s *Framing the Early Middle Ages* (2005), an acclaimed comparative multiregional and explicitly Marxist history of the differential consequences of the Roman Empire’s collapse, which draws heavily on evidence of the differential persistence of post-Roman states’ systems of Roman land tax, their systems of accountability for tax, and on evidence from estate accounts. This evidence, chapter 5 argues, supports the hypothesis that the slave mode continued in the late Roman Empire until its collapse in the fifth and sixth centuries in the west where slavery retreated and, chapter 6 argues, feudalism appeared in some regions of Western Europe during the eighth and ninth centuries. By contrast, in the east following the collapse of Roman rule in the seventh century, the slave mode continued. This accounting evidence, it concludes, supports the hypothesis, consistent with Marx’s theory, that the transition to the feudal mode in Europe was the outcome of a process of revolutionary class conflict between large landowners and free peasants in which the victors, large landowners, chose feudal relations to increase their surpluses.

Chapters 7–9 explore the consequences for Marx’s prediction of the inevitability of socialism from concluding that his theories of value and history are logically consistent and supported by accounting evidence. Chapter 7 gives an accounting interpretation of Marx’s theory of ideology and defends it against the influential criticism of its economic determinism, which many believe left Marxists with a ‘problem’ (e.g., Hall 1986) by failing to explain populist ideologies. This criticism misses its mark, it argues, because Marx explained capitalist ideology historically, and did not claim to explain ‘ideology’ in general, a word he rarely used in his later work, only capitalism’s ideology, its ‘commodity fetishism,’ the fundamental superstructure controlling its economic base. Capitalism’s phenomenal forms of ‘profit,’ ‘capital,’ ‘wages,’ ‘costs,’ and so on, which appeared in reality, in political economy,

and in capitalists' accounts, he argued, were the foundations of capitalist ideology, distorted reflections of reality, misperceptions that understanding his theory of value would dispel, making socialism inevitable. In comparison with overthrowing capitalist ideology, for Marx populist ideologies of religion, nationality, identity, and so on, were therefore secondary, of little interest.

Chapter 8 explains the development of Marx's concept of socialism. It gives an accounting interpretation of his mature concept, on Day 1 after the democratic installation of the 'dictatorship of the proletariat,' and of its interim aim of 'directly' equal social value for every labor hour, using his social reproduction accounts to illustrate how, in pursuing this aim, socialism progressively abolishes the capitalist law of value. It criticizes leading Marxist interpretations, particularly the dominant central planning interpretation, but also 'market socialist' interpretations that envisage a transition from capitalism, both of which, by discarding his theory of value, fail to recognize capitalism's system of accounting control and how his concept of socialism adapts this to implement socialist relations of production. The chapter supports a particular 'market socialist' interpretation, abolishing markets for capital and labor power on Day 1, but retaining markets for commodities and services in the first phase. It concludes by proposing a scheme of socialist accounting for Day 1, rewriting the *Communist Manifesto's* program to update it in the light of Marx's mature concept of socialism and the development of advanced capitalism today, particularly the massive growth in the capital market and the central importance of accounting to its functioning.

Chapter 9 builds on the accounting interpretation of Marx's theories of value, history, and ideology, and his concept of socialism, to explain the tasks of 'critical accounting' posed for Marxists. It explores the limits of current critical accounting research, highlighting the opportunities presented by 'modern financial reporting' to go beyond interpreting "the world in various ways," when "the point is to *change* it" (Marx 1976b, 5). Using Marx's theories to explain, criticize, use, and transcend capitalist accounts, the book concludes, offers Marxists the possibility of combining empirically supported theory with practical reality, seeking to explain capitalism and to test his concept of socialism, its desirability and feasibility, and ways to work toward it.

NOTES

1. The book uses "Marxist" to mean anyone with a view about Marx's works.
2. Marx's phenomenal forms are the "categories" or "expressions" used in ordinary language to "represent" external reality, also called, *inter alia*, "semblances, appearances, estranged outward appearances, illusions, forms, forms of manifestation,"

that he explained by underlying “Real relations . . . called essences, real nature, actual relations, secret or hidden substratum, content, inner connections” (Mephram 1972, 14; Sayer 1979, 9, fn.14, 159–60).

3. I explain Marx’s words and phrases in single quotation marks, and others, as I explain his theory and the accounting interpretation.

4. *Shorter Oxford English Dictionary on Historical Principles*, 3rd ed. 2 vols. s.v. “material.”

5. *Shorter Oxford English Dictionary on Historical Principles*, 3rd ed. 2 vols. s.v. “determine.”

Chapter 2

Marx's Theory of History

Marxists dispute whether Marx had 'a' theory of history. Some argue it "had already found its mature formulation in the mid-1840s, and remained substantially unchanged in later years" (Hobsbawm 1998, 14; Blackledge 2006, 22), that Marx "deepened" his original views (Blackledge 2006, 27). The chapter, however, agrees with others (e.g., Walton and Gamble 1976; Holton 1985; Brenner 1977, 1989) that Marx did "substantially" change his theory of history. Marx, it shows, abandoned his earlier concept of the 'form of commercial intercourse' determined by the forces of production, reconceptualizing the economic base of society as the 'mode of production,' prompted by working out his theory of surplus value and studying capitalist accounting. This does not mean that Marx abandoned his materialist philosophy or that "his individual texts are themselves contradictory and problematical" (Rigby 1998, 2). Marxists often argue that searching for what Marx "really said" is futile because he left an "ambiguous legacy" (Rigby 1998, 1, 7). Some argue it is inevitable, even desirable, that readers will interpret his works in different ways. However, the chapter supports those who reject the claim of "a plurality of Marxes . . . from which we might . . . construct the Marxism of our choice" (Blackledge 2006, 20), but not necessarily their interpretations.

The chapter first explains Marx's theory of history. It shows that Marx developed his concept of the mode of production in *Grundrisse* and *Capital*, answers Max Weber's criticism that he had ignored 'culture,' and gives an accounting interpretation of Marx's heavily criticized statement of historical materialism in the *Preface to A Contribution to the Critique of Political Economy*, his theory of historical change. According to Marx's theory, it argues, revolutionary class conflict determines the method of extracting surplus labor appropriate to the level of productive forces available, which

determines the social relations of production, which determine the controlling superstructure and develop the forces, which leads eventually to further conflict and change (see figure 2.1).

Second, the chapter defends Marx's theory against Giddens's (1995) well-known criticism (following others) that he had failed to distinguish between the slave and feudal modes, by an accounting interpretation of his discussions of 'pre-capitalist economic formations,' in *Grundrisse* and *Capital*. This shows that Marx explained the 'phenomenal forms' of ancient, medieval, and capitalist societies—respectively, production, labor rent, and profit—by the underlying 'essence' of their mentalities, expressed in the social relations of master-slave, lord-peasant, or capitalist-wageworker, determined by their different methods of extracting surplus labor, which the chapter elaborates as a world accounting history. That is, it interprets the different ways of extracting surplus labor as qualitatively different, but sequentially related epochs with distinct calculative mentalities, social relations, and phenomenal forms, which we should observe in qualitative differences between ancient, feudal, and capitalist accounts (see table 2.1). Chapters 4–6 argue that we do.

MARX'S THEORY OF HISTORY

Some Marxists, notably Colletti (1974; 1975), see two separate discourses in Marx's theory of society, a 'scientific' and a 'dialectical' discourse, and some see only one or the other (Therborn 1976, 387). Marx himself "regarded his scientific analysis of capitalism as an instance of dialectical method" (Therborn 1976, 387), seeing no conflict between his 'science' and 'dialectics.' Dunayevskaya (2003, 48, 56) highlights the enduring importance to Marx's theory of history of his critique of Hegel's philosophical dialectic. In the *Economic Manuscripts of 1844* Marx called his theory "a thoroughgoing Naturalism or Humanism which distinguishes itself both from Idealism and Materialism and is, at the same time, the truth uniting both . . . capable of grasping the act of world history" (quoted by Dunayevskaya 2003, 49). Despite its many faults, Marx retained the logic of Hegel's dialectic because "what was crucial was that man was not merely an object, but subject, not only determined by history, but [was] its creator. The *act* of world history is the self-development of labour, its class struggles. 'All history is the history of class struggles'" (Dunayevskaya 2003, 49). Marx retained "the dialectic not only of thought but of history," Dunayevskaya (2003, 50) emphasizes, and was therefore not only a "'scientific economist' but . . . [a] dialectical analyst of liberation from the pre-capitalist Orient, through industrial workers' battles with the machine, to authorship of *Capital*, Marx's greatest

theoretical, dialectical, historical, philosophical as well as economic work.” The accounting interpretation supports her conclusion that “the actual movement of history that Marx saw in Hegel’s dialectic” is “why he insisted that the dialectic Hegel had discovered was ‘the source of all dialectic’” (Dunayevskaya 2003, 57; Therborn 1976, 389), because it provided the key to explaining historical change.

Instead of philosophy, in Marx’s dialectics “we have context or totality, contradiction and negation, motion or process, qualitative change, and also scientific procedure in general, the search for laws and the study of their operation by empirical investigation” (Therborn 1976, 390). For Marx, as Therborn (1976, 393) says, the “principle of contradiction refers to the unity of opposites” because his modes of production are social totalities, that is, the chapter argues, systems of social accountability founded on contradictory class relations that, ultimately, ‘contradict’ the forces of production. World accounting history supports this interpretation by allowing us to observe Marx’s ‘unity of opposites’—“classes [as] the two necessary poles of a common, specific mode of exploitation and oppression” (Therborn 1976, 394)—and ‘negation of the negation,’ the transition from one mode to a qualitatively different one, by investigating the functioning and changes in qualitatively different methods of accounting. It is true that historical materialism is ‘dialectical’ only in the “limited sense” that for Marx “contradictions exist in social reality,” are “antagonisms intrinsic to a social structure,” but it is questionable whether they have “nothing to do with . . . Hegelian determinate negation” (Callinicos 2005, 55–56). By identifying qualitative differences in these social antagonisms or contradictions, what follows argues, interpreting Marx’s theory as world accounting history allows us to address “The central difficulty with historical materialism [which] is how the two principal contradictions, those between the forces and relations of production, and between classes, relate to one another to bring about social transformations” (Callinicos 2005, 57).

Marx always argued, most Marxists agree, “it was *production*, understood as a social, political and historical process, that was at the centre of the social totality” (Blackledge 2006, 22), but there is disagreement about what this meant in his various works. In the *German Ideology*, Marx and Engel’s first statement of their materialist theory of history, some argue, they explained the major social changes brought about by the development of production, but they meant the “progressive development of ‘economic intercourse’ (*verkehr*), often translated as ‘exchange.’ In this ‘Smithian’ formulation, neither causal autonomy nor causal primacy is given to the sphere of ‘production’” (Holton 1985, 67). Cohen disagrees, arguing that *verkehr* is a term “peculiar to the *German Ideology* . . . standardly translated

as ‘form (or mode) of intercourse’ or, misleadingly, as ‘mode of (carrying on) commerce,’ whereas in his view “*Verkehrsform* is a precursor of the later, better defined, ‘relations of production’” (2000, 142–43). However, as Marx put it in a letter in 1846, “If he is not to be deprived of . . . the results of civilisation, man is compelled to change all his traditional social forms as soon as the mode of commerce ceases to correspond to the productive forces acquired. Here I use the word *commerce* in its widest sense—as we would say *Verkehr* in German” (Marx and Engels 1982, 97). By drawing on Adam Smith’s market economics in his early works, Marxists more usually agree, Marx left himself open to the charge of economic determinism (e.g., Baechler 1971; Brenner 1977, 1989; Walton and Gamble 1976). Walton and Gamble (1976, 196), for example, conclude that in his pre-*Grundrisse* writings “Marx does not fulfill the demands of his own materialist conception of history . . . [because] [h]e does not show precisely how capitalism is different from previous modes of production. Instead he stays on the terrain of political economy and shows how capitalism is doomed by the operation of the very laws that the political economists have discovered.” Some think this formulation continued throughout Marx’s work (e.g., Rigby 2004). Most, however, agree, “By the late 1850s and 1860s . . . [i]n *Capital* . . . and *Grundrisse* . . . Marx had not only recast the ‘classical’ labour theory of value, but had also developed the concept of the ‘social relations of production’ to emphasise the priority of ‘production’ over ‘exchange’” (Holton 1985, 67).

Marx broke with Smithian “linearity,” stopped assuming rather than explaining the rise of the bourgeoisie, Brenner argues, only in *Grundrisse* and *Capital* where he formulated the “master principle” of conceiving the mode of production as a system of “social-property relations” (1989, 273). In *Grundrisse*, Marx claimed he had “produced analyses of social change in terms of the progressive transformation of production relations” (Holton 1985, 67), provided a “general theory of capitalism as a *specific* mode of production by discovering the real law of value that governs it” (Walton and Gamble 1976, 196, emphasis added). In short, as we will see later when considering his discussions of “pre-capitalist economic formations,” Marx used his theory of value to show how capitalist social relations of production differed from earlier forms of society. Marx, we will see below, certainly made a decisive breakthrough in *Grundrisse* and *Capital* with his new concept of the social relations of production. However, adopting this as his “master principle” did not, as Brenner and others suggest, mean breaking with productive force determinism, which he reasserted in the *Preface*, in *Capital*, and as late as 1882 (Blackledge 2006, 40–41), because it explained not only the relations of production, but also their link with the forces.

Theory Development

In *Capital*, many Marxists would accept, Marx recast the classical labor theory of value and overthrew Adam Smith, but it is less clear that he and Engels had not sufficiently emphasized the importance of 'production' in the *German Ideology* (Blackledge 2006, 22–23). There Marx and Engels argued,

By producing their means of subsistence men are indirectly producing their actual material life. . . . This mode of production must not be considered simply as being the production of the physical existence of the individuals. Rather it is a definite form of activity of these individuals, a definite form of expressing their life, a definite mode of life on their part. As individuals express their life, so they are. What they are, therefore, coincides with their production, both with what they produce and with how they produce. The nature of individuals thus depends on the material conditions determining their production. . . . This production only makes its appearance with the increase of population. In its turn this presupposes the intercourse [*Verkehr*] of individuals with one another. The form of this intercourse is again determined by production. (Marx and Engels 1976a, 31–32)

Production involved a “double relationship,” they emphasized, an intertwining of the “natural” and “social” in a “mode of co-operation,” a “mode of production,” or “industrial stage,” embedded in a “history of industry and exchange,” but gave “productive forces,” including within this the “mode of co-operation,” that “determines the nature of society,” clear causal priority:

The production of life, both of one's own in labour and of fresh life in procreation, now appears as a double relationship: on the one hand as a natural, on the other as a social relationship. By social we understand the co-operation of several individuals, no matter under what conditions, in what manner and to what end. It follows from this that a certain mode of production, or industrial stage, is always combined with a certain mode of co-operation, or social stage, and this mode of co-operation is itself a 'productive force.' Further, that the multitude of productive forces accessible to men determines the nature of society, hence, that the 'history of humanity' must always be studied and treated in relation to the history of industry and exchange. (Marx and Engels 1976a, 43)

The problem was to understand how the multitude of productive forces “determines the nature of society,” its social relations as a distinct “form of intercourse,” “mode of production,” “mode of co-operation,” “social stage,” or “industrial stage.” At a general level, Marx and Engels were obviously saying, “material factors may . . . demand, or at least favor [or] . . . impose significant constraints on . . . certain patterns of ownership and relations of economic domination and dependence” (Wood 2004, 70), but the problem

was to explain what these ideas concretely meant. The editors of Volume 5 of the *Collected Works* noted, “the term ‘Verkehr’ is used in a very broad sense. It comprises both the material and spiritual intercourse of individuals, social groups and whole countries,” and suggested that although Marx and Engels used it “to express the concept ‘relations of production,’” this idea “was at the time taking shape in their minds” (Marx 1976b, fn.11, 590). Therborn concludes, “it seems to refer to social relations in general” (1976, 368). Some see it as “an early articulation of his concept of relations of production,” that “betrayed a certain level of technological determinism” (Blackledge 2006, 27), but it was Adam Smith’s notion. In his 1844 ‘Excerpt Notes,’ Marx wrote, “*Society . . . is a commercial enterprise. Each of its members is a merchant*” (quoted by Walton and Gamble 1976, 170), or as Smith put it: “Every man thus lives by exchanging, or becomes in some sense a merchant, and the society itself grows to be what is properly called a commercial society” (quoted by Therborn 1976, 369). In all his early writings on political economy Marx tried to show that “the social harmony it proclaims is an illusion . . . in terms of the laws of political economists themselves” (Walton and Gamble 1976, 173). In *The German Ideology*, as Blackledge says, “Marx argued that class grew out of the division of labour” (2006, 28).

After *The German Ideology* Marx “usually speaks not of ‘forms of intercourse,’ but of ‘relations of production,’ which in any society is an organic whole that Marx calls society’s ‘economic structure’” (Wood 2004, 68). Some argue that he first worked out the concept of the mode of production in *The Poverty of Philosophy* (1846–47), where “his mature theory of history is for the first time elaborated in full” (Blackledge 2006, 27). This is where, Therborn (1976, 366) argues, Marx first explicitly “employs the concept of relations of production” (see also Blackledge 2006, 40). Marx certainly criticized “Economists [who] express the relations of bourgeois production, the division of labour, credit, money, etc., as fixed immutable categories,” because “what they do not explain is how these relations themselves are produced, that is, the historical movement that gave them birth” (quoted by Therborn 1976, 366), but he retained the economists’ definitions. In *The Poverty of Philosophy*, Marx’s language changed from ‘form of intercourse’ and ‘form of community’ to ‘production relations’ and ‘social relations.’ However, ‘mode of production’ still meant ‘the way of earning their living,’ which still meant the division of labor that gave rise to these ‘social relations,’ which was how they were ‘bound up with’ material forces (Wood 2004, 68). As Marx put it in a widely quoted and heavily criticized passage,

M. Proudhon the economist understands very well that men make cloth, linen, or silk materials in definite relations of production. But what he has not understood is that these definite social relations are just as much produced by men as

linen, flax, etc. Social relations are closely bound up with productive forces. In acquiring new productive forces men change their mode of production; and in changing their mode of production, in changing the way of earning their living, they change all their social relations. The hand-mill gives you society with the feudal lord; the steam-mill society with the industrial capitalist. The same men who establish their social relations in conformity with the material productivity, produce also principles, ideas, and categories, in conformity with their social relations. (Marx 1976b, 165–66)

Many Marxists criticize this as blatant economic determinism, the assertion that a hand-mill or steam-mill “gives you society.” Many see it as a stark illustration of “the claim that the form taken by society’s relations of production is determined by the level of development of its productive forces, a claim that Cohen [2000] labels the ‘Primacy Thesis,’ [which] was one of Marx and Engels’s most central and frequently repeated ideas” (Rigby 2004, 474).¹ Rigby notes the reaction of a well-known Marxist medieval historian “Pierre Dockès [who] wonders whether Marx intended this aphorism as ‘a joke’” (Rigby 2004, 474), but Rigby does not find it amusing. Instead, for him it reveals serious historical and theoretical errors:

Even if we take Marx’s aphoristic claim . . . as less than the literal truth, we can still see it as symptomatic of all of the weaknesses of his and Engels’s claims for the social primacy of the productive forces. After all, as Marx was well aware, hand-mills existed long before feudalism (29: 213), which suggests that a given level of the productive forces can be compatible with a variety of different relations of production. (Rigby 2004, 499)

A sympathetic reader would note Marx’s insistence that “*men* change their mode of production,” but it remains true that how they do, and exactly how the “social relations are *closely bound up* with productive forces,” if the latter do not determine the former, is left unclear. A more generous reading, looking back from the vantage of his developed theory, would also understand that Marx compared the hand-mill to the steam-mill to illustrate ‘low’ and ‘high’ forces of production. As Marx put it in Volume 1 of *Capital*, “It is not the articles made, but how they are made, and by what instruments, that enables us to distinguish different economic epochs” (1996, 190). There and elsewhere in his post-*Grundrisse* work, he made clear that “instruments of labour not only supply a standard of the degree of development to which human labour has attained, but they are also indicators of the social conditions under which that labour is carried on” (Marx 1996, 190), that is, are “indicators” of the underlying mode of production.

Understood as a question of social accountability, we do not have to read Marx's statement in *The Poverty of Philosophy* as economic determinism. We could read it as the argument that capitalist accounts could not control feudal relations and forces of production, and feudal accounts could not control capitalist relations and forces. Steam mills and capitalist accounts presuppose that labor, the means of subsistence, and the means of production, are available as commodities on markets—general commodity production—and high productive forces. Hand mills, or more appropriately, as Marx knew, water mills, and feudal accounts, we will see, presuppose the coercive control of the surpluses of self-sufficient peasants, and are appropriate for lower productive forces. However, Marx did not draw this inference until later. Cohen is right that “here ‘mode of production’ is probably the material mode” (2000, fn.1, 144), that is, the technologically determined division of labor.

The concept of social relations of production “emerges in *The Poverty of Philosophy*, in close relation with the concept of property, to denote a specific totality of economic relationships,” Therborn (1976, 371) argues, but highlights that in all Marx's works of the 1840s “something central is still missing. The concept of surplus-value, for example [*sic*], first appears only in the *Grundrisse*.” Rectifying this omission was critical for Marx's development of historical materialism because the discovery of surplus value led to the further discovery, as he put it in *Theories of Surplus Value* of “surplus-value in its original form, i.e., that of surplus labour” (1972, 257). It was important, as Therborn puts it, because the “general concept of surplus value [*sic*]”—he means surplus labor—took “different, concrete historical forms,” and these forms were “part [*sic*] of the concept of relations of production” (1976, 372), but they were the critically important part, as we will see. In 1852, Marx wrote to Weydemeyer, a supporter of Marx's ideas, that while he was not the first to discover class conflict, he had discovered the existence of classes was “*bound up* with certain historical phases in the development of production” (Marx and Engels 1983, 62, emphasis added), but did not elaborate. In 1883, Engels (1989, 467) claimed at Marx's funeral, “Just as Darwin discovered the law of development of organic nature, so Marx discovered the law of development of human history.” Engels was referring to Marx's conclusion in the *Preface*, discussed below, that the “correspondence of society's relations of production or forms of property to the level of development of its productive forces [w]as a general law of human history” (Rigby 2004, 474–75). Marx discovered this general law while writing *Grundrisse*, and argued that with it went another, “that the class struggle is the immediate motive force of history” (Marx 1991, 408), because it determines the social relations of production that ‘correspond’ to the level of development of the productive forces.

To discover these laws, ten years after the *Poverty of Philosophy* Marx returned to re-examine the relationship between Smith's exchange value and his labor theory of value (Walton and Gamble 1976, 175–76). Having done so, rather than an 'intercourse,' 'mode of commerce,' 'mode of co-operation,' or 'way of earning their living,' Marx now firmly concluded that the really penetrating way of defining the social relations of production, one which uniquely characterized different modes of production, explained their progression, and yet highlighted capitalism's qualitative difference, was their way of extracting surplus labor. Marx agreed with Ricardo, who wrote to Malthus, "Political economy you think an inquiry into the nature and causes of wealth; I think it should rather be called an inquiry into the laws which determine the divisions of the produce of industry among the classes which concur in the formation," calling it his greatest achievement (Walton and Gamble 1976, 176). In *Grundrisse*, Marx for the first time explained the social relations of production by the method of surplus extraction, concluding that together they constitute the 'economic base,' the 'form,' or 'structure,' of a society.

Marx's theory, what follows argues, was that the method of surplus extraction, determined (decided) through class conflict, determines (decides) what Max Weber might have called the 'calculative mentality,' the generally accepted method of calculating surplus labor that underlies the aim and method of control of the dominant social relations. In Marx's theory each historical era has a distinctive 'calculative mentality' that determines its social relations, which determine its superstructure of stabilizing institutions, including accounting, which contradicts Weber's criticism that Marx had failed to provide a 'cultural' explanation of capitalism or its history.

Marx, Weber and Accounting

Only Marxists debated the transition to capitalism in the late nineteenth century, but after Werner Sombart published *Moderne Kapitalismus* in 1902, and Max Weber published articles on *The Protestant Ethic* and the *Spirit of Capitalism* in 1905, 'feudalism' and 'capitalism' became a focus for historians and sociologists. According to Weber, the predominant basis of social action is 'economic culture,' what he called his 'sociological categories of economic action,' or modes of 'formal rationality.' Weber's history of modern capitalism is of the transition from the pre-capitalist mentality of 'budgeting' to 'profit-making activity.' Central to Weber's "rationality theme . . . [that] provides the focal point for all Weber's socio-historical interests" (Cohen 1981, XVIII) is "a form of monetary accounting which is peculiar to rational economic profit-making; namely, 'capital accounting'" (Weber 1964, 191). Capital accounting is the basis for both elements of Weber's idea that modern capitalism has a distinctive 'economic culture,' a calculative

mentality embodied in capitalist enterprises, and in the ‘spirit’ of their entrepreneurs.

Weber claimed his categories of economic action “entirely avoid the controversial concept of value” (1964, 158), presumably meaning Marx’s theory of value because Weber’s criticism of neoclassical economics was only the presumed self-evidence of its assumptions. According to Weber’s “wife at least, he expressed ‘great admiration’ for . . . [Marx’s] ‘brilliant construction’” (Marshall 1982, 151). However, as Cohen (1981, XXIV) says, “While Weber does emphasize the relationship between wage labor and capital, the surplus theory of value [*sic*] plays no central role in his conception of modern capitalism.” In fact, however, Weber’s ‘rational capital accounting’ is a version of neoclassical economic income accounting (Bryer 2000a), which undermines the claim that by providing a ‘cultural’ explanation of capitalism, Weber delivered a fatal blow to Marx. Weber claimed, “the view of historical 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, 151). However, Weber’s misunderstanding of capitalist accounting renders his theory irrelevant as a critique of Marx or as an explanation of the ‘economic culture’ or ‘spirit’ of capitalism (Bryer 2000a, 143–49). Ignorant of his accounting, Weberians often criticize Marx’s explanation of the transition to capitalism for ignoring subjective human meaning, which for Weber is the foundation of all social action (1968, 4). For example, in Holton’s view,

One 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. (Holton 1985, 101)

Mann (1986) and Runciman (1989) prominently reject “a Marxist approach to social evolution as too economic and class reductionist” because it ignores individual subjectivity (Haldon 1993, 15). However, if we understand Marx’s theory of history as a theory of world accounting history, this problem disappears just as it did for Weber who recognized the need for ‘economic preconditions’ before modern capitalism appears. He nevertheless avoided 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, XXXVI). The difference, however, is that whereas Weber presupposes the appearance of capitalist rationality and accounting,

Marx provided a historical explanation of their emergence (Bryer 2000a). What follows elaborates and defends the claim that Marx's theory of history specifies an evolution of modes of production defined by distinct economic cultures or calculative mentalities appropriate for progressively higher levels of the forces, reflected in changing methods of accounting. The criticisms that Marx's 'evolutionism' is unspecified and relies on 'economic determinism,' following chapters argue, are therefore wrong, and the criticisms of its 'functionalism' are unjustified.

Modes of Exploitation

In *Grundrisse*, having analyzed capital and the concept of surplus value, to become a capitalist, Marx concluded, the ancient landowner had "only" to produce for "profit instead of revenue," that is, he had to change his mentality, "*the form in which he obtains his revenue*" (1973, 277, emphasis added), the method of extracting surplus labor. However, this change presupposed capitalist social relations, "free" wageworkers, and highly developed forces of production, requiring a "total restructuring of the mode of production," a qualitative leap beyond a mode founded on agriculture:

The ancient proprietor of land, if he is rich, needs no capitalist in order to become the modern proprietor of land. He needs only to transform his workers into wageworkers and to produce for profit instead of for revenue. . . . This change in the form in which he obtains his revenue or in the form in which the worker is paid is not, however, a formal distinction, but presupposes *a total restructuring of the mode of production* (agriculture) itself; it therefore presupposes conditions which rest on a certain development of industry, of trade, and of science, in short of the forces of production. (Marx 1973, 277)

In Volume 1 of *Capital*, Marx emphasized the importance of "the form in which he [the proprietor] obtains his revenue" (1996, 226), the way surplus labor was extracted. "The *essential difference* between the various economic forms of society, between, for instance, a society based on slave-labour, and one based on wage-labour," he concluded, "*lies only in the mode in which this surplus-labour is in each case extracted* from the actual producer, the labourer" (Marx 1996, 226–27, emphases added), in the "mode of exploitation" (Marx 1976a, 620; 1978, 923). Throwing off the political economists, he now understood, "Capital has not invented surplus-labour" (Marx 1996, 243). In all class societies, "Wherever a part of society possesses the monopoly of the means of production, the labourer, free or not free, must add to the working-time necessary for his own maintenance an extra working-time in order to produce the means of subsistence for the owners of the means of production" (Marx 1996, 243). This was true "whether this proprietor be

the Athenian [aristocrat], Etruscan theocrat, *civis Romanus*, Norman baron, American slave-owner, Wallachian Boyard, modern landlord or capitalist” (Marx 1996, 243). In Volume 3 of *Capital*, he emphasized that the “specific economic form in which unpaid surplus-labour is pumped out of the direct producers” revealed the “innermost secret” of a society, its class structure, which determined the “form of its state;” particularly, we will see, its method of surplus extraction (taxation):

The specific economic form, in which unpaid surplus-labour is pumped out of direct producers, determines the relationship of rulers and ruled, as it grows directly out of production itself and, in turn, reacts upon it as a determining element. Upon this, however, is founded the entire formation of the economic community which grows up out of the production relations themselves, thereby simultaneously its specific political form. It is always the direct relationship of the owners of the conditions of production to the direct producers—a relation always naturally corresponding to a definite stage in the development of the methods of labour and thereby its social productivity—which reveals the innermost secret, the hidden basis of the entire social structure and with it the political form of the relation of sovereignty and dependence, in short, the corresponding specific form of the state. (Marx 1998, 777–78)

Defining exploitation as the method of surplus extraction underlies Marx’s definition of class as a social relation of production. As de Ste. Croix—a leading Marxist medievalist and expert on Greek and Roman accounting, we will see in chapter 4—emphasized, for Marx “*Class* (essentially a relationship) is the collective social expression of the fact of exploitation, the way in which exploitation is embodied in a social structure” (1981, 43). This definition is, as Therborn says, “the most systematic formulation of the core of historical materialism” that identifies the “*differentia specifica* of types of society” (1976, 373–74), but he implies that Marx left us guessing what exactly the differences between the pre-capitalist modes were. Therborn (1976, 373) concludes, “The general concept of surplus labour, and with it the concept of relations of production, is not nearly as systematically developed by Marx as the concepts of value and surplus value.” However, the development of his definitions of the different methods of extraction in *Grundrisse* and *Capital*, while necessarily extensive for capitalism was systematic for pre-capitalist societies, but appropriately less extensive given their simpler social relations and forces of production, reflected, we will see, in much simpler systems of accounting.

Marx emphasized the central position and influence of the method of surplus extraction, the “economic basis,” but also that it was the “*hidden basis*,” the “*inner secret*,” not visible to the eye, so identifying the mode of production would require “analysis” of the “empirical” to get beneath the “infinite

variations and gradations in appearance” of actual societies (1998, 778). The same “economic basis,” the same mode of production, could be consistent with “innumerable different empirical circumstances, natural environment, racial relations, external historical influences, etc.,” and therefore what it was “can be ascertained only by *analysis* of the empirically given circumstances” (Marx 1998, 778, emphasis added). The primary empirical circumstances were the social relations of production, the economic classes, and their phenomenal forms. To get beneath societies’ gradations in appearance, to conceptualize pre-capitalist modes of production as different appropriate methods of extracting surplus labor, Marx’s “analysis” began from the benchmark of the capitalist law of value, which *Accounting for Value* argued he tested against capitalist accounts, that is, used it to explain capitalism’s phenomenal forms, gave an “analysis” of the “empirically given circumstances.” Analyzing pre-capitalist societies’ social relations and dominant method of accounting should therefore reveal the underlying mental signature of their “economic structure,” a quantitative representation of the calculative mentality of its ruling class, implemented through the dominant social relations of production and superstructure. We can therefore understand pre-capitalist accounts as different methods of controlling the extraction of surplus labor, the final section argues, see them as quantitative representations of the different phenomenal forms produced by different social relations of production.

Having discovered his theory of surplus value, and worked out the pre-capitalist modes of exploitation in *Grundrisse*, in the *Preface to A Contribution to a Critique of Political Economy* Marx summarized his fundamental concepts of historical materialism, his theory of historical change driven by dialectical contradictions between the forces and relations of production. Many Marxists consider this his ‘classic’ but deeply flawed statement, which following sections interpret as a world accounting history.

Historical Materialism

In the *Preface*, written shortly after completing *Grundrisse* in 1857–58, Marx outlined his intellectual journey in writing it and summarized the results. He explained that the *Contribution to a Critique* dealt only with the first two “chapters,” on the commodity and money, of the first “book” on “capital,” leaving unpublished the chapter on “capital in general,” and five other books (landed property, wage labour, the state, foreign trade, world market) “written for self clarification” (1971, 19). He began his journey because as the editor of the *Rheinische Zeitung* in 1842–43 he had found himself “in the embarrassing position of having to discuss what is known as material interests” (Marx 1971, 19). To “dispel the doubts assailing” him he turned first to “a critical re-examination” of Hegelian philosophy, from which he concluded it

was impossible to explain “legal relations” or “political forms,” and so on, “on the basis of a so-called general development of the human mind,” and instead the “anatomy of civil society has to be sought in political economy” (Marx 1971, 20). Marx summarized his “general conclusion,” which “once reached, became the guiding principle of . . . [his] studies”:

[1] 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. [2] 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. [3] The mode of production of material life conditions the general process of social, political and intellectual life. [4] It is not the consciousness of men that determines their existence, but their social existence which determines their consciousness. [5] 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. [6] From forms of development of the productive forces these relationships turn into their fetters. [7] Then begins an era of social revolution. [8] The transformation in the economic foundation leads sooner or later to the transformation of the whole superstructure. . . . [9] No social order is ever destroyed before all the productive forces for which it is sufficient have been developed, and new superior relations of production never replace older ones before the material conditions for their existence have matured within the framework of the old society. [10] Mankind thus inevitably sets itself only such tasks as it is able to solve, since closer examination will always show that the problem itself arises only when the material conditions for its solution are already present or at least in the course of formation. (Marx 1971, 20–21, numbering added)

To interpret this heavily criticized passage we must bear in mind, first, that if a calculative mentality (‘hidden basis,’ ‘inner essence’) underlies Marx’s mode of production, we can read it in a non-reductionist or economically deterministic way. Second, if to avoid the German censors Marx’s statement did not mention class conflict, as Prinz (1969) persuasively argues, this would also explain why he writes of “legal relations,” “political forms,” and “civil society,” and does not mention mode of production or its method of surplus extraction. Highlighting the underlying calculative mentality and putting back class conflict, the accounting interpretation reads as follows: [1] Humans organize production socially, according to “definite relations,” definite ways of extracting surplus labor, that they do not chose as individuals, but which overall are “appropriate” given the forces of production available, that is, best calculated to maximize the surplus labor extracted. [2] Taken together, these

social relations are the “economic structure,” the “real foundation,” of society. To each type of economic structure, each way of controlling the extraction of surplus labor, there “correspond definite forms of consciousness” or, in other words, particular calculative mentalities. [3] and [4] Social control of production according to a calculative mentality “conditions” other forms of general consciousness. That is, the implicit or (in socialism) explicit calculative mentality underlying the social relations of production provides the conceptual framework within which the “superstructure” of non-economic institutions and ideas functions, such as property law, the customs and laws of accounting, and other forms of ideology, that justify and stabilize the economic relations and extraction of surplus.

[5] The ruling class controls the social relations of production to produce surplus labor and, albeit slowly at lower levels, these relations therefore inevitably develop the forces of production. [6] With this development, eventually the existing social relations, their calculative mentality and system of control, “conflict with,” that is, impose a limit to surpluses, becoming “fetters” that limit the extraction of surplus labor. [7], [8], and [9] When this limit becomes recognized, a period of “social revolution” begins, which uncensored means a period of revolutionary class conflict. Beyond everyday class conflict within the current mode, revolutionary conflict is between those who gain from the current mode and those who would benefit from a new mode. The latter are victorious when they have the necessary commitment and resources, and when they do they impose new social relations based on a new mentality, and a new control system, which increases their surpluses and leads to further development of the forces of production. [10] “Mankind,” in short, “solves” the problem of progress by deciding the appropriate social relations of production for the increased forces at hand, “already present.”

Figure 2.1 summarizes the accounting interpretation of Marx’s theory of history as a dialectical process of revolutionary class conflict–driven change

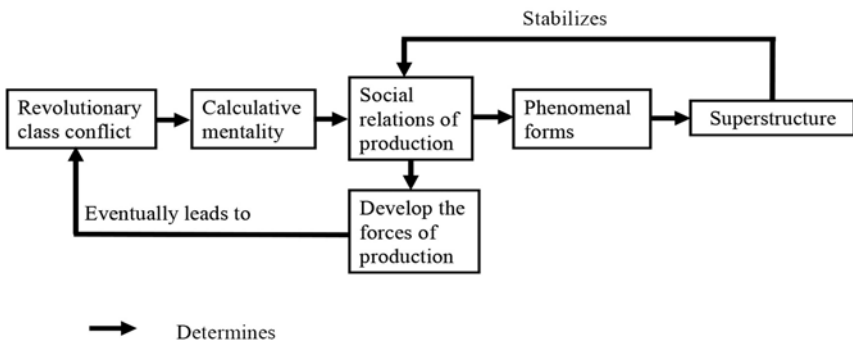


Figure 2.1 Marx’s Theory of History. *Source:* Created by the author.

in modes of production that resolve contradictions between the social relations and the forces of production they develop, by appropriate calculative mentalities, social relations, phenomenal forms, and superstructures, including accounting.

Post-war Marxist debates on structure and agency “have tended to polarise around attempts to reduce either agency to structure and vice versa,” but none of the many “attempt[s] to synthesise structure and subject into a Marxist theory of agency” (Blackledge 2006, 153, 191) commands general support. The accounting interpretation reconciles Marx’s treatment of individuals in Volume 1 of *Capital* as “personifications of economic categories,” his so-called structuralism, with his and Engel’s view in the *Holy Family* (1844) that “history is nothing but the activity of man pursuing his aims,” his “humanism” (Blackledge 2006, 21). Individuals “personify” economic categories within a mode of production by either holding economic agents accountable, or by being accountable, whereas ‘history’ has been class conflict driving humanity to determine a calculative mentality and social relations of production appropriate to the level of development of the forces of production. Humans ‘make history’ as individuals, supporting or opposing the dominant social relations of production and superstructure. However, they do so within them, within the dominant economic structure, within a system of social accountability. ‘Men’ act, but only given the dominant calculative mentality and method of controlling and extracting surplus labor, determined by the victors of class conflict, the ruling class, by the actions of calculating classes, who alone have the power to produce an ‘act of world history,’ that is, change the mode of production.

Having laid out his model of historical change, Marx summarized its application to world history:

[11] In broad outline, the Asiatic, ancient, feudal and modern bourgeois modes of production may be designated as epochs marking progress in the economic development of society. [12] The bourgeois mode of production is the last antagonistic form of the social process of production—antagonistic not in the sense of individual antagonism but of an antagonism that emanates from the individuals’ social conditions of existence—but the productive forces developing within bourgeois society create also the material conditions for a solution of this antagonism. [13] The prehistory of human society accordingly closes with this social formation. (Marx 1971, 21–22, numbering added)

[11] Capitalism is an evolution from Asiatic despotism, slavery, and feudalism. [12] The change to socialism abolishes classes, the capitalist mentality, and its social relations. [13] This ends the “prehistory of human society,” chapters 7 and 8 argue, by “winning the ideological struggle” through “scientific understanding” (Blackledge 2006, 190), by abolishing the capital

markets and wage labor through the creation of a 'vast association' of workers that takes social control of production, initially through accounting for value. These conclusions support those who argue that, according to Marx, "to constitute itself fully as a collectivity, that is, to achieve revolutionary class consciousness," the working class "requires a lucid understanding of its position in capitalist society and the power and interest which this position gives it to build communism" (Callincos 2005, 251).

The remainder of the book elaborates and defends the accounting interpretation against a Marxist literature where the only consensus is that, as Cohen (2000, 28) puts it, "Controversy rages around" Marx's argument that "production relations . . . *correspond* to productive forces at a certain stage of development of the latter." Cohen points out, "Commentators disagree on whether its use implies that the production forces enjoy explanatory primacy over the production relations," and almost uniquely, his defense of this statement "hold[s] that is precisely what it implies," and he "propound[s] what is called a 'technological' interpretation of historical materialism" (2000, 28, 29). Some Marxists argue that the productive forces do not "make history," but "the level of development of the forces of production sets the parameters of the possible outcomes" (Blackledge 2006, 39). Most Marxists, however, would agree with Rigby (2004) that,

of all of Marx and Engels's claims, the least acceptable aspect of their social theory now is probably their 'Primacy Thesis,' in which society's relations of production correspond to the level of development of its productive forces . . . , and so are cast aside as they become fetters on the growth of the productive forces Indeed, modern Marxists, never inclined to ascribe to Marx a view which they themselves cannot accept, have even been tempted to reject this account of historical materialism as a valid reading of Marx's work and tend to stress instead the primacy of society's relations of production over its productive forces. (Rigby 2004, 497)

Chapter 3 examines Cohen's defense of Marx's theory of history and supports some of its elements. In particular, it supports Cohen's defense of "an interpretation of historical materialism according to which revolutionary transitions from one mode of production to another occur with a functional necessity," which many Marxists criticize for being "systematically fatalistic" (Blackledge 2006, 21). However, rather than Cohen's *causal* primacy, the accounting interpretation supports the *explanatory* primacy of the production forces because, to explain the social relations of production as a class-conflict-determined best way of extracting surplus labor given the productive forces, the existing and potentially available material and human use-values available, these forces must first exist. As Marx said, they must be "already present."

Historians write much about the development of the forces and social relations of production, but overlooking the mentalities underlying Marx's mode of production, they have, not surprisingly, "been able to make little use" (Rigby 1998, 34) of his productive force determinism. Not recognizing mentalities, we will see, historians face the insuperable problem that focusing on the observable aspects of the forces (hand or steam mills) and social relations of production (property relations and forms of control) does not necessarily identify Marx's concept of the mode, which they therefore often dispute. However, recognizing calculative mentalities, different ways of calculating and controlling the extraction of surplus labor, what follows argues, does unambiguously identify Marx's modes, which are observable in surviving accounts. The challenge then is to show historically that, given the productive forces available, a method of surplus extraction, a calculative mentality and method of control, particular social relations of production that 'correspond to' them, were selected by class conflict as most 'appropriate,' that is, best calculated to reap greater surpluses, which led to the development of the forces. To begin to address it, the remainder of this chapter elaborates historical materialism as a world accounting history and addresses Gidden's (1995) critique through an accounting interpretation of Marx's pre-capitalist formations. Subsequent chapters argue that world accounting history confirms Marx's theory.

Historical Materialism as World Accounting History

In the *German Ideology*, Marx and Engels sketched out their materialist vision of history as the progressive division of labor, and "recognise only three forms of class society: the slave society of antiquity, feudalism and bourgeois society. It seems to suggest the first two as alternative routes out of primitive communal society, linked only by the fact that the second established itself on the ruins of the first" (Hobsbawm 1964, 32). However, following a decade of intensive study, alongside his discovery of surplus value and capitalist accounting in the late 1850s, Marx revised his theory of history. As Hobsbawm (1964, 9, 32) says, "The stage of Marx's thought represented by the *Formen* [the section in *Grundrisse* headed 'Forms Preceding Capitalist Production'] is considerably more sophisticated and considered, and it is of course based on far greater and more varied historical studies, this time not confined to Europe."

Including the classless tribal and socialist societies in *Grundrisse* and *Capital*, Marx distinguished six "economic formations," different modes of production and social control: tribal or primitive communism, Asiatic or oriental despotism, ancient slavery, feudalism, capitalism, and socialism—where 'history,' the evolution of class-based modes of production, ends—that

he argued “correspond to” different levels of productive forces. To explain the transition to capitalism, Marx added the transitional form of ‘semi-capitalism,’ which also appeared in other historical contexts (Bryer 2000a, 2000b, 2012, 2013a, 2013b). To explain the transition to feudalism, a transitional form of Marx’s ‘simple commodity producer’—here peasants without lords, what Wickham (2005) calls the “peasant mode”—was historically important in the west after the fall of the Roman Empire for several hundred years until its eclipse with the rise of feudalism, as we will see in chapter 6.

Table 2.1 summarizes the accounting interpretation of Marx’s six modes of production (and the transitional semi-capitalist form), his historical materialism as world accounting history. Each mode of production has a calculative mentality, Marx’s ‘inner essence,’ observable by its ‘accounting signature,’ the aim of its distinctive accounting method. For each mentality and accounting method there are corresponding social relations of production, a labor process, forms of control, forms of property and capital, the “empirical circumstances” of history that Marx arranged in an evolutionary, but not necessarily linear, progression along a continuum of increasing forces of production, from ‘low’ to ‘high’ levels. He argued that humanity had evolved, and will continue to evolve, toward individual freedom through “the movement of history” (Dunayevskaya 2003, 12). His dialectical-historical philosophy was that “human beings become individuals only through the process of history. He appears originally as a *species-being* [*Gattungswesen*], *clan being*, *herd animal*” (Marx 1973, 496). Capitalism finally appeared only when “free capital” faced “free wage labour,” and to get there required a long “historic process” (Marx 1973, 489).

Briefly, at low but successively increasing levels of the forces, societies escaped from tribalism (primitive communism), but not from the community, through various forms of ‘property,’ by first recognizing surplus labor in ‘tribute’ (tribal), then extracting it through taxation (asiatic/oriental despotism), by controlling production using physically and ideologically coerced labor (ancient world slavery), or directly appropriating labor rent (feudalism). At higher levels of productive forces, ‘semi-capitalists’ appear in agriculture and manufacturing seeking a return on their capital by exploiting landless wagers, using economic coercion, and at yet higher levels capitalism extracts a return on capital employed (ROI) from employing ‘free’ wagers by enforcing accountability for capital through economic and ideological coercion. The semi-capitalist is not simply a merchant capitalist, one of the oldest forms of capital, as Marx recognized, seeking profit from, as Xenophon had put it in his *Memorabilia* (3.7.6) (c. 300 BC), “buying cheap and selling dear.” Semi-capitalists do not buy to sell, but sell a commodity produced under pre-capitalist social relations, whether slavery, feudalism, or simple commodity production, for example, semi-capitalist slave owners

Table 2.1 Historical Materialism as World Accounting History

<i>Mode of Production</i>	<i>Tribal</i>	<i>Asiatic</i>	<i>Slave</i>	<i>Feudal</i>	<i>Semi-Capitalist (Transitional Form)</i>	<i>Capitalist</i>	<i>Socialist (Day 1)</i>
Accounting signature	Tribute	Taxation	Production	Rent	Cash surplus ----- Opening capital	Profit ----- Capital employed	$s/v \times v/[v + c] \times [c + v]/K^a$
Social relations of production	Communal	Communal	Master and slave	Lord and peasant	Capitalist and wage laborer	Capitalists and 'free' wagedworkers	Society and cooperative enterprises
Labor process	Communal	Communal	Control of production	Appropriation of surplus labor	Formal subordination under capital	Real subordination under capital	Social accountability
Form(s) of control	Community	Community, physical and ideological coercion	Physical and ideological coercion	Physical and ideological coercion	Economic, physical and ideological coercion	Economic and ideological coercion	Free social agents
Property	Communal	Despotic (state)	Public and private	Individual and communal	Individual	Individual	Public ownership of the means of production
Capital	None	None	Money and merchant	Money and merchant	Money, socialized merchant and manufacturing	Social	None
Level of the forces of production	Low						High

^as = surplus value; v = variable capital; c = constant capital; K = total capital.
Source: Created by the author.

and simple commodity producers in America during the nineteenth century (Bryer 2012), and chapter 4 shows that semi-capitalist slave owners existed in the Graeco-Roman era. Marx said relatively little about the socialist mode of production, but the final column of table 2.1 outlines an accounting interpretation of what he did say, which chapter 8 explains.

There are, as Giddens says, “two threads to this historical progression: the elaboration of the forces of production and the expanding capabilities of human beings to understand and control the conditions of their life” (1995, 74). Self-understanding and control expand as the forces of production increase through the progressive reduction in control by the community and increase in control by the individuals, from community control by the tribe at one end, through forms of community and individual control, to free agents in socialism at the other. Driving this elaboration of the forces and social relations of production, Giddens (1995, 74) accepts, “Class is not for Marx a purely negative phenomenon, because the formation of classes injects the dynamic in history which has propelled humanity to the threshold of a society in which human beings will for the first time realise their ‘true humanity.’” Class is the motor of history because all ruling classes, from the despot to the proletariat, organize and control labor in pursuit of surplus labor, the foundation of ‘civilization.’ The ‘dynamic’ of class conflict, according to the accounting interpretation, is driving progress by determining the dominant calculative mentality, social relations of production, and system of accounting control ‘appropriate’ for, ‘corresponding to,’ the level of the forces, which leads to their development. This is not to say that classes function self-consciously as the makers of history, which until the change to socialism happens ‘behind men’s backs.’ According to Marx, as de Ste. Croix put it, “the essence of class struggle is exploitation or resistance to it; there need not necessarily be any class consciousness or political element” (1981, 3). Rather than class-consciousness or politics, later chapters look for evidence of class conflict and progress in changing methods of accounting.

The *Preface* and *Formen* “are not ‘history’ in the strict sense,” Hobsbawm emphasizes, but “an analysis of social evolution” intended “to establish the general mechanism of all social change” (1964, 11). Given this aim, while Marx and Engels necessarily “relied on such literature as was available to them, and this was far scantier than it is at present,” as Hobsbawm says, “this does not mean their knowledge was *insufficient* for the elaboration of their theories of pre-capitalist societies” (1964, 20). Marx claimed to have theorized world history dialectically, “the entire process, spanning the centuries and continents,” distinguishing “analytical, though not chronological, stages in this evolution” (Hobsbawm 1964, 14), that he had theorized a logical and not necessarily a linear historical progression (Blackledge 2006, 29). European history broadly followed the slavery-feudalism-capitalism pattern, he

argued, but insisted that this was not a blueprint for all societies. He studied the transition to capitalism in Western Europe, particularly England (Rigby 2004), in part VIII ‘The so-called primitive accumulation’ of *Capital* in Volume 1, but noted that the history of expropriating peasants from their land took other routes elsewhere (Marx 1996, 707). He wrote to Russian Marxists in 1877, attacking a critic who “feels himself obliged to metamorphose my historical sketch of the genesis of capitalism in Western Europe into an historico-philosophic theory of the *marche generale* imposed by fate upon every people, whatever the historic circumstances in which it finds itself.”²

THE GIDDENS CRITIQUE

In *Grundrisse*, Giddens (1995, 74, 75) accepts, Marx gave “an interpretation of the ascendancy of humankind to control over its own destiny,” claiming he had theorized “the progressive epochs of human history [that] both includes the achievements of the one which went before and yet is discontinuous from the preceding stage. Each form of society [Marx argued] has to be analysed in its own terms, yet incorporates the advances made in previous forms of society.” However, following Lefort (1978), Giddens sees an inconsistency between this formulation and the statement in the *Preface*.³ Giddens sees in *Grundrisse*’s “celebrated few pages . . . views that are arguably inconsistent with some of his general formulae about the course of human history,” particularly in the *Preface* (1995, 2). This, if true, would be surprising because we saw that Marx wrote the *Preface* shortly after finishing the *Grundrisse* (Hobsbawm 1964, 10). Nevertheless, according to Giddens and others, *Grundrisse* is inconsistent with the *Preface*’s evolutionary world history “from tribal societies, Ancient Society, feudalism, to capitalism, and thence to socialism, together with the ‘stagnant’ offshoot of the ‘Asiatic Mode of Production’” (1995, 2). In *Grundrisse*, Giddens (1995, 2) argues, Marx by contrast stressed “just what is most distinctive about the social world that capitalism has created, as contrasted to [all] other forms of societal organization,” which contradicts his claim that development of productive powers explains progressive, evolutionary changes in the social relations of production. In short, it contradicts Marx’s repeated view that “the overall course of human history can be divided into a series of distinct epochs” (Wright et al. 1992, 13). According to Giddens (1995), Lefort (1978), and others, therefore, Marx gave contradictory “continuist” and “discontinuist” histories.

Marx certainly claimed in *Grundrisse* that he had provided a general evolutionary model. That is, we will see, a dialectical-historical model of different “pre-capitalist economic formations,” different forms of pre-capitalist exploitation and social control, corresponding to lower levels of the

forces of production, which also showed how radically different capitalism was from all that had preceded it. It is true therefore that, as Giddens (1995, 80) stresses, in the *Formen* “Marx leaves us in no doubt about the affinity of the three [earlier] types of society, as differentiated from capitalism,” quoting the following passage:

In all these forms—in which landed property and agriculture form the basis of the economic order, and where the economic aim is hence the production of use values, i.e. the reproduction of the individual within the specific relation to the commune in which he is its basis—there is to be found: (1) Appropriation not through labour, but presupposed to labour; appropriation of the natural conditions of labour, of the earth as the original instrument of labour as well as its workshop and repository of raw materials . . . ; (2) but this relation to land and soil, to the earth, as the property of the labouring individual . . . is instantly mediated by the naturally arisen, spontaneous, more or less historically developed and modified presence of the individual as member of a commune—his naturally arisen presence as member of a tribe etc. (Marx 1986a, 408–9)

To Giddens this passage means that before capitalism all “production is subordinated to the social relations connecting nature, the individual and the social community,” which contradicts the *Preface*'s view that “the productive forces, at a certain point in the development of a society, can no longer be contained by the pre-established economic relations, leading to their transformation” (1995, 80). In other words, there was no essential difference between Asiatic despotism, ancient slavery, and feudalism because ‘politics,’ not ‘economics,’ dominated them all, and therefore no progressive evolutionary transition could occur within them.

The Giddens critique chimes with Finley's (1999 [1973]) revival of the ‘primitivist’ view that the ancient world knew nothing of ‘economic rationality,’ which, as we will see in chapters 4 and 5, is still common among historians. According to Finley, “we may speak of ‘the ancient economy’ only for reasons that have little or nothing to do with the economy, because of the political and cultural history of Graeco-Roman antiquity” (1999, 181). Only capitalism broke free from the community tied to nature, which, according to Giddens, Marx accepted in *Grundrisse*. Konstan (1975, 150, 153) agrees: “Marx speaks throughout the essay in the *Grundrisse*, as he does in the third volume of *Capital*, of ‘slavery and serfdom’ in a single breath, without pausing to draw any distinction between them.” Nevertheless, according to the *Preface*, “The transition from slavery to feudalism is qualitative, and it is [therefore] a theoretical embarrassment if the boundaries of the two forms cannot be identified” (Konstan 1975, 148). *The German Ideology* explained the stages in the development of human society as “phases of the development in the division of labour [and] . . . different forms of property,” which Giddens

thought was at least clear (1995, 69). By contrast, in *Grundrisse* “Marx is vague about the conditions which lead to one type of development out of tribal society rather than another. But it seems evident that they do not bear any particular relation to the forces of production as such” (Giddens 1995, 79). Giddens highlights Marx’s argument in *Grundrisse* that ancient slavery and feudalism were “essentially different” from capitalism because they presupposed the “appropriation of an alien will,” the appropriation of surplus labor by “personal servitude,” which according to Giddens means that class conflict in an economic sense did not exist prior to capitalism. Marx wrote:

The relation of personal servitude, or of the retainers to their lord, is essentially different. For it forms, at bottom, only a mode of existence of the land-proprietor himself, who no longer works, but whose property includes, among the other conditions of production, the workers themselves as bondsmen etc. Here the master–servant relation [*Herrschaftsverhältnis*] as essential element of appropriation. Basically the appropriation of animals, land etc. cannot take place in a master-servant relation, although the animal provides service. The presupposition of the master-servant relation is the appropriation of an alien will. Whatever has no will, e.g. the animal, may well provide a service, but does not thereby make its owner into a master. This much can be seen here, however, that the master-servant relation likewise belongs in this formula of the appropriation of the instruments of production; and it forms a necessary ferment for the development and the decline and fall of all original relations of property and of production, just as it also expresses their limited nature. (Marx 1973, 501)

According to Giddens (1995, 81) this passage means, “Class relations do not govern the basic character of production, in either the Ancient world or in feudalism. Production remained tied to nature and to ‘natural community’ in ways that are only finally broken through by the advent of capitalism—for the capital/wage relation is quite unique, involving a process of separation of the realm of the ‘economic’ from other institutions unknown in prior forms of society.” If this is true, it follows that “far from being the summation of world history, the ‘synthesis of previous syntheses,’ the development of capitalism marks a series of fundamental discontinuities with previous history” (Giddens 1995, 81).

Giddens, however, overlooks that according to Marx in the ancient world, dominated by the slave mode, the ‘economic’ classes were wealthy-landed proprietors, slaves, and free peasants; while in medieval Europe, dominated by the feudal mode, the classes were landlords, free peasants, and serfs. In pre-capitalist societies, Marx argued, the bases of ‘political’ relations of personal dependence were ‘economic’ relations, and transparently so in feudalism. In the middle ages, as he put it in Volume 1 of *Capital*, like

capitalism, “Compulsory labour is just as properly measured by time, as commodity-producing labour; but every serf knows that what he expends in the service of his lord, is a definite quantity of his own personal labour-power. The tithe to be rendered to the priest is more matter of fact than his blessing” (Marx 1996, 88). Serfs performed the historically most visible form of surplus labor, Marx argued in *Capital*, because in addition to working for subsistence they paid rent in the form of corvée labor on their lord’s demesne (1996, 245). In the *Manifesto*, Marx and Engels had argued the reverse, “that the rise of capitalism has pitilessly torn asunder the motley feudal ties that bound man to his ‘natural superiors,’ and has left remaining no other nexus between man and man than naked self interest. . . . In one word, for exploitation, veiled by religious and political illusions, it has substituted naked, shameless, direct brutal exploitation” (quoted by Rigby 2004, 478–79). “Yet,” Rigby complains, from *Grundrisse* onward, they “argue precisely the opposite, that it is under the conditions of coerced corvée labour that the reality of exploitation is most apparent, whereas under the capitalist relations of production, its existence is obscured and opaque” (2004, 479). Rigby overlooks that Marx had reworked his theory of history: whereas compared to capitalism’s ‘commercial intercourse’ feudalism’s was opaque, the reverse was true for their modes of production. For the mature Marx, we will see, the slave and feudal modes had distinct ruling classes that ‘governed’ production to extract surplus labor in distinct ways, and distinct classes of producers who provided it, an interpretation the accounting evidence supports.

Seeing no qualitative distinction between the slave and feudal modes in *Grundrisse*, Giddens concludes, Marx failed to explain capitalism as an evolution from slavery and feudalism. If Giddens is right, “Capitalism does not . . . represent the summation of world history. On the contrary it stands out in relief from other types of society, as more radically distinct from them as they are from one another” (1995, 75–76), as a discontinuous ‘jump’ from all pre-capitalist societies. Giddens would therefore also be right that Marx’s prediction of the ‘inevitability’ of socialism as the end of class history has no theoretical foundation, or as Giddens (1995, 80) puts it, “If this does not actually split Marx’s progressive evolutionary scheme asunder, at least we can say that it exists in considerable tension with it.” However, what follows argues, to the contrary, that according to Marx’s theory each mode of production is qualitatively different and yet represents an evolutionary progression in two senses. First, a progressive release from control by the community at increasing levels of the productive forces, and second, a progressive increase in freedom through increasing control by calculation until, finally, the process of production and distribution of wealth becomes publicly transparent and controlled through socialist accounting. What Giddens and other critics miss, we will see, is that the basis of Marx’s

later discussions of the pre-capitalist modes of production is the progressive appropriateness of their different ways of extracting surplus labor, different methods for controlling labor, as the appropriate means for increasing ruling-class surpluses given the forces of production available, which leads to their development.

To decide whether there was a qualitative difference between Marx's slave and feudal modes, whether feudalism represented a progressive evolution from slavery, whether 'tension' exists in his theory of history, we must understand what he called in *Grundrisse* his "pre-capitalist economic formations," or modes of production. The following section gives an accounting interpretation, defending Marx's analyses against some prominent criticisms, but leaves a detailed examination of Marxists' criticisms, and the accounting interpretation's answers, to chapter 3.

PRE-CAPITALIST ECONOMIC FORMATIONS

In *Grundrisse*, Marx concluded that capital, the ultimate form of bourgeois property, is a social relation of production, and in general that property rights change as the social relations of production change. He re-examined the notion of property, ownership of the means of production, mainly land, in pre-capitalist societies, and found its origins, not in labor, the accepted view of political economists, but in the community. Marx's "economic formations," which entail different forms of property, are different forms of social control whose history accounting can reveal because, from the beginnings of class society, we will see, the "most important role for bookkeeping" has been "safeguarding property entitlements" (Oldroyd and Dobie 2009, 112; see also Littleton 1968, 21). Accounting, therefore, changes only if the social nature of property changes.

Tribal or Primitive Communism

The first form of society with "landed property" was the "clan" or "tribe," the "primitive-communal" society, a "naturally arising spontaneous . . . community" in which individuals are its "proprietors" or "possessors" of land because they are tribe members (Marx 1973, 472). The two basic forms of property in this mode were "small, free landed property as well as communal ownership" (Marx 1973, 471):

In both forms, the individuals relate not as workers but as proprietors—and members of a community, who at the same time work. The aim of this work is not the *creation of value*—although they may do surplus labour in order to

obtain alien, i.e., surplus products in exchange—rather, its aim is sustenance of the individual proprietor and of his family, as well as of the total community. The positing of the individual as a *worker* [in capitalism], in this nakedness, is itself a product of *history*. (Marx 1973, 471–72)

The primitive-communal mode “can realize itself in various ways” (Marx 1973, 472), took “many and various” forms (Amin 1976, 14). However, in all of them “Property . . . originally means—in its Asiatic, Slavonic, ancient classical, Germanic form—the relation of the working (producing or self-reproducing) subject to the conditions of his production or reproduction as his own” (Marx 1973, 495). In all of them, “This relation as proprietor—not as a result but as a presupposition of labour, i.e., of production—presupposes the individual defined as a member of a clan or community (whose property the individual himself is, up to a certain point)” (Marx 1973, 495).

All modes of production produce “surplus labor,” Marx argued, the surplus over the labor necessary for the reproduction of the worker, because all forms of social production, including tribal societies, had necessary overheads, for example, for “children, the old, the sick” (Hindess and Hirst 1975, 26). In tribal societies the mode of appropriating surplus labor was collective (e.g., feasts, war), so there were “no classes, no state and no politics” (Hindess and Hirst 1975, 27). The foundation of social control, the “basis of the community,” is the “naturally evolved tribal community, or, if you wish, the herd—common ties of blood, language, custom, etc.” (Marx 1986a, 400). Production is communal, which means “The labour of each individual is ‘indistinct’ in the sense that there is no form of calculation which can assess the relative contributions of different individuals towards the final product” (Hindess and Hirst 1975, 49), access to subsistence is equal, and therefore these societies have no need for accounts.

Tribes, however, could become hierarchical, divided between members and a ruling elite that “monopolizes the functions of the given society’s political organization,” that requires members to pay “tributes” to the leader in the forms of food, constructing buildings and fortifications, and particularly by army service, to sustain the leader and the community (Amin 1976, 14–15; Wickham 2005, 315). At first glance ‘tributes’ look like later feudal ‘rents,’ but, Marx argued, “One can understand tribute, tithe, etc., if one is acquainted with [capitalist] ground rent. But one must not identify them” (1986a, 42). He criticized economists for their tendency to “confound or to extinguish all historic differences under general human laws” (Marx 1973, 87). “For example, the slave, the serf and the wage labourer all receive a quantity of food which makes it possible for them to exist as slaves, as serfs, as wage labourers” (Marx 1973, 87), which made them indistinguishable to economists. Similarly, the fact that “the conqueror who lives from tribute, or

the official who lives from taxes, or the landed proprietor and his rent, or the monk and his alms, or the Levite and his tithe, all receive a quota of social production,” made them also seem indistinguishable (Marx 1973, 87). To Marx, however, they were distinguishable because the quota of social production each received “is determined by other laws than that of the slave’s, etc.” (1973, 87).

Having understood capitalist rent using his theory of value (Bryer 2004), tribute was an attenuated or “reduced” (1998, 777) form of what became feudal labor rent, Marx argued, that in its simplest form was serfdom or forced labor (discussed below). The common element was that the tribe member and peasant were the “possessor” of land, and therefore extracting surplus required “domination,” which took different forms:

In all forms where the actual worker himself remains the ‘possessor’ of the means of production and the conditions of labour needed for the production of his own means of subsistence, the property relationship must appear at the same time as a direct relationship of domination and servitude, and the direct producer therefore as an unfree person—an unfreedom which may undergo a progressive attenuation from serfdom with statute-labour down to a mere tribute obligation. (Marx 1981, 926)

Marx distinguished tribute, a charge for membership of the tribal community, an attenuated form of labor rent for possessing the land as part of the community, from feudal rent based on individual ownership of land. Whereas the feudal mode was class-based, tribes were a form of “naturally arisen clan community . . . for the appropriation of the objective conditions of their life, and of their life’s reproducing and objectifying activity (activity as herdsmen, hunters, tillers etc.)” (Marx 1973, 472). In such societies, “The earth is . . . the property of the . . . community producing and reproducing itself in living labour. Each individual conducts himself only as a link, as a member of this community as proprietor or possessor” (Marx 1973, 472). In such societies, surplus labor is “labour for the *communal reserves*, insurance so to speak, and to meet the expenses of the community as such, i.e. for war, religion etc.” (Marx 1973, 473).

Within such societies, he argued, “This form, with the same land-relation as its foundation, can realize itself in very different ways” (Marx 1973, 473). Extreme hierarchies are possible, where “the unity is represented in a chief of the clan-family, or as the relation of the patriarchs among one another. Depending on that, a more despotic or a more democratic form of this community system” (Marx 1973, 473). In despotic forms, “A part of their surplus labour belongs to the higher community, which exists ultimately as a *person*, and this surplus labour takes the form of tribute etc., as well as of common labour for the exaltation of the unity, partly of the real despot, partly of the

imagined clan-being, the god” (Marx 1973, 472, 473). In the tribute paid to the chief or despot, Marx argued, “lies the transition to villeinage” (1973, 473), to the feudal, class-based, mode of production and rent. To draw the boundary between hierarchical tribes paying tribute and class-based modes—between the collective appropriation of surplus labor and all class-based appropriation—Marx conceptualized a form of tribal development he called the “Asiatic mode” or “Oriental despotism,” marking the boundary between the ‘chief’ and the ‘state.’ He drew this boundary, according to the accounting interpretation, around their qualitatively different forms of accountability, the shift from the incalculable accountability of the community to the calculated accountability demanded by the state.

The Asiatic Mode

The tribe could develop a “higher unity” in the form of a “sole proprietor,” “the father,” “the despot” (master, lord, absolute ruler, tyrant), who owned all means of production, mainly land, and appropriated surplus labor from “propertyless” workers, “by law,” that is, ultimately by force, in the form of communal labor, “tribute, etc.,” Marx argued in *Grundrisse* (1973, 472–73). He emphasized, “in most of the *Asiatic* land-forms, the *comprehensive unity* standing above all these little communities appears as the higher *proprietor* or as the *sole proprietor*; the real communities hence only as *hereditary* possessors,” “is not in the least a contradiction” to their tribal origin (Marx 1973, 472–73). The Asiatic form of property was different, however, because “The surplus product—which is, incidentally, determined by law in consequence of the real appropriation through labour—thereby *automatically* belongs to this highest unity” (Marx 1973, 473, emphasis added). In *Capital*, we will see below, he clarified that this turned the surplus labor into “tax.” Its economic basis was the “despotic” appropriation of surplus labor from the whole community, from the propertyless, self-sustaining, small commune (Marx 1973, 473, 493).

The higher community was “despotic” because it owned all property and took surplus labor from the whole community by “law,” “automatically,” and when it did it became the “state,” which, as Marx made clear in Volume 3 of *Capital*, distinguished the payment of “tribute etc.” and “common labor” from the class-based extraction of “tax.” In *Grundrisse*, he observed, “In Asiatic societies . . . the monarch appears as the exclusive proprietor of the agricultural surplus product,” and “in those earlier modes of production the principal proprietors of the surplus product . . . [are] the slaveowner, the feudal lord and the state (e.g. the oriental despot)” (Marx 1973, 467; 1981, 448). In Volume 3 of *Capital* he imagined, “If there are no private landowners but it is the state, as in Asia, which confronts them directly as simultaneously

landowner and sovereign, rent and tax coincide, or rather there does not exist any tax distinct from this form of ground-rent” (Marx 1981, 927). In other words, when tributes and communal labor become calculated legal claims to surplus labor from the whole community they become “tax,” the expropriation of surplus labor by the higher community by force and ideology, and, we will see, the state keeps detailed accounts.

Marx’s Asiatic mode is often criticized for not describing actual historical societies (e.g., Anderson 1974, 484–95, 548–49; Hindess and Hirst 1975, 178–206; de Ste. Croix 1981, 155; Wickham 1985, 170–71), but these criticisms are misplaced. Marx called this mode “Asiatic” because he identified its characteristics in historical Asian societies, but “understood the Asiatic mode to have universal rather than a particular geographic reference—paralleling the way that, for instance, nineteenth-century anthropology understood the term ‘Peking Man’ to have universal reference” (Blackledge 2006, 112). Hindess and Hirst (1975, 197) ignore this when they argue that appropriating tax/rent without private ownership of land is not a mode of production because its foundation—peasant and/or communal production—is not exploitative, therefore the “state has no necessity” because classes did not exist. Wickham agrees, concluding that the answer to the question, “What is tax . . . is not the traditionally defined Asiatic mode of production,” which “cannot be regarded as having any analytical validity” (1985, 170).

This criticism misses the point of Marx’s Asiatic mode, which from an accountability perspective is to conceptualize the difference between the ‘chief’ demanding ‘tribute, etc.’ and the ‘state’ of all class-based societies, conceptualizing the state *as* the ruling class, the owner of *all* means of production, that appropriates surplus labor from *all* the direct producers by calculation, force, and ideology. For example, feudalism with one lord would have meant that “rent” equaled “tax.” Marx did not describe particular historical societies. He put them to one side by assuming that the despot owned all the means of production, which abstracted from variations in property relations and from economic change by conceptualizing a mode of production in stasis, where the despot represented class exploitation in general, as the calculated forcible extraction of surplus labor from the community. In short, he conceptualized the boundary between primitive-communal tribal societies and all class societies, between the chief as representative of the higher community and the class-based state, as their different methods of surplus labor extraction, communal or despotic. By implication, the systematic, legal, “automatically” calculated surplus labor expropriated by the state from the whole community should be an important feature of any historical class-based society, and it is (Wickham 2005), as we will see in chapters 4–6.

Amin (1976, 15) influentially argues that the “tribute-paying mode of production is the form that most normally succeeds the communal form.

It is the rule.” He argues that the “tribute mode,” “sometimes inaccurately called the ‘Asiatic’ mode, has existed in four continents: in Asia, of course (China, India, Indochina, Mesopotamia, and the Asia of classical times), and in Africa (Egypt and Black Africa), in Europe (in the preclassical societies of Crete and Etruria), and in pre-Columbian America (Incas, Aztecs, etc.)” (Amin 1976, 16). Over these vast areas and long stretches of history, societies of communal producers paid “tributes” to higher communities, Amin argues, whereas slavery (ownership of workers) and feudalism (individual ownership of land) were marginal cases. Marx certainly argued, “the very condition of existence of a class-divided formation is . . . a ‘surplus’ . . . , an excess of production over consumption” (Amin 1976, 18), and there is no doubt that these societies had higher communities that extracted surplus labor. However, to identify Marx’s tribute, feudal, and capitalist, modes of production, Amin distinguishes between their forms of surplus production, whether they were “noncommodity forms such as tribute, rent in kind, etc., or commodity forms” (1976, 18)—not between their methods of extracting surplus labor. It is therefore possible that although all of these societies extracted what Amin calls “tribute,” only some of the higher communities were class-based states extracting tax.

In all post-tribal societies, the state taxed their citizens more or less heavily, and kept accounts of its collection and use, but according to Marx’s theory, the basis should change with changes in the mode of production, with changes in the method of extracting surplus labor. The dominant basis of taxation in the slave mode should be production, rent in feudalism, and wages and profit (value added) in capitalism, which would tell us the calculative mentality of the state, the mentality and social relations of the ‘dominant’ mode of production (discussed below), that of its ruling class. For example, criticizing the demand of German socialists in 1875 for a “single progressive income tax” in semi-feudal Germany, Marx argued, “Income tax presupposes various sources of income of the various social classes, and hence capitalist society” (1989, 96). Other forms of taxation likewise presuppose various classes and different forms of society. Marx and Engels saw the state as an instrument of “the most powerful, economically dominant class,” which “becomes also the politically dominant class and thus acquires new means of keeping down and exploiting the oppressed class” (quoted by Rigby 2004, 489). The ruling class’s mentality and interests dominate the state, but as Engels said, “periods occur in which the warring classes balance each other so nearly that the state power . . . acquires a certain degree of independence from both” (quoted by Rigby 2004, 489). The state could have “relative autonomy” and act in the general interest, but the social relations of production set limits to this. Because ruling-class individuals typically also directly extracted surplus labor, the possibility if not likelihood existed for intra-class

conflict between those who benefited from the state and the direct extractors over the division of the total surplus available (Haldon 1993, 1–9), which we will see in chapter 6 was the case in the later Roman Empire.

The Dominant Mode of Production

In studying history, not only will the same mode of production create, as Marx said, different “gradations in appearance,” differences in their cultural and ideological superstructure, but “in the crucial and rather common case . . . more than one mode of production coexists in the same social formation” (Wickham 1984, 7). In Marx’s later works a ‘social formation’ is an actual historical society in which different modes of production coexisted, with its own particular ideological superstructure. Nevertheless, Marx insisted that the different historical eras were periods when one mode of production was “dominant” (1971, 213; 1972, 468; 1973, 650; 1998, 863), and the questions are what he meant and whether we can observe it.

Alongside the slavery of the ancient world, historians point out, there were small-scale subsistence farmers (who paid tax), tenants (who paid rent and tax), and landless laborers working for wages, which they argue creates a problem for Marx’s theory. For Konstan, for example, “at this point, the notion of a slave society has lost its categorical character, and the doctrine of the five stages must founder” (1975, 150). Historians have typically reduced the question of identifying Marx’s ‘dominant’ mode of production to guesses about the number of legally designated ‘slaves’ or ‘serfs,’ which is why there are conflicting opinions, and in particular why many question the relevance of calling the ancient world a ‘slave society’ (e.g., Konstan 1975, 147–48; Shaw 1984, 223; Wickham 1984, 1985). Marx appeared to support this approach in his rare detailed history of a particular social formation, in *Class Struggles in France* (1851), and in the *Eighteenth Brumaire* (1852), where he “characterize[d] France of the 1840s and 1850s as a collage of different modes of production in which even industrial capitalism was not dominant” (Shaw 1984, 215). A period of intense class struggle, in Marx’s history of nineteenth-century France, “quantitative dominance by traditional types of production was decisive for the form the state took,” so it is true that “one may reasonably suggest that Marx never held that one could ignore the quantitative element in which the vast majority of production was performed” (Shaw 1984, 215). However, it does not follow that quantitative dominance of types of production was what he meant in his later work by the dominant mode of production.

Finley (1999, 179) objects to Marx’s concept of the slave mode of production as a distinct form of exploitation because, he argues, “chattel slavery has in the past been integrated into other modes of production, most obviously capitalism.” Marx’s distinction between ‘dominant’ and ‘secondary’ modes,

he therefore concludes, is specious. However, it is arguable whether in Marx's theory "The problem . . . is that the secondary modes—slavery in the case of American capitalism—are not merely 'dominated' by the main mode but are incorporated into it, so that 'mode of production' loses any meaning other than as a synonym for a particular category of labour" (Finley 1999, 180). Bryer (2012, 2013a), for example, argues that according to the accounting evidence America became 'capitalist' in Marx's sense only toward the end of the nineteenth century. Nor does it follow "When that labour is employed, as were American slaves, to produce for a capitalist world-market, it is meaningless and indeed misleading to speak of a slave mode of production" (Finley 1999, 180). Finley follows Banaji (1977) who argues, referring to various historical situations, including the American South, that "there was no question of identifying the 'mode of production' according to the character of the given forms or relations of exploitation. Nor did any of these instances involve a 'coexistence' of modes of production" (1977, 9). Banaji (1977, 8) cites a comment in *Capital* Volume 3 where "Marx referred to the evolution of merchant capital in the ancient world 'transforming a patriarchal slave system devoted to the production of immediate means of subsistence into one devoted to the production of *surplus value*,'" that is, to capitalism, but this interpretation is debatable:

In the ancient world, the influence of trade and the development of *commercial capital* always produced the result of a slave economy; or, given a different point of departure, it also meant the transformation of a patriarchal slave system oriented to the production of the direct means of subsistence into one oriented to the production of *surplus value* [*sic*]. In the modern world, on the other hand, its outcome is the capitalist mode of production. It follows that this result is conditioned by quite other circumstances than the development of commercial capital. (Marx 1981, 449–50, emphasis added)

It is clear from Marx's comments on American slavery in Volume 1 of *Capital* that the second half of the sentence Banaji quotes referred to the American South. However, it is doubtful whether 'surplus value' is the correct translation of the original German *mehrwert* (Banaji 1977, 8), which is not consistent with comments in Volume 1 on the American South, and we could translate *mehrwert* as 'added value,' by which Marx appeared to mean *commercial* profit. If so, he meant that just as in the ancient world where merchant capitalism produced a slave-economy, spread and intensified it, grafting merchant ("commercial") capitalism onto preexisting slavery in America changed it from subsistence to commercial slavery. In Volume 1 Marx also wrote, "Whilst the cotton industry introduced child-slavery in England, it gave in the United States a stimulus to the transformation of the earlier, more or less patriarchal slavery, into a system of *commercial*

exploitation. In fact, the veiled slavery of the wage-workers in Europe needed, for its pedestal, *slavery pure and simple in the new world*" (Marx 1996, 747, emphases added). In the Southern states, "It was no longer a question of obtaining from him [the slave] a certain quantity of useful products. It was now a question of production of surplus *labour* itself" (Marx 1996, 226, emphasis added). It was, in short, not a question of producing 'surplus value,' capitalist profit. American accounting history is consistent with Marx's view that American slave owners had a semi-capitalist mentality, as did the Northern manufacturers until well after the Civil War, but unlike the North, the South had a slave mode of production onto which it grafted the merchant capitalist mentality that accentuated slave exploitation (Bryer 2012, 2013b).

Given the typical quantitative interpretation of what Marx meant by 'dominant,' there has been an understandable "growing tendency for historians of a Marxist inspiration to talk of the slave mode of production being dominant in the ancient world in a qualitative or ideological rather than a simple quantitative sense" (Rathbone 2002, 158). However, this overlooks that by 'dominant' mode of production Marx meant the typical (modal) way the ruling class, who control the state, extract surplus labor. This follows from his definition of the mode of production as the method of surplus extraction, the "specific economic form" in which the "unpaid surplus labour is pumped out," which "determines the relationship of rulers and ruled." It follows, de Ste. Croix emphasizes, "the most significant distinguishing feature of each social formation, of each 'mode of production' is not so much *how the bulk of the labour of production is done* as *how the dominant propertied classes, controlling the conditions of production, ensure the extraction of the surplus, which makes their own leisured existence possible*" (1981, 52). Marx's claim is not that "*the bulk of production* was done by slaves, or even . . . by slaves, serfs and all other free workers put together" (de Ste. Croix 1982, 133). To the contrary, in de Ste. Croix's "opinion, the combined production of free peasants and artisans must have exceeded that of unfree . . . producers in most places at all times" (1982, 133). Nevertheless, for Marx the key question is "the role played by unfree labour in providing the dominant propertied classes with their surplus" (de Ste. Croix 1981, 133). Chapter 4 uses de Ste. Croix's work on ancient accounting, and other evidence, to underwrite his conclusion that by defining dominant to mean how the ruling class extracted surplus labor, we are "justified in saying that the Greek and Roman world was a 'slave economy'" (1981, 52), and argues that we can say the same of ancient Mesopotamia and Egypt. The slave mode of production continued to dominate until the Roman Empire's collapse in the west during the fifth and

sixth centuries, chapter 5 argues, and chapter 6 that it continued in the east after Roman control collapsed in the seventh.

Ancient Slavery

Engaged in perpetual war, the primitive commune embraced slavery, which Marx argued became the basis of the first antagonistic class-based mode of production, an appropriate mode for developing the low productive forces because individuals, we have seen, were ‘proprietors,’ albeit as members of the community. Through war with other tribes, proprietors acquired land and slaves, creating a labor process that increased their productive forces, which produced the surpluses necessary to create and sustain towns, concentrations of proprietors, and a hierarchy preoccupied with agriculture and war:

War is . . . the great comprehensive task, the great communal labour which is required either to occupy the objective conditions of being there alive, or to protect and perpetuate the occupation. Hence the commune consisting of families initially organized in a warlike way—as a system of war and army, and this is one of the conditions of its being there as proprietor. The concentration of residences in the town, [is the] basis of this bellicose organization. (Marx 1973, 474–75)

For Marx, war and slavery, the use of organized physical force, drove the development of antiquity’s forces of production, was central to its political economy of agriculture. “Warfare is . . . one of the earliest types of labour for every naturally evolved community of this kind, both for the defence of property and for its acquisition . . . [and] man himself is captured as one of the conditions of production, and this is the origin of slavery and serfdom” (Marx 1973, 491). Slavery allowed production “units of a size and a scale of production, which are impossible on the basis of production by isolated individuals—the single artisan or the peasant farm” (Hindess and Hirst 1975, 137). Captured slaves were much cheaper than self-produced slaves, so “the slave system . . .—so long as it is the dominant form of productive labour in agriculture, manufacture, navigation, etc., as it was in the advanced states of Greece and Rome—preserves an element of natural economy” (Marx 1997, 479). The slave market “maintains its supply of the commodity labour-power by war, piracy, etc., and this rapine is not promoted by a process of circulation, but by the actual appropriation of the labour-power of others by direct physical compulsion” (Marx 1997, 479). The aim of ancient slave-owners, Marx concluded, was compelling the production of use-values (including

coin), to produce the “best citizens” who managed the slaves on their estates, engaged in war, and consumed appropriately to their status, to give them a way of life, not money “wealth” as “an end in itself,” which was true only for merchants, and later in capitalism:

Among the ancients we never come across an investigation into which form of landed property etc., is the most productive, creates the greatest wealth. Wealth does not appear as the aim of production, although Cato may well investigate which manner of cultivating a field brings the greatest rewards, and Brutus may even lend out his money at the best rates of interest. The question is always which mode of property creates the best citizens. Wealth appears as an end in itself only among the few commercial peoples—monopolists of the carrying trade—who live in the pores of the ancient world, like the Jews in medieval society. (Marx 1986a, 411)⁴

Compared to capitalism, “the old view according to which man always appears in however narrowly national, religious or political a determination as the end of production, seems very exalted when set against the modern world, in which production is the end of man, and wealth the end of production” (Marx 1986a, 411). Slave masters wanted to maximize their ‘wealth,’ which for them was their land, slaves and possessions, in the form of use-values, including coin, and therefore to spend as little of them as possible for slaves, minimize slaves’ consumption, acquire other productive assets for as little as possible, and so on, as we will see in chapter 4. The merchant capitalist’s notion of profit (receipts minus expenses) was understood, but slave masters never held their overseers accountable for the profit earned from their slaves, chapter 4 shows, did not seek any notion of ‘value for money.’ Money in Greece and Rome was a store of wealth and a means of exchange, but it was not, according to Marx, a general measure of the value of all commodities, and was not therefore the aim of production, as it uniquely is under capitalism. Masters were interested in controlling ‘costs,’ but the accounting evidence shows they did not see these as the monetary costs of production (including fixed capital and overheads), or even usually as expenses, but as the consumption or loss of use-values, including coin. There is no evidence in any ancient accounts of concern with the monetary cost of production, or in estate manuals.

To analyze the ancient world, in *A Contribution to a Critique of Political Economy* Marx turned to his theory of value, that is, according to the accounting interpretation, to his emerging explanation of capitalist accounting, of the “categories” of “bourgeois society” (1971, 211) he found there (Bryer 2017). To understand the “economy of antiquity,” as he put it in Appendix I

on “The Method of Political Economy,” it was first necessary to understand capitalism:

Bourgeois society is the most advanced and complex historical organisation of production. The categories which express its relations, and an understanding of its structure, therefore provide an insight into the structure and the relations of production of all formerly existing social formations the ruins and component elements of which were used in the creation of bourgeois society. . . . Bourgeois economy thus provides a key to the economy of antiquity, etc. . . . If one knows [capitalist] rent, it is possible to understand tribute, tithe, etc. (Marx 1971, 211)

Similarly, if one understands capitalist accounts it is possible to understand slave and feudal accounts. Workers in capitalism are economically ‘free’ and therefore wages are an element of ‘circulating capital,’ a recoverable cost in capitalists’ accounts (Bryer 2017). It followed, as “direct forced labour was the foundation of the ancient world” (Marx 1986a, 176), in slave owners’ accounts slaves would, by contrast, be “instruments of production,” would “form part and parcel of the means of production” (Marx 1996, 705), exactly like the owner’s oxen, dairy cattle, goats, buildings, wagons, and so on. To understand the pre-capitalist world, therefore, Marx argued, we must first understand capitalism’s unique separation of workers from the means of production, which meant that this was precisely what the economic categories of slaves and serfs, both subject to forced labor in different forms, were—means of production:

It is not the unity of living and active humanity with the natural, inorganic conditions of their metabolic exchange with nature, and hence their appropriation of nature, which requires explanation or is the result of a historic process, but rather the separation between these inorganic conditions of human existence and this active existence, a separation which is completely posited only in the relation of wage labour and capital. In the relations of slavery and serfdom this separation does not take place; rather, one part of society is treated by the other as itself merely an inorganic and natural condition of its own reproduction. The slave stands in no relation whatsoever to the objective conditions of his labour; rather, labour itself, both in the form of the slave and in that of the serf, is classified as an inorganic condition of production along with other natural beings, such as cattle, as an accessory of the earth. (Marx 1973, 489)

A capitalist would classify purchased slaves (and serfs) as ‘fixed capital’ in the accounts, costs to be recovered ‘bit-by-bit’ over more than one circuit of capital (Bryer 2017, chapter 6). In the ancient world, by contrast, “wealth confronts direct forced labour not as capital but rather as a *relation*

of domination . . . ; thus, the relation of domination is the only thing that is reproduced on this basis, for which wealth itself has value only as gratification, not as wealth itself” (Marx 1973, 326). Capitalists maintain their capital by reproducing it before recognizing surplus value, but in the ancient world domination produced “gratification,” use-values, which reproduced the material basis of their domination, not monetary wealth.

Slavery and serfdom are for Marx “only further developments of the form of property resting on the clan system” (1973, 493), a development from collective to individual ownership, legal or de facto, of the means of production. He therefore agreed with Aristotle, for whom a slave was an “animate tool,” and Varro the ancient Roman writer who categorized slaves as an “*instrumentum vocale*” (de Ste. Croix 1981, 58), an instrument or tool that talks. Marx agreed with Aristotle that in ancient Greece slaves were “articles of property,” “actually parts of their owner,” and “by being separable parts of the bodies of their masters, slaves hardly qualified as labourers or producers: they were seen as their masters’ capacity, so to speak, of putting instruments of property to work” (Kyrtates 2002, 141). Marx, however, corrected Aristotle, who was right that the master-slave relation was one of domination, but wrong that slavery was ‘natural,’ that slaves were naturally inferior, and who therefore, like other Greek writers, never saw slavery as “exploitation” (Kyrtates 2002, 141), never understood it as a method of extracting surplus labor in the form of use-values. Marx (1998, fn.1, 92) admired his philosophy, but concluded that even “a giant thinker like Aristotle erred in his appreciation of slave labour,” never understood the slave’s production of use-values for its owner as exploitation, which remained its “hidden basis.” The only alternative to slavery Aristotle could imagine was an automated utopia where “every tool could perform its own work when ordered” (Kyrtates 2002, 140), total control of the means of production, available only to the Gods.

Aristotle’s views were widely shared: “As the ancients saw it, slaves were, above all, dominated” (Kyrtates 2002, 142) as “instruments of production, and that, surely, is how many if not most rich Greeks typically saw their slaves most of the time” (Cartledge 2002, 161). We should therefore expect the accounts of ancient wealthy landowners in ancient Mesopotamia, Egypt, Greece, Rome, and so on, to hold their overseers (‘stewards,’ ‘bailiffs’) accountable, not for the recovery of the value and surplus value, but for their workers as means of production, as living tools for producing the owner’s way of life, producing use-values, including coin. Accounting history, chapters 4 and 5 argue, supports this hypothesis.

The key question, therefore, is whether there was a qualitative difference between the ancient slave-owners’ methods of extracting surplus labor and forms of accounting calculation and control, and those of Western European landowners in the early middle ages. What follows argues there was a

difference, that Marx's analysis of the different mentalities and social relations of the ancient slave owner and the feudal lord, their different methods of surplus extraction, explains them as qualitatively different ways of controlling the labor process, demanding qualitatively different modes of accountability, implying qualitatively different forms of accounts, which chapter 6 confirms.

Ancient Slavery versus Feudalism

Whereas Marx's categories are economic, historians typically define slaves, serfs, and wageworkers from the legal viewpoint—slaves are legally 'unfree,' serfs are legally 'relatively unfree,' and wageworkers are legally 'free'—and find a confusing variety within the hypothetical extremes. Finley (1979, 67), for example, influentially rejected Marx's concept of class because, he claimed, it produced the "false triad . . . whereby we try to force all labour into one of three categories, slave, serf or free." According to Finley, "Conceptually, there are two polar extremes of legal 'freedom.' At one pole is the slave as property and nothing else; at the other pole, the perfectly free man, all of whose acts are freely and voluntarily performed. Neither has ever existed. . . . Between these two hypothetical extremes there is a whole range or spectrum of positions . . . often existing in the same society" (1979, 67). Antiquity's range of rights, privileges, claims, and duties, Finley (1999, 51) argued, corresponded to degrees of "status," which underlies the "increasingly orthodox" view "that the mass of agricultural producers in the ancient world as a whole were in a position between slavery and freedom" (Rathbone 2002, 158). The accounting evidence, however, chapter 4 argues, supports de Ste. Croix's (1981, 58) criticism of Finley's "cavalier rejection of Marx's whole concept of class as an instrument of analysis . . . [that] reveal[s] a surprising lack of knowledge of some of Marx's basic concepts."

The distinction between slave and 'free' wageworker, Marx argued, is neither the poles of legal freedom, nor degrees of freedom, but a qualitative distinction between the methods of extracting surplus labor and controlling the labor process. The difference was that the economic 'freedom' of wageworkers, and the 'domination' of slaves and serfs, were necessary conditions of the different modes of extracting surplus labor. Wageworkers had to be 'free' of any means of support, including ownership of any means of production, so therefore could not obtain a livelihood in any other way than wage labor, so the 'free' worker "learns to control himself" (Marx 1976a, 1033), to allow capitalists to control workers economically and pursue surplus value. By contrast, it was because "Direct forced labour is the foundation of the ancient world; the community rests on this as its foundation" (Marx 1973, 245), that the slave owner could coercively hold slaves accountable for production. The legal freedom of workers did not create the capitalist

mode of production, and their legal unfreedom did not create the slave mode. Rather, the capitalist mentality, seeing the opportunity for increased surplus from exploiting the higher forces of production at hand, created economically ‘free’ wageworkers, and similarly the slave mentality, given the much lower level of forces of production available, created slaves. As we will see in chapters 4–6, ‘wage labor’ existed in many pre-capitalist societies and did not create capitalists. By contrast, Marx argued, when capitalists faced peasants who ‘possessed’ or even legally owned the land, they dispossessed them through enclosures and turned them into ‘free’ wageworkers (Bryer 2004). In the late Roman Empire, chapter 5 argues, slave masters dispossessed free peasants and turned them into ‘effective slaves’ (discussed below).

The key to the ancient world was not for Marx that most workers were legally unfree, but the way they were accountable. A slave, he argued in *Grundrisse*, was a “labouring machine,” an instrument of production, forced labor whose master held it physically accountable for its “totality of force expenditure,” its “capacity” to produce the master’s way of life, for production, whereas a serf is an “appendage to the soil,” an element of the land, accountable, we will see, for labor rent:

In the slave relation, he belongs to the *individual, particular* owner, and is his labouring machine. As a totality of force expenditure, as labour capacity, he is a thing [*Sache*] belonging to another, and hence does not relate as subject to his particular expenditure of force, nor to the act of living labour. In the serf relation he appears as a moment of property in land itself, is an appendage to the soil, exactly like draft cattle. In the slave relation the worker is nothing but a living labour-machine, which therefore has a value for others, or rather is a value. (Marx 1973, 464–65)

To Marx “belonging,” “possession,” or being a “moment of property” did not necessarily mean legal ownership. Being “in the slave relation” therefore does not necessarily mean the chattel slavery that was usual in ancient Greece and Rome. Slavery can be ‘voluntary,’ that is, it can be de facto, ‘effective’ slavery. Marx’s discussions do not presume chattel slavery. He did not use the phrase in *Grundrisse*, or in Volume 3 of *Capital*, and used it once only in Volume 1 quoting an observer of slavery in the American South where it was the norm. The essential feature of his definition is that the master forcibly controls the slave, not as a “subject,” but as a “thing,” as a “living labor-machine,” as a machine for producing use-values, an instrument of production that must be forced to work, not legal ownership.

The feudal lord, by contrast, held self-sufficient peasants who were “a moment of property,” part of the land, accountable for rent. In the “serf relation” the peasant and his draft cattle, “belonged to the property” (Marx

1973, 252). In the feudal mode, the peasant was “the ‘possessor’ of the means of production and labour conditions necessary for the production of his own means of subsistence” (Marx 1998, 776–77). The land was occupied, worked, and controlled by the peasant, not the lord, who therefore still relied on physical and ideological coercion, but now to extract the surplus, a ‘rent’ of directly appropriated surplus labor, either as ‘labor-rent’ (labor-services or *corvée* labor) and/or rent in kind or money. Whereas under capitalism, the wage laborer is ‘free’ of all possessions and is therefore compelled economically to sell labor power to acquire the means of subsistence (Marx 1996, 178–79, 704–6), unlike the slave or the ‘free’ wageworker, the feudal peasant in both agriculture and rural home industry was a self-sufficient producer who worked for subsistence without supervision. For Marx, however, ‘possession’ without qualification was not the key distinction between slavery and feudalism, that is, it was not the cause, which was the landowner’s aim. Under feudalism this was not production, but surplus labor in the form of ‘rent,’ which we will see for Marx was the feudal precursor of capitalist ‘profit,’ which meant that the peasant must “produce his own means of subsistence,” that is, must bear the ‘expense’ of production by being self-sufficient, as well as paying the ‘rent,’ feudal ‘profit.’

Labor-rent (*corvée* labor) was the earliest and simplest form of rent, but the development to paying rent in kind or money “changes nothing,” Marx argued, because the source of the rent remained directly appropriated surplus labor, but these forms did presuppose progressively higher levels of the forces of production and, we will see, a different form of control:

The transformation of labour rent into rent in kind changes nothing from the economic standpoint in the nature of ground-rent. The latter consists, in the forms considered here, in that rent is the sole prevailing and normal form of surplus value, or surplus labour. This is further expressed in the fact that it is only the surplus labour, or only the surplus product, which the direct producer, who is in *possession* of the labour conditions needed for his own reproduction, must give up to the *owner* of the land, which in this situation is the all-embracing condition of labour. (Marx 1998, 780–81)

Marx equated “possession” with “own reproduction,” but the “all-embracing condition of labour” was that the worker must “give up” surplus labor to the owner, was accountable for rent. The issue for Marx was not legal rights, but the aim and method of control, the forms of accountability, which differed for labor rent and rent in kind or money. In *Theories of Surplus Value*, he argued, “Serf labour . . . has this in common with wage-labour, in respect of rent, that the latter is paid in *labour*, not in *products*, still less in *money*” (Marx 1972, 401). A serf paid labor-rent with surplus labor, “labour

performed without payment in return” (Marx 1972, 400), unlike the tenant who paid rent with products or money. When Marx discussed “*forced labour* and the forms of serfdom (or slavery) which correspond to it more or less” (1972, 400), that is, *corvée* labor-services, labor rent in its pure form, because the same was true of a slave, he therefore justifiably spoke of them together (cf. Konstan 1975, 150, 153).

Slaves and serfs subject to forced labor are coercively, physically, and ideologically, accountable for production, the slave full time, the serf for surplus labor, whereas a tenant is accountable for rent in kind or money. Rent in kind or money, Marx emphasized, which he saw as appropriate to higher levels of the productive forces than labor-rent, “is distinct from the preceding form in that surplus-labour needs no longer be performed in its natural form, thus no longer under the direct supervision and compulsion of the landlord or his representatives” (1998, 781). It was a different form of accountability. Rather than a slave or a serf driven by accountability for production, as a tenant “the direct producer is driven rather by force of circumstances than by direct coercion, through legal enactment [the lease] rather than the whip, to perform it on his own responsibility” (Marx 1998, 781), and produce the demanded rent.

Table 2.2 summarizes the above discussion, showing that Marx’s pre-capitalist categories of slave (legal and effective) and feudal peasant (serf and tenant), based on whether they are accountable for production or rent, transcend historians’ legal classifications of ‘unfree’ and ‘free’ labor and, we will see, resolve controversial cases.

Marx’s concept of the serf as part-time slave-tenant accountable for production in the form of labor rent answers the Gidden’s critique that in *Grundrisse* he had not clearly distinguished slavery from feudalism. Because the labor of slaves (legal and effective) and serfs is forced, they are instruments of labor accountable for production, but are different because serfs are accountable for rent, which means they are also part-time tenants. Whereas the aim of slave labour is production, the aim of serf labor is ‘rent,’ surplus labor (production) over self-produced subsistence. The slave master controls all the products, whereas serfs control their subsistence because they ‘possess’ land, but this is not the key distinction, which is that serfs and tenants are accountable for surplus labor as rent. To be a serf or tenant the worker must be self-sufficient,

Table 2.2 Marx’s Pre-capitalist Categories

	<i>Accountable for Production</i>	<i>Accountable for Rent</i>
Unfree labor	Slave	Serf (<i>corvée</i>)
Free labor	Effective slave	Tenant (commodities/money)

Source: Created by the author.

not simply 'possess' means of production, as we will see below and in chapter 5, and also be accountable for rent. Only the form of accountability allows us to distinguish serfs from, for example, chattel slaves who, subject to a Roman *peculium* nevertheless possessed the means of production and used them for self-sufficiency, and to buy their freedom while producing a surplus for their master, but they remained accountable for production, and therefore, chapter 4 argues, remained effective slaves. Like a slave owner, capitalists also control all products, which they sell, but they are not slave owners because 'free' wageworkers, who own nothing except the ability to sell their labour power, are economically accountable to them for value.

To reveal the key "force of circumstance," the "innermost secret" of the feudal mode as a distinct way of extracting surplus labor, in Volume 3 of *Capital* Marx contrasted labor rent with capitalist "profit," which again shows the centrality of the form of accountability to his categories:

If we consider ground-rent in its simplest form, that of *labour rent*, where the direct producer, using instruments of labour (plough, cattle, etc.) which actually or legally belong to him, cultivates soil actually owned by him during part of the week, and works during the remaining days upon the estate of the feudal lord without any compensation from the feudal lord, the situation is . . . quite clear, for in this case rent and surplus value [*sic*] are identical. Rent, not profit, is the form here through which unpaid surplus labour expresses itself. (Marx 1998, 776)

By "rent and *surplus value* are identical," which *prima facie* conflates feudalism with capitalism, Marx clarified, he meant that rent was the "*primeval form of surplus value* and coincides with it" (1998, 778, emphasis added), was the first or primitive form of what became surplus value underlying capitalist profit. In the feudal mode, "Rent here is the normal, all-absorbing, so to say legitimate form of surplus labour, and far from being an excess over profit," as capitalist ground rent was, "it is rather that the amount of such profit . . . depends . . . upon . . . the enforced surplus labour" (Marx 1998, 779). Rent appropriates the peasant's surplus labor, which is the feudal lord's "profit," and if this allows the peasant to earn an excess over subsistence, this "if we wish to anticipate the capitalist mode of expression," allows the peasant to "produce a profit for himself" (Marx 1998, 779). Rent therefore "represents no excess over profit. It absorbs the profit, *as it is understood*" (Marx 1998, 784, emphasis added). Rent was the "profit" as feudal lords understood their surpluses. When tenants pay money rent, the "cost of production, which now comprises . . . expenditures of money, becomes decisive; at any rate, the excess of that portion of the gross product to be converted into money," the sales revenues (Marx 1998, 783). As we

will see in chapter 6, feudal lords, whether as rent collectors or producers on their demesnes, calculated their surpluses, their 'rent' as 'primeval profit,' in the simple form of receipts minus expenses, which was the foundation of the 'charge and discharge' accounting that appeared in Western Europe, probably from around AD 700.

Marx's definition of slavery does not rule out a peasant household 'possessing' a small plot to provide itself, by the land owner's calculations, less than subsistence, for which it pays 'rent' in kind or money, compelling it to also work for the lord for 'wages,' additional necessary subsistence, as effective slaves, accountable for production. The "small peasant tenant farmer" paying money rent was an example of "intermediate forms" that Marx argued helped to create the conditions for the capitalist tenant farmer (1998, 784). The spread of money rent, leading to the disappearance of the small tenant, he speculated, was "accompanied, but *even anticipated*, by the formation of a class of propertyless day labourers, who hire themselves out for money" (Marx 1998, 785, emphasis added). These wageworkers were destined to become the capitalists' 'free' wageworker. In antiquity, however, hired labor was rare and seen by the "propertied class . . . (and by many of the poor) as only little better than slavery" (de Ste. Croix 1981, 4). Many were in fact slaves hired out by their masters, usually for seasonal work or building, and their standard of life and status was low (de Ste. Croix 1981, 179, 187, 199). Because ancient Greeks controlled hired labor as they did slaves, to them hired laborers were "slavish," that is, effectively slave labor, "were regarded, for all practical purposes, as slaves, or came very close to being regarded as slaves" (Kyrtates 2002, 143). Greece and Rome had large numbers of 'free' peasants, many of whom leased land and paid 'rents' who, *prima facie*, were 'tenants,' but chapter 4 argues the accounting evidence is consistent with many being effective slaves, and chapter 5 argues that effective slavery spread in the late Roman Empire. This evidence supports the hypothesis that the effective slavery of small tenancies combined with labor-services and/or casual wage laborers, was prevalent during the late Roman Empire, and continued in the east following the collapse of the Roman Empire.

The transition to feudalism in the west and the extraction of surplus labor from self-sufficient serfs and tenants as rent represented progress, Marx argued, because it contained the "germ" of capitalist profit:

To what extent the labourer (a self-sustaining serf) can secure in this case a surplus above his indispensable necessities of life, *i.e.*, a surplus above that which we would call wages under the capitalist mode of production, depends, other circumstances remaining unchanged, upon the proportion in which his labour-time is divided into labour-time for himself and enforced labour-time for his feudal lord. This surplus above the indispensable requirements of life, the germ

of what appears as profit under the capitalist mode of production, is therefore wholly determined by the amount of ground-rent, which in this case is not only directly unpaid surplus-labour, but also appears as such. (Marx 1998, 776)

Feudal rent was the “germ” of capitalist profit, because “It is unpaid surplus-labour for the ‘owner’ of the means of production, which here coincide[s] with the land” (Marx 1998, 776). This was progress, as Marx put it in Volume 1 of *Capital*, because “The starting-point of the development that gave rise to the wage-laborer, as well as to the capitalist, was the servitude of the labourer. The advance consisted in a change of form of this servitude, in the transformation of feudal exploitation into capitalist exploitation” (1996, 706), in the form of accountability reflected in a change in the form of accounts (Bryer 1994, 2000a). Similarly, the advance from slavery to feudalism was the change in the form of exploitation, chapter 6 argues, also evidenced by a change in the form of accounts. Feudal relations also represented an advance over slavery, Marx argued, because appropriating surplus labor created an opportunity for the peasant to make a surplus where custom or law restricted labor rent, which, when added to the landlord’s demands, made them a potent force of production, a “spur . . . to a greater exertion” creating “definite economic development” toward capitalism:

Take it, for instance, that the enforced labour for the landlord originally amounted to two days per week. These two days of enforced labour per week are thereby fixed, are a constant magnitude, legally regulated by prescriptive or written law. But the productivity of the remaining days of the week, which are at the disposal of the direct producer himself, is a variable magnitude, which must develop in the course of his experience, just as the new wants he acquires, and just as the expansion of the market for his product and the increasing assurance with which he disposes of this portion of his labour-power will spur him on to a greater exertion of his labour-power, whereby it should not be forgotten that the employment of his labour-power is by no means confined to agriculture, but includes rural home industry. The possibility is here presented for definite economic development taking place, depending, of course, upon favourable circumstances. (Marx 1998, 780; see also, 782)

The Transition to Feudalism:

The feudal mode became dominant in Western Europe because, according to the accounting interpretation, it ‘corresponded to,’ was more ‘appropriate’ for, would give larger surpluses from, the higher level of productive forces bequeathed from the ancient world, and led to their further development. Ancient society was “the product of a more dynamic life,” was expansionist and dynamic compared to primitive communism, Marx argued, particularly

in its developed form in Greece and Rome “characterised by chattel slavery” (Hobsbawm 1964, 34). Wars of conquest transmitted Roman culture, social relations, and technology around the Mediterranean and across Europe developing the forces of production, particularly clearing land for agriculture and the water mill. In the *German Ideology*, Marx and Engels argued, “feudal development starts on a much more extensive territory, and one prepared by the Roman conquests and the spread of agriculture connected with these” (1976a, 34). In *Capital*, Marx noted, “the Roman Empire had handed down the elementary form of all machinery in the water-wheel” (1996, 353). The historical evidence, unavailable to Marx, chapter 6 argues, supports the hypothesis that the transition to feudal relations occurred because it offered larger surpluses to wealthy landowners from these higher-level forces handed down from Rome.

CONCLUDING COMMENTS

We can interpret Marx’s theory of history as a world accounting history that explains the phenomenal forms of ancient, medieval, and capitalist production—production (use-values), rent and profit—by the ‘essence’ underlying their social relations of master-slave, lord-peasant, and capitalist-free wage-worker, their different methods of extracting surplus labor. Marx used the differences he identified to divide history into three major, qualitatively different, but sequentially related modes of production, each with different calculative mentalities/modes of exploitation (the ‘hidden basis’), social relations, and phenomenal forms (the ‘empirical’), summarized in table 2.3, which we should observe in qualitative differences between ancient, feudal, and capitalist accounts. Chapters 4–6 argue that we do.

First, however, the following chapter gives an accounting critique of some leading Marxist interpretations of Marx’s historical materialism. Neglecting his theory of value, it argues, has prevented Marxists from understanding his pre-capitalist modes of production, and not understanding these has prevented them from understanding the logic of his explanations of ‘structure,’ ‘agency,’ and ‘dialectical’ historical change.

Table 2.3 Mentalities and Phenomenal Forms

<i>Calculative Mentality</i>	<i>Social Relations of Production</i>	<i>Phenomenal Form</i>
Way of life (use values)	Master-slave	Production
Surplus labor	Lord-peasant	Rent
Surplus value	Capitalist-‘free’ wage labor	Profit

Source: Created by the author.

NOTES

1. Rigby (2004) cites across Marx and Engel's works, where the first number in each sequence is a volume of their *Collected Works*: 5:34–36, 38, 43, 53, 59–60, 63, 74, 81–84, 89, 231; 6:175, 259, 319–20, 348–49; 9:211–12; 24:307; 24:415; 25:254; 28:419–20; 29:38; 30:311, 533–34; 37:778; 38:96, 100; 40:186; 42:297.
2. <https://www.marxists.org/archive/marx/works/1877/11/russia.htm>.
3. This criticism, we will see, is not unique to Giddens (e.g., Konstan 1975, 149–50), but because his critique attracted Marxists' attention (e.g., Wright 1983), what follows calls it the 'Giddens critique.'
4. Commercial capitalists seek money 'wealth' in itself through trade, not production. Chapter 4 examines Cato's writings on slavery and accounting, and Marx's analysis of his mentality.

Chapter 3

An Accounting Critique of Marxist Interpretations

This chapter compares and contrasts some influential interpretations of historical materialism with the accounting interpretation, using it to answer criticisms of Marx's pre-capitalist modes of production and the philosophical logic of his theory of historical change. The chapter first examines the well-known critiques of Marx's pre-capitalist modes by Hindess and Hirst (1975) and Cohen (2000 [1978]). Hindess and Hirst's book, *Pre-Capitalist Modes of Production* (1975), we will see in chapters 5 and 6, has influenced leading Marxist historians. Wickham judges it "acute," "useful as a critique of many more sloppy formulations" (1985, 168); Bertay (1987) and Haldon (1989, 1990) "commend" it (Blackledge 2006, 118). Cohen's "economic power" interpretation of Marx's modes of production in *Karl Marx's Theory of History: A Defence* (2000; see also 1988) has become conventional wisdom. By contrast, the chapter argues, by rejecting Marx's theory of value, focusing on the legal 'freedom' or effective 'economic power' of slaves, serfs, peasants, and wageworkers, these theorists fail to understand that Marx's definition of modes of production as different ways of extracting surplus labor meant the different forms for which workers were accountable, and they therefore misunderstand them. Their interpretations, which overlook Marx's concepts of the slave as a 'laboring machine,' the feudal peasant as a worker forced to pay 'rent' (in labor, commodities or money) seen as 'primeval profit,' and economically coerced 'free' wageworkers in capitalism producing surplus value in the form of 'profit,' are, by comparison, the chapter concludes, judgmental and empirically unsupportable.

Second, the chapter examines the interpretations of the 'analytical Marxists,' centered around Cohen (2000), who focus on the philosophical problems they see associated with Marx's productive force determinism, most criticizing its 'functionalism,' 'determinism,' and 'evolutionism.' It rejects these

criticisms because they also stem from failing to understand that by defining modes of production as different ways of extracting surplus labor Marx meant different forms of accountability for production, and therefore how the social relations come to contradict the forces. The analytical Marxists consequently fail to recognize the role Marx gave to class conflict in selecting the social relations to maximize the surpluses of the victorious class given the forces at hand. The accounting interpretation supports, but modifies, Cohen's (2000) functionalist defense of 'orthodox' historical materialism, by reinstalling Marx's theory of value and class conflict.

INTERPRETING MARX'S PRE-CAPITALIST MODES OF PRODUCTION

Hindess and Hirst (1975, 1) engage in "Marxist theory," claim to produce "a work of theory" on Marx's pre-capitalist modes of production, which is necessary, they argue, because these are only "briefly indicated" compared to his lengthy treatment of capitalism. Marx gives "the elaborated concept" for capitalism, but they argue for pre-capitalist modes, "we are merely given a series of brief and partial indications which are mostly in the form of illustrative comparisons designed to highlight certain features of capitalism" (Hindess and Hirst 1975, 6). Hindess and Hirst (1975, 3) seek to put this right, to fill in the pre-capitalist gaps "to raise the conceptualisation . . . to a more rigorous level," claiming that their purely abstract concepts "cannot be refuted by any empiricist recourse to the supposed 'facts' of history." Instead, for them, the "general concept of . . . the capitalist mode of production . . . is not a description of a particular structure of social relations but a means for the analysis of social relations" (Hindess and Hirst 1975, 4), which we can use to fill in the missing analyses of the pre-capitalist modes. In effect, by rejecting any idea that capitalism has a factual foundation, Hindess and Hirst reject Marx's theory of value, the basis of his concept of the capitalist mode, his argument that surplus value underlies and expresses a historically specific capitalist "structure of social relations."

According to the accounting interpretation, by contrast, first, Marx's aim in analyzing pre-capitalist modes was not highlighting features of capitalism, but using surplus value as the conceptual benchmark for specifying their distinctive ways of extracting surplus labor, and their preconditions, which we can test empirically using accounting history. Second, there are no conceptual gaps in Marx's analysis of pre-capitalist modes. The difference in the detail of his treatment of pre-capitalist and capitalist modes is appropriate because the slave and feudal modes, which correspond to low levels of the forces, while qualitatively different, are simpler than capitalism, and therefore, as we will

see in chapters 4–6, slave and feudal accounting are simpler than capitalist accounting. Third, using a “general” interpretation of Marx’s concept of the capitalist mode of production, shorn of his theory of value, to analyze pre-capitalist modes, what follows argues, misunderstands Marx’s concepts and produces vague and incongruous results inconsistent with the accounting evidence.

Hindess and Hirst conceptualize a mode of production as an “articulated combination of relations and forces of production structured by the dominance of the relations of production” (1975, 9). Social relations must be dominant, they claim, because “it is impossible to construct the concept of an articulated combination of relations and forces of production starting from the primacy of the productive forces” (Hindess and Hirst 1975, 12). Therefore, they conclude, “the transition between one mode of production and another must be conceived in a non-evolutionary way” (Hindess and Hirst 1975, 1). Attempting any “general theory of modes of production” is therefore “idealist and teleological,” and in this vein they criticize Marx’s formulation in the *Preface* (Hindess and Hirst 1975, 7). Many Marxists reject the explanatory primacy of the forces of production and argue instead for the primacy of the social relations, and some historians think that this case “was most coherently articulated by Paul Hirst and Barry Hindess” (Blackledge 2006, 118). The accounting interpretation agrees with them that the “relations of production define a specific mode of appropriation of surplus-labour and the specific form of social distribution of the means of production,” which means that the modes of production “differ not in the existence of surplus-labour but in the mode in which it is appropriated” (Hindess and Hirst 1975, 10). However, the lack of accounting “rigor” with which they conceptualize the different modes of appropriation, which follows from neglecting Marx’s theory of value, we will see, undermines their claim that we must give priority to social relations, which according to the accounting interpretation are appropriate ways to extract the maximum surplus labor *given* the level of development of the forces.

Chapter 2 supported Marx’s claim to have defined slavery as an economic relation. To Hindess and Hirst (1975, 109), by contrast, because pre-capitalist forms of “bondage of human beings is very varied,” ranging from serfdom, debt bondage, indentured labor, and so on, to “various forms and degrees of slavery,” “slavery is always first and foremost a legal or customary *status*,” a view generally accepted by historians (e.g., Finley 1999, 51). To develop their abstract concept “most exactly” they focus on “*chattel slavery* . . . in which the owner has all of the rights of property over the slave,” which for them is the “foundation of all significant slave systems . . . , the necessary legal form of slavery in the slave mode of production” (Hindess and Hirst 1975, 109, 110). Roman law, as they say, “reflects chattel slavery in its

clearest and most developed legal form,” even though they recognize that in “Rome and elsewhere *pure* chattel slavery never existed in fact, for the law recognised . . . limitations on his master’s rights” (Hindess and Hirst 1975, 110, 112). A legal focus is nonetheless critical in their view to understanding slavery because regardless of “the contradictions and inconsistencies it was predominantly as property and not as a man that the slave was regarded in law and in fact” (Hindess and Hirst 1975, 112). As slaves, the “labourers (direct producers) are the legal property of the non-labourers. As chattels they have no legal or social existence independently of their master and they are dependent on him for their maintenance” (Hindess and Hirst 1975, 126). Therefore, anything less than “developed property in the means of production,” that is, societies without “markets” for land and slaves, is not a slave mode (Hindess and Hirst 1975, 140). Slaves in “autosubsistence societies,” or where the “state distributes ‘slaves’ and land in combination to the ruling class [and] the slaves are tied to the land,” or the state distributes ‘slaves’ to “free peasants,” or they acquire their own (Hindess and Hirst 1975, 140), are therefore not evidence of their slave mode.

These tests rule out vast swathes of history, restricting the ‘slave’ mode to the chattel slavery of Greece and Rome, and yet in any particular case they are vague and judgmental. How do we objectively identify a “developed property” or even a “market”? How do we identify an “autosubsistence” society or the “state,” or what it means to be “tied to the land,” or a “free” peasant? By contrast, chapter 2 argued, from Marx’s perspective the tests are objective, whether the non-laborer holds the workers coercively accountable for production, and whether this is the dominant source of surplus labor for the ruling class. The absence of the slave mode does not rule out the existence of slave relations according to Marx’s concept of a social formation. However, according to Hindess and Hirst’s legal property definition, the absence of their slave mode means that any “subordinated” workers, who may appear to be ‘slaves’ because, for example, they are treated and accounted for as laboring machines, “are equivalent in economic function to bond servants or wage-labourers” (1975, 140), merely different legal forms.

Hindess and Hirst recognize that legal title alone is insufficient for “effective possession of the slave as a productive labourer,” which also required the master to control the means of production so that slaves were “unable . . . to reproduce themselves” (1974, 126–28). The “important difference” between a serf and a slave, they argue, is that “slaves are separated by the property form and the organisation of the labour process from effective possession of the means of production in a different way from the feudal producer” (Hindess and Hirst 1975, 127). It was not simply the owner’s legal rights over slaves, but that their legal status meant, “Slaves *cannot* own the means of production (or possess them)—ownership is confined to freemen/non-labourers” (Hindess

and Hirst 1975, 127). The serf's legal "possession" of land they therefore conclude, "is the real difference between the relations of production that accounts for the difference in the conditions of the slave and serf" (Hindess and Hirst 1975, 127), but for Marx, chapter 2 argued, it is not the underlying difference.

Marx saw the calculative mentality—the distinctive method of surplus extraction, the qualitatively different aim of control—as the key difference between the slave and feudal modes of production, their underlying difference, chapter 2 argued, the fact that slave and serf labor was forced and therefore accountable for production, whereas self-sufficient peasants were forcibly accountable for rent. It was not that the slave was 'unfree' whereas "serfdom," for Hindess and Hirst "a legal status" requiring *corvée* labor (1975, 191, 224), allowed possession of land. From Marx's perspective, a serf, a forced worker, was a part-time slave, and as the possessor of land was a part-time peasant. The cause of their sameness was coercive accountability as a laboring machine for production, and the cause of their difference was the serf's accountability for rent, for surplus labor over self-subsistence. Classifying workers using Marx's pre-capitalist economic categories, according to the form of accountability, chapters 4–6 argue, brings clarity to difficult cases. For example, 'serfs' legally 'tied to the land,' the *adscripticiate*, ostensibly 'tenants' paying 'rent,' but who were coercively accountable for target production, who 'possessed' land but insufficient for subsistence, and therefore had to also work for 'wages' on the owner's estate. From Marx's perspective, chapter 5 argues, accounting and other evidence identifies these sixth-century Egyptian workers as effective slaves, whereas from Hindess and Hirst's perspective, we will see, historians dispute whether they were 'serfs,' 'tenants,' or 'wageworkers.'

To fill in the conceptual gaps left by Marx, developing his "general" concept of the capitalist mode of production, Hindess and Hirst argue that he saw an "identity of the slave labourer with other forms of fixed capital" (1975, 128), that the master treated a slave as "fixed capital" and controlled all output from production, just like a capitalist. Leaving aside for now whether Marx argued that slave owners saw slaves, like capitalists, as "fixed capital," it is true, as they say, in the slave mode of production (SMP), the "mode of appropriation of the surplus-product" is necessarily that "the whole product of the direct producers (slaves) goes to the non-labourers (slaveowners). The master owns the product of the slave's labour just as he owns the slave. . . . The slave receives the means of subsistence" (Hindess and Hirst 1975, 127–28). Slave owners control the whole product, but this is also true of capitalists, who merely sell rather than give workers their subsistence. Slavery for Hindess and Hirst, in other words, is a simpler form of capitalism with only "fixed capital," without wages, and slave masters did not therefore distinguish between "constant and variable capital," concepts that Marx applied only to

capitalism, forms of the circulation of capital he explained with his theory of value (Bryer 2017). Hindess and Hirst, by contrast, having in effect rejected Marx's theory of value, incongruously apply it to the slave mode. They conclude, "In the SMP the reproduction of labour-power is assimilated to the renewal of the stock of fixed capital [*sic*]: there is no distinction between constant and variable capital [*sic*], the slave is no different from any other form of capital investment [*sic*] in machines, animals, etc." (1975, 127–28), which they claim, we will see below, the owner 'depreciated.'

Surviving slave owners' accounts support Hindess and Hirst's conclusion that, very different from capitalism, "there is no division apparent within the [slave] mode between necessary-labour and surplus-labour" (1975, 128). In other words, as chapters 4 and 5 show, slave owners made no calculations of the surplus labor or product derived from their slaves, no calculations of an ancient form of 'profit.' However, disregarding what for a capitalist would be the 'cost' of maintaining the slave does not necessarily mean that slave owners had no concept of surplus labor, does not rule out that production was itself the measure of surplus labor for which the slave was accountable. As Hindess and Hirst themselves point out, the slave owner thought of his slaves as his *familia*, "consisting not only of his immediate family but also of his dependents, servants and slaves" (1975, 111), whose subsistence he would no more think of charging as a cost of production than he would that of himself, his wife, or children. Greek slave masters, for example, "certainly knew that buying and sustaining slaves cost money" (Kyrtates 2002, 142), but we will see in chapter 4 that they chose not to account for it as a 'cost.' The reason was "the way in which masters exploited their slaves," the fact that it was forced labor, chapter 2 argued, not simply the legal fact of "possessing their whole body, [that] concealed the fact that they did not possess all the products of their labour" (Kyrtates 2002, 142). To their controllers, we will see, slaves were above all forced laborers, laboring machines that were, their accounts shows us, accountable for production, not for 'profit,' for receipts minus expenses. Therefore, the master saw all of the slave's labor as surplus labor, just as Hindess and Hirst recognize was the case from the slave's viewpoint: "For the slave all labour is surplus-labour" because the slave's subsistence "is necessarily independent of his labour" (1975, 131, 132).

Hindess and Hirst (1975) are right that no division was "apparent" between necessary and surplus labor. However, they contradict this when they claim that because to their owners slaves were "fixed capital" they in practice made a division by recognizing "depreciation," which implies a division identical to the capitalist's between profit (surplus value) and the cost of production (transferred value) (Bryer 2017, chapter 6). Because a slave is "fixed capital," they argue, "the value [*sic*] of the slave is subject to depreciation," that is, "a portion of the value [*sic*] produced by the slave reproduces the value of the

capital invested [*sic*] in him” (Hindess and Hirst 1975, 128). For them the slave owner’s calculation was “no different from the capitalist’s calculation of the life of fixed capital and, therefore, the rate of depreciation” (Hindess and Hirst 1975, 136). The large slave-worked estates in Sicily and South Italy in the last two centuries BC, producing cattle and wheat for the market, they claim, made these calculations: “the slaves who worked them were treated strictly as a capital [*sic*] investment, exploited as thoroughly as possible and written off [*sic*] in a relatively short period” (Hindess and Hirst 1975, 121). In short, they claim these slave owners calculated like capitalists, but provide no accounting evidence. Whereas capitalists charged depreciation as an element in calculating the cost of production and profit, Marx argued (Bryer 2017, chapter 6), slave owners did not, as we will see in chapters 4 and 5.

Hindess and Hirst also give the example of the Athenian state’s “silver mines at Laurium—here the slave was treated as a capital investment and systematically worked to death in order to extract the maximum value from him” (1975, 116, 128), quoting Marx from Volume 2 of *Capital* in support. This is probably true, as we will see in chapter 4, but we need to make the important qualification that in this case, where the slaves could not reproduce, and not in the typical situation where they did, the “capital” Marx was talking about in the passage quoted by Hindess and Hirst was *money* capital. As we will see, in Athens, slaves sent to the mines were, Marx said, regarded as the “money-form of fixed capital,” and therefore the charge for “fixed capital” was for the *amortization* of a loan. Hindess and Hirst, by contrast, think of capitalist “depreciation” generically, as “a capitalist form of calculation” (1975, 136).

Hindess and Hirst deduce from their analysis that “the existence of the slave as a form of capital and his non-possession of the means of production” means “co-ordination/supervision by non-labourers is *necessary*” (1975, 134, emphases added). In other words, that “Slave production *requires* . . . the detailed supervision of the workers,” which for them shows “the dominance of the relations of production over the productive forces” (1975, 135), that the slave relation *causes* detailed supervision, which is a force of production. However, first, seeing supervision costs from the capitalist’s perspective, Hindess and Hirst incongruously conclude, “The labour of supervision is a direct cost of production [*sic*]; a form of functionally necessary labour which in itself produces no value [*sic*]” (1975, 136). In fact, capitalists distinguish between the cost of coordination, which is an indirect cost of production, a production overhead, and the supervision of exploitation (company management and administration), which is a nonproduction overhead, that Marx explained using his categories of productive and unproductive labor (Bryer 2017, chapter 7). Rather than a cost of production, as we will see in chapters 4 and 5, in slave owner’s accounts supervision ‘costs’ were distributions

from production, that is, consumption. Second, coordination was necessary in any form of “combined social process” of production, but Marx argued, “supervision . . . reaches its *peak* in the slave system” (1981, 507–8, emphasis added). There supervision plays a “*greater* . . . role” than in capitalism (Marx 1981, 508, emphasis added), leaving open the possibility that, as we will see happened in practice, slave masters could hold their slaves accountable for production not only by supervision, action control, but also results control, which shows that the relations do not simply dominate the forces.¹

Marx’s “Asiatic mode” is not a mode of production, Hindess and Hirst (1975, 196) conclude in the same vein, because the social relations do not determine the forces. Marx’s concept of its economic foundation as “the small commune, which thus becomes altogether self-sustaining, and contains all the conditions of reproduction and surplus production within itself” (1973, 473), Hindess and Hirst argue, means that “the units of production may be: (a) independent peasant farmers or (b) collectives of direct producers organized into communities” (1975, 194). They therefore conclude, “This mode of appropriation of the surplus-product corresponds to at least two distinct sets of forces of production: the forces entailed in independent peasant cultivation and communal cultivation,” and it is not therefore a mode of production because the social relations do not determine specific forces (Hindess and Hirst 1975, 196). By contrast, chapter 2 argued, the Asiatic is for Marx an abstract mode of production conceptualizing the boundary between the ‘chief’ and any class-based ‘state,’ not a specific historical mode, and there are not “two distinct sets” of productive forces underlying it. Marx conceptualized the Asiatic mode having a low *level* of development, merely “self-sustaining” (1973, 493), a distinction Hindess and Hirst overlook.

Marx made no serious attempts to define feudal rent, Hindess and Hirst (1975, 222–23) argue, because he was preoccupied with understanding capitalist ground rent, so we learn only its political and ideological preconditions. In their view, “the concept of feudal rent as it is presented in *Capital* cannot be taken as given and the structure of the FMP [feudal mode of production] deduced from it” (Hindess and Hirst 1975, 222). Marx’s concept, they argue, specified only its “non-economic conditions of existence,” its “political/ideological relations,” which come down to the “dominance of the landlord class in the state or the preparedness of the state to sanction and enforce titles to the land” (Hindess and Hirst 1975, 237). According to Hindess and Hirst (1975, 227), Marx’s argument that “the middle ages could not live on Catholicism” illustrates this because “Economic relations are reduced to the simple fact of material production,” whereas, chapter 2 argued, for Marx it reduced to the distinctive mode of surplus extraction in the form of rent, to ‘primeval profit.’ Hindess and Hirst claim “as a revolutionary insight” to go beyond Marx to show “that feudal relations are represented simply by tenants paying rent to (or doing labour service for) a monopolistic landowner,” something that, as

Wickham says, “has long been perfectly well-known to medievalists” (1994, 10). However, chapters 5 and 6 argue that neither Wickham nor any other medievalists understands feudal rent as ‘primeval profit,’ as receipts minus expenses, and nor do Hindess and Hirst (1975). Marx’s concept, they argue, focused on politics and ideology, fails to identify “a specific mechanism of exploitation, which is an effect of an articulated combination of forces and relations of production”:

Political or ideological domination is used to explain exploitation in the absence of a mechanism of exploitation deriving from the system of production, and this domination becomes the exploitation of man by man, a simple and direct relation between subjects. This is because it has no social conditions of existence. Definite political and ideological structures arise on the basis of the structure of the social relations of production, yet in this case political and ideological domination must be presupposed to constitute the social relations of production. (Hindess and Hirst 1975, 228)

Political and ideological domination are not the cause or essence of feudal exploitation for Marx, chapter 2 argued, but the result of class conflict in which victorious wealthy landowners chose social relations of accountability for ‘rent,’ for surplus labor, that they calculated would increase their surpluses. In Volume 3 of *Capital*, Marx argued, “exploitation *appears* ‘as a direct relation of lordship and servitude’” because possession of the land meant, “exploitation takes place by ‘other than economic means’” (quoted by Hindess and Hirst 1975, 228, first emphasis added), that is, not through the market’s “economic pressure” (Marx 1998, 777), not that feudal exploitation *was* politically ‘direct,’ ‘non-economic.’ It “appears” to be, but underlying feudal exploitation, he stressed, was the forcible extraction of surplus labor, necessarily calculated such that “the serf’s product must be sufficient . . . to replace his conditions of labour as well as his subsistence” (Marx 1981, 926), that is, feudal rent was the primeval form of ‘profit.’ Whereas capitalists ‘maintained’ capital (Bryer 2017, chapter 2), feudal lords ‘maintained’ their tenants (Bryer 1994). Hindess and Hirst (1975, 229, 230, emphasis added), by contrast, influentially claim that Marx argued, “one subject compels another to obey him and to give him *a portion of the proceeds of his labour*,” which, if true, certainly “entails a retreat from historical materialism” because the relative power of the individual landowner alone would determine the level of ‘surplus.’ They overlook his conclusion that “in antiquity and the Middle Ages . . . the *domination of the producers by the conditions of production is concealed by the relations of domination and servitude*, which appear and are evident as the direct motive power of the process of production” (Marx 1998, 818, emphasis added). The fundamental feudal condition of production that dominated peasants, chapter 2 argued, was their payment of rent in the

form of ‘primeval profit,’ the lord’s implicit demand for receipts to exceed expenses.

Hindess and Hirst (1975, 227–28) accept the Giddens critique that Marx “uses a relatively simple differentiation of capitalism/pre-capitalism,” which “provides no basis for differentiation between pre-capitalist modes of production,” between slavery and feudalism. They therefore also claim to go beyond Marx when they discover that “*by controlling the size, the character and the reproduction of the units of production it makes the reproduction of the means of production simultaneously a reproduction of the exploitative productive relations*” (Hindess and Hirst 1975, 236). The accounting interpretation agrees that the exploitation of the tenant by “Separation/subsumption,” separating the surplus and taking it, “requires a definite policy and calculation on the part of the landlord” (Hindess and Hirst 1975, 236). To avoid a concept of rent as “a politically/ideologically enforced deduction from the product,” they are right that we must think of it as “both the form of exploitation and the condition of existence of that exploitation,” just “like surplus-value” (Hindess and Hirst 1975, 235). This is precisely what Marx did, chapter 2 argued. According to Hindess and Hirst (1975, 232), however, Marx contradicted his supposed claim that “possession” meant feudalism’s foundation was political/ideological when, “in the very chapter . . . we have been criticizing,” he “very clearly” concluded it was the “specific economic form in which unpaid labour is pumped out of the direct producers [that] determined the relationship of rulers and ruled”! Unlike Hindess and Hirst, however, Marx actually distinguished between surplus value, capitalist profit, and rent seen as feudal ‘profit.’ Feudal exploitation, he argued, was lords holding peasants accountable for rent, which was the basis of landowners’ continued political, ideological, and economic domination. He therefore would agree that to understand feudalism “we must forget about the legal and constitutional history of the Middle Ages” (Hindess and Hirst 1975, 231). Instead, surviving accounts, chapters 4–6 argue, allow us to verify Marx’s distinction between accountability for production under slavery and rent as ‘primeval profit’ under feudalism.

Cohen (1978, 1988, 2000) influentially proposed an effective “economic power” interpretation of Marx’s pre-capitalist and capitalist modes of production. Finley (1999, fn.16, 246) recommends Cohen (2000 [1978]) for “a clear and succinct statement of Marx’s own (varied) uses of the phrase ‘mode of production.’” Callinicos (2005, xx) finds “compelling” Cohen’s analyses of the social relations of production as “relations of effective power over persons and productive forces,” and to leading Marxist historians, we will see, this has become the conventional wisdom. Marx argued, according to Cohen, “Relations of production are relations of economic power, of the economic power people enjoy or lack over labour power and means of

Table 3.1 Cohen's Interpretation of Marx's Modes of Production

	<i>Slave</i>	<i>Independent</i>	<i>Serf</i>	<i>Wage Worker</i>
Control of the means of production	None	Total	Some	None
Control of labor power	None	Total	Some	Total

Source: Created by the author based on Cohen (1988, figure 1, 6).

production” (1988, 5). Whereas capitalists have total “economic power . . . over means of production . . . , workers (unlike slaves) have [it] over their own labour power, and . . . lack [it] . . . over means of production” (Cohen 1988, 5). Applying this principle generally, therefore, “Immediate producers may have no economic power, some economic power, or total economic power over their own labour power and over the means of production they use” (Cohen 1988, 5–6). Independent or ‘free’ wagedworkers are therefore the opposite of slaves, and serfs are in an intermediate position. Table 3.1 summarizes Cohen’s interpretation.

Cohen’s accepts that his interpretation makes Marx’s categories “highly idealized,” but to him this reveals, “Real history exhibits important shadings and significant intermediate cases. The idea of a slave who is wholly at the disposal of his master is rarely exemplified. . . . Perhaps the only ‘true’ slaves have been galley slaves and similarly imprisoned labour. For their part, serfs lack full authority over their labour power in significantly different ways” (Cohen 2000, 68). According to Cohen, in short, Marx’s pre-capitalist economic categories are hazy and difficult to operationalize for “real history.” By contrast, chapter 2 argued, for Marx the defining feature of slavery was domination of a laboring machine, not necessarily “total control,” total action control or supervision, because we will see in chapters 4–6 that slave masters could and did use results control, and feudalism means the forcible extraction of rent, not sharing “some” economic control with the lord. For capitalism, Cohen overlooks Marx’s explanation in Volume 1 of *Capital* that the ‘freedom’ of the wagedworker is a helpful illusion (1976a, 1031–34). First, the wagedworker is not free from compulsion:

In contrast to the slave, this labour becomes more productive because more intensive, since the slave works only under the spur of external fear but not for his existence which is guaranteed even though it does not belong to him. The free worker, however, is impelled by his wants. . . . The continuity in the relations of slave and slave-owner is based on the fact that the slave is kept in his situation by direct compulsion. The free worker, however, must maintain his own position, since his existence and that of his family depends on his ability continuously to renew the sale of his labour power to the capitalist. (Marx 1976a, 1031)

Furthermore, “In the eyes of the slave a minimal wage appears to be a constant quantity, independent of his work” (Marx 1973, 1031), which was true for wageworkers as a class. Whereas “The average for the [wageworker] class as a whole remains more or less constant, like the value of all commodities; . . . this is not how it immediately appears to the individual worker whose wages may stand above or below this minimum” (Marx 1973, 1032). Likewise, while “The slave is the property of a particular master; the worker must indeed sell himself to capital, but not to a particular capitalist, and so within certain limitations he may choose to sell himself to whomever he wishes; and he may also change his master” (Marx 1973, 1032), but the freedom was nominal for workers as a class. Marx concluded, “The effect of all these differences is to make the free worker’s work more intensive, more continuous, more flexible and skilled than that of the slave,” but the master-servant relation therefore, he argued, “is reproduced—in mediated form—in capital,” concluding that the ‘free’ wageworker was a “wage slave” (Marx 1973, 501; 1976, 575). Wageworkers were, he argued,

free in a double sense, free from the old relations of clientship, bondage and servitude, and secondly free of all belongings and possessions, and of every objective, material form of being, free of all property; dependent on the sale of its labour capacity or on begging vagabondage and robbery as its only source of income. It is a matter of historic record that they tried the latter first, but were driven off this road by gallows, stocks and whippings, onto the narrow path to the labour market. (Marx 1973, 507)

Free workers were not the cause of capitalism, but the historic “process which placed the mass face to face with the *objective conditions of labour* as free workers also placed these conditions, as capital, face to face with free workers” (Marx 1973, 503). What “enables money wealth to become capital” is “the encounter, on one side, with free workers; and on the other side, with the necessaries and materials, etc., which were previously the property of the masses,” creating a “free fund” of capital (Marx 1973, 505) that pursued surplus value. Similarly, unfreedom was not the cause of the slave mode of production, and relative freedom was not the cause of feudalism. Rather, chapters 4–6 argue, the accounting evidence is consistent with their cause being the historic process in which the ruling class, the victors of class conflict, chose the social relations of production best calculated to increase its surpluses given the forces of production at hand.

Interpreting Marx’s argument that peasants ‘possess’ the means of production to mean that feudal lords can extract surplus only “by other than economic means,” “has been extremely influential among modern Marxist characterizations of feudal class relations” (Rigby 2004, 482), particularly ‘political Marxism’ in explaining the transition to capitalism (particularly

Brenner 1985). Cohen's economic control interpretation has been influential among Marxist medievalists (particularly Wickham 2005). This interpretation, chapters 5 and 6 argue, lies at the root of their failure to provide a convincing history of the differential consequences of the collapse of the Roman Empire as the seedbed of an evolutionary transition to feudalism in the west.

ANALYTICAL MARXISM

Encouraged by the apparent success of the neo-Ricardian critique of Marxist economic theory in the early 1970s that rejected Marx's theory of value and his LTFRP (cf. Kliman 2007), a group of Marxists became interested in historical materialism, particularly following the publication of Cohen's *Karl Marx's Theory of History: A Defence* (2000 [1978]). Callinicos (2005, 74) knew of "no analytical Marxist, Cohen included, who accepts the law of the tendency of the rate of profit to fall . . . , and only one, Brenner, who still holds the labour theory of value . . . to be true." Abandoning Marx's economics, Cohen uniquely drew on analytical philosophy to defend "orthodox historical materialism," whose often-critical followers call themselves "analytical Marxists" or "rational choice Marxists" (Callinicos 2005, xv–xvi, 74–75). Analytical Marxists support what they call "methodological individualism, that is, the idea that social structures are reducible to the consequences of the actions taken by individual persons" (Callinicos 2005, xvi). As Cohen puts it, they "reject the point of view in which social formation and classes are depicted as entities obeying laws of behaviour that are not a function of their constituent parts" (2000, xxiii). Explaining all behavior as the outcome of 'rational choices,' those in accordance with the needs and desires of individuals, is obviously inconsistent with "much of the content of Marxist theory" (Callinicos 2005, xvi) focused on social 'structure,' by which, chapter 2 argued, Marx meant the ruling class's calculative mentality and the relations and system of accountability founded on it.

Arguing that the ruling class imposes accountability on agents does not deny rational agency. On the contrary, it recognizes that without the constraints of accountability the agent would act 'rationally' in accordance with their own needs and desires. Historical materialism is compatible with rational agents "constrained by the social relations in which they find themselves," Callinicos (2005, xxv) argues, and raises the important empirical question, to which, following chapters argue, the accounting interpretation has an answer. Callinicos (2005, xxvii) asks, "What is the problem with referring to structures in our explanations, so long as, as with all explanations, these make empirically testable claims about the mechanisms responsible for the events requiring explanation, and either specify or leave space

for the specification of the micro-foundations of these events?" Analytical Marxists have not explained, "Why is it so important to reduce structures to individuals," and therefore Callinicos concludes, "The belief that there is a problem here is a symptom of a metaphysical individualism that has no useful role to play in social theory" (2005, xxvii). Marx's testable claims, chapter 2 argued, are that we can distinguish modes of production according to the method of accounting employed by the ruling class, and explain the transitions, the events requiring explanation, by the "mechanism" of selecting through class conflict the mentality and social relations calculated to increase victors' surpluses.

Cohen (2000) rejects Marx's theory of value and class conflict as explanatory concepts, and defends what he calls his "technological determinist" interpretation of historical materialism, based particularly on Marx's statement in the *Preface*. According to Cohen (2000, 278), Marx "uses a number of explanatory expressions: relations of production *correspond* to productive forces; the legal and political superstructure *rises on* the real foundation; the social, political and intellectual life process is *conditioned* by the mode of production of material life; consciousness is *determined* by social being," that support his interpretation. Cohen also elaborates and defends what he calls the "developmental thesis," that "the productive forces tend to develop throughout history" (2000, 134). This thesis reasonably assumes that "the key aspect of the development of the forces of production is the development of knowledge of productive techniques," that these are generally cumulative (Wright et al. 1992, 81), and that humans generally seek to reduce toil, that material production is socially "enabling," and increases societal autonomy (Callinicos 2005, xxxii–xxxiv). There was a slow cumulative increase in the forces of production in the ancient world, which chapter 6 shows ultimately bequeathed a higher level to feudalism. However, there is no evidence that their development was an autonomous 'tendency,' unrelated to the social relations of production. The focus in what follows is Cohen's "primacy thesis," that "the nature of the production relations of society is *explained by* the level of development of its productive forces" (2000, 134, emphasis added), a functional explanation which the accounting interpretation supports but reinterprets, putting back Marx's theory of value and his theory of class conflict. According to Cohen's supporters, his "book was the first to uncover and develop the *causal* structure of Marx's theory" (Wright et al. 1992, 16, emphasis added). However, according to the accounting interpretation the productive forces have *explanatory* priority, not *causal* priority. Cohen's views are "nearly Marx's own" (Wright et al. 1992, 16), particularly in emphasizing functional explanation, but the differences are significant.

Functionalism

Cohen's argument that Marx's explanations are functional was seen as a "novel, and controversial, way of understanding the causal relations in historical materialism" (Wright et al. 1992, 17), as "elegant" and "ingenious" (Callinicos 2005, 59–60). Cohen argues, "to say that an economic structure *corresponds* to the achieved level of the productive forces means: the structure provides maximum scope for the fruitful use and development of the forces, and obtains *because* it provides such scope" (2000, 278–79, see also, 136). Therefore, when Marx says in the *Preface* that "production relations *correspond* to productive forces, he means the former are appropriate to the latter, and we may impute to him the further thought that the relations are as they are *because* they are appropriate to productive development" (Cohen 2000, 136), because they have this effect. Similarly, when Marx continues, "in the sentence following . . . that forms of social consciousness 'correspond' to the economic structure," he "assigns a derivative role to social consciousness," says "their social being determines their consciousness," that "Consciousness must be explained . . . from the contradictions of material life" (Cohen 2000, fn.1, 137), because the consciousness is functional. It is undeniable, Cohen concludes, "that the central Marxian explanations are functional, which means, *very roughly*, that the character of what is explained is determined by its *effect* on what explains it" (Cohen 2000, 278, latter emphasis added).

There is, as Cohen says, "no well-stated alternative to the view that major Marxian explanatory claims are functional in character," even though "The functional explanation is nevertheless not popular, for a number of bad reasons" (2000, 279). Natural science disciplines such as biology accept functional explanation if researchers specify the mechanism, for example, natural selection. Functional causality underlies Marx's use of his theory of value to explain the economic categories or phenomenal forms of capitalism he found in accounts, in which the 'function,' the underlying purpose or objective of accounting, is controlling the production of surplus value (see Bryer 2017, chapter 7). The same is true for his pre-capitalist economic categories, determined by an underlying mentality that determines the social relations and superstructure, whose function is controlling the extraction of different forms of surplus labor. Analytical Marxists agree that functional explanations are acceptable "provided that in principle a mechanism can exist which regulates functional adaptations" (Wright et al. 1992, 17), but rather than define 'functional' to mean achieving an aim or objective, to Cohen it means the 'effect.'

Cohen initially argued that the "*forces select* structures according to their capacity to promote development," his 'technological' interpretation that "the *forces decide* the character of the relations" (2000, 162, emphases

added). Cohen's critics responded that he had not specified the mechanism regulating the functional adaptation of the social relations, or even seriously attempted to explain the mechanism for functionally adapting the superstructure (Callinicos 2005, xxxiv; Wright et al. 1992, 17). Cohen denied the need to specify any mechanism, but when pressed responded that "being rational, people retain and reject relations of production according as the latter do and do not allow productive improvement to continue" (1988, 91). In other words, individually and collectively, agents consciously choose social relations to increase the forces of production (Callinicos 2005, xxxiv). In this vein, Wood (2004, 104) argues, "materialist explanations . . . are *teleological* explanations," which "arise in connection with what are sometimes called 'goal-directed systems,' systems which exhibit a persistent tendency to achieve or maintain a certain state," and that Marx's historical materialism is of this form, which is common in the biological sciences. According to Wood,

Productive powers 'determine' production relations in the sense that these relations exist *in order* to bring about an efficient use of productive powers. Further, Marx proposes to explain the character of a society's legal system, politics and moral or religious beliefs by showing how they serve to sanction its social relations. . . . Revolutions occur and class struggles have the outcome they do, *in order that* the productive powers of society may continue to expand, and the social relations of production may be suited to them. (Wood 2004, 105)

This specification, that the goal of revolutions is to expand the productive powers, however, is clearly inconsistent with Marx's view that history occurred "behind men's backs" (Callinicos 2005, xxxiv). In *Grundrisse* Marx made clear that the calculative mentality drives the forces, the "real development of the sources of wealth" (1973, 225). For the transition to capitalism, he argued, "The period which precedes the development of modern industrial society *opens with general greed for money* on the part of individuals as well as of states. The real development of the sources of wealth takes place as it were behind their backs, as a means of gaining possession of the representatives of wealth" (Marx 1973, 225, *emphasis added*). According to the accounting interpretation, individuals and collectives do not consciously choose social relations to develop the forces, but change them to increase their surpluses from those 'at hand,' which then develop the forces.

There could be a "*purposive* elaboration of a functional explanation," Cohen accepted, but did not apply this to his primacy thesis, only to a competitive economy, that is, given capitalist social relations of production, a "Darwinian elaboration of a functional explanation" (2000, 287, 288), not Marx's class conflict explanation. Some critics suggested an alternative mechanism, "competitive primacy," which postulates competition between

systems of social relations of production offering higher or lower levels of development of the productive forces, which avoids the need for conscious individuals, but it treats 'competition' (or 'natural selection,' 'reproductive success,' etc.) as a transhistorical feature of all societies (Callinicos 2005, xxxv–xxxvii). This version is also open to the same objection as the first, that the conscious individual and collective objective of class conflict ('competition,' 'natural selection') is more plausibly increasing the phenomenal forms of surplus from the forces at hand, not their development.

Some Marxists defend what they accept was Marx's failure to specify a selective mechanism, pointing to contemporary philosophers of science who accept that even without causal explanations "teleology still provides an illuminating perspective" (Wood 2004, 108). However, unlike biology that has Darwin's theory of natural selection to causally explain the adaptive mechanisms, this defense leaves Marx's 'teleology' open to "general objections . . . from those who deny that societies really are 'directively organized systems' or that they exhibit the persistent tendencies Marx attributes to them" (Wood 2004, 108), for example, Giddens (1995). Interpreting the social relations of production as a system of accountability answers this general objection. Then, rather than 'technology' or 'competition,' what Marx and Engels called the "social power" (discussed below) 'decides' or 'selects' the calculative mentality, the method of extracting surplus labor, which 'selects' the social relations, the 'real basis,' and the appropriate forms of consciousness and control, the institutional superstructure, including ideological, political and accounting control. The 'mechanism' for both is class conflict. Although invisible to analytical Marxists, accounting is an important institution in capitalist and pre-capitalist societies, and therefore accounting could provide, as Wright put it, "The critical step in . . . [a functionalist] argument [which] is the specification of the institutional context within which such functional explanations are made" (1983, 16). Wright proposes searching for "negative selection mechanisms . . . that provide for the causal feedback processes needed to generate functional relationships," that "filter policies in a manner that is, in an on-going way, not regulated by intentions and which nevertheless is systematically functional" (1983, 16), precisely accounting's role in Marx's theory of history.

Through their individual and collective actions, in Marx's explanations humans always 'select' and 'decide,' an interpretation stressed by "Western Marxists [who] have focused upon the role of human (individual and collective) agency in social transformation," to "emphasize the transformation of production relations, according comparatively little importance to the development of productive forces" (Wright et al. 1992, 14, 15). However, it is arguable whether in Marx's explanation agency "enters at a lower level of abstraction from that at which historical materialism is pitched,"

that “Indisputably, the Preface accords causal primacy (of a sort it does not clearly explain) to the forces over the relations of production” (Wright et al. 1992, 14). This view, Cohen’s ‘technological’ interpretation, is disputable if we understand ‘structure’ to mean the relations of accountability entailed by a calculative mentality, a way of extracting surplus labor. If we do, the causation runs: given the forces of production, the ruling class, the victors of class conflict, ‘determine,’ ‘put to an end,’ ‘settle or decide’ the calculative mentality and associated social relations and superstructure because this system of extraction and control produces increased surpluses, which drives development of the productive forces.

Rigby (2004, 500) and others argue the reverse: “Marx’s own historical analysis concentrates on change in society’s social relations as the prelude to change in its productive forces, the opposite approach to that set out in his and Engels’s general theory.” Marx certainly always denied, “that industrial technology gave us capitalism per se. . . . Marx and Engels repeatedly insisted that capitalism had emerged *before* the rise of large-scale industry,” and started from “the specific actual labour processes as it finds them available in the existing technology and in the form in which they developed on the basis of non-capitalist relations of production (20:258; 30:92; 34:95–96, 102–3; 35:314, 326–27)” (Rigby 2004, 500). As Rigby says, “The emphasis here is not on the dynamic productive forces bringing about change in society’s class relations but rather on change in the relations of production as the precondition of change in society’s productive forces” (2004, 499). The primacy of the social relations has become the more popular of the two “versions of historical materialism” (Rigby 2004, 503). The other version, the orthodox view, “That ‘there is a continual movement of growth in productive forces,’ a growth which *forces* men to change their social relations (6:166)” was according to Rigby (2004, 494, emphasis added) “never justified at length by Marx and Engels but rather was assumed as a given of their analysis.” However, first, in the passage Rigby cites from *Poverty of Philosophy* (6:166) Marx did not use ‘force’ in this sense: he said, “in acquiring new productive forces *men change* their mode of production” (1976b, 166, emphasis added), that is, they decide to change.

Second, Rigby overlooks Marx’s argument that the social relations *develop* the forces of production, which do not simply follow technical developments, because their function is to increase surpluses. This is Marx’s answer to the “standard criticism of the Primacy Thesis . . . that Marx in *Capital* treats capitalist relations of production as preceding and making possible the productive forces,” which is inconsistent with productive forces causing the social relations (Callinicos 2005, 59). As Callinicos says, adopting a functional explanation, “the problem vanishes” (2005, 59), but it is important to be clear that the function of the social relations is increasing surpluses, not the forces,

which is the consequence. Marx's functionalist explanation of the social relations of production follows from his commitment to conceptualizing and explaining history as the consequence of 'rational,' purposeful humanity. As he put it in a letter in 1846, "With the acquisition of new production facilities, *man changes* his mode of production and with the mode of production *he changes* all the economic relations which were but necessary relations of that particular mode of production" (Marx and Engels 1982, 97, emphases added). The "he" is humanity collectively, which collectively changes its social relations and mentality, the "social power," as Marx and Engels put it in *The German Ideology*, not individuals:

The social power, i.e., the multiplied productive force, which arises through the co-operation of different individuals as it is determined by the division of labour, appears to these individuals, since their co-operation is not voluntary but has come about naturally, not as their own united power, but as an alien force existing outside them, of the origin and goal of which they are ignorant, which they thus cannot control, which on the contrary passes through a peculiar series of phases and stages independent of the will and the action of man, nay even being the prime governor of these. (Marx and Engels 1976a, 48)

This means that history, as Cohen says, "is not subject to human will," but he accepted, "this does not put something extra-human at the centre of history" (2000, 148). To be consistent with Marx, however, Cohen should have said 'not subject to *individual* will,' because individual "men make their *own* history," but only collectively do they make the history of *society*. Therefore, the fact that individual men are not conscious of the "origin and goal" of history, which for Marx was the fullest possible development of the productive forces, particularly the workers, to create the 'kingdom of freedom,' as we will see in chapter 8, is not relevant. Marx and Engel's concern was with social reality, with social individuals, with a reality independent of their individual will, with

definite individuals who are productively active in a definite way [who] enter into these definite social and political relations. . . . The social structure and the State are continually evolving out of the life-process of definite individuals, but of individuals, not as they may appear in their own or other people's imagination, but as they really are; i.e. as they operate, produce materially, and hence as they work under definite material limits, presuppositions and conditions independent of their will. (Marx and Engels 1976a, 35–36)

Marx and Engels distinguished between individual interests and the "common interest," which "does not merely exist in the imagination, as the 'general interest,' but first of all in reality, as the mutual interdependence of the

individuals among whom the labour is divided” (1976a, 46). From *Grundrisse*, Marx’s aim was “discovery of the social process by which people changed from one mode of production . . . to another” (Foley 1986, 158). He thought he had found it, not in the decisions of particular individuals or groups, but in the process by which the “large numbers of people gradually come to share a new vision of what human life is and how it ought to be organized” (Foley 1986, 158). The social process through which many people come to share a new “vision” was, Marx argued, class conflict over the appropriate method of extracting surplus labor given the forces at hand, over the social relations of production, that is, according to the accounting interpretation, over the appropriate calculative mentality and method of accounting control.

Class Conflict

Many Marxists, as Cohen puts it, “turn away from the tangled question of the respective roles of the productive forces and production relations in history and assert that the ‘motor’ of history is the class struggle” (2000, 148), which he rejects. For Marx class conflict between the producers and extractors of surplus labor is the motor of history when it changes the mode of production, when it ‘determines,’ ‘selects,’ ‘decides,’ the calculative mentality and social relations that will rule given the level of development of the forces. Cohen is clearly right that conflict per se is not “the fundamental explanation of social change” (2000, 148, 149), but this is because historic conflict presupposes a level of development in the productive forces and fettering of surpluses by the existing relations. By contrast, according to Cohen (2000, 148, 149), Marx argued that a new class appears and succeeds in changing history because of the “*character of the productive forces.*” That is, because its “class consciousness” makes it, as Cohen says but does not explain, the class “best suited, most able and disposed, to preside over the development of the productive forces at the given time” (2000, 149). Cohen “did not wish to deny that class struggle is always essential for social transformation,” but argued that to explain it “we must turn to the dialectic of forces and relations of production which governs class behaviour and is not explicable in terms of it” (1983, 121, 123). However, in Cohen’s ‘dialectic,’ we will see, the forces rule the relations and are the motor of history that drives historic class conflict, not the calculative mentality, a way of extracting surplus labor, underlying the demand for appropriate social relations of production given the forces.

Wright et al. (1992, 29) add to Cohen’s primacy thesis the “Capacity Thesis: Where there is an ‘objective’ interest in transforming the relations of production to restore compatibility with the forces of production, the capacity for bringing that change about will ultimately be brought into being . . . in consequence of the intentional struggles of actors with an interest in their

transformation.” The capacity thesis is implied by the primacy thesis, Wright et al. (1992) argue, but because they introduce “intentional struggles,” as Callinicos says, “surely it is better seen as specifying the mechanism which brings it about that production relations exist because they promote the development of the productive forces. This mechanism is the class struggle” (2005, 63). Wright et al. (1992) do not define “‘objective’ interest,” and doubt the inevitability of these conscious struggles, but according to the accounting interpretation, in Marx’s theory, where a class of agents calculate the surpluses it foregoes because of the existing social relations, and it has the necessary resources to change them, it will. Wright et al.’s two additional theses, “The Transformation thesis,” that the relations *will* change to ‘correspond’ to the new productive forces, and the “Optimality Thesis,” that the new relations *are* functionally optimal to increase the forces (1992, 30–31), are also the consequences of calculation. Marx wrote *Capital* precisely to encourage such calculations, chapters 7 and 8 argue, believing that when the global working class made them it would understand the reality of capitalism, see the need for change, and have the power to change the social relations of production. Adopting a calculative interpretation would clarify Wood’s philosophical reading:

Marx postulates certain basic tendencies in human social behaviour; the tendency of society’s productive powers to increase; the tendency of social relations to adjust themselves [*sic*] to the efficient [*sic*] employment of these powers, and to change in response [*sic*] to changes in them; the tendency of social groups with shared economic interests to organize into social movements [*sic*] struggling to establish and defend the set of social relations most favorable [*sic*] to the group. (Wood 2004, 101)

The ultimately successful contending class did not win simply through force or ideology, Marx argued, but because its mentality and relations really were the best, not just for that class, but for humanity, judged by the growth in its productive powers. Cohen (2000, 149) accepts, “Marx frequently allows that a dominant class promotes not only its own interests but, in so doing, those of humanity at large,” which is consistent with a calculative interpretation, that on average the calculations were correct, overall surplus labor and, therefore, the forces of production, increased. For example, as Cohen himself says, the victorious capitalist class did this wholly unconsciously because of “capital fetishism,” the failure to recognize that capital is “doubly productive. First, it is value productive, because it yields a financial return: it is released, and it comes back with a surplus attached. But that surplus *value* reflects the creation of surplus physical product” (Cohen 2000, 117). Cohen, however, overlooks that this means Marx had argued it was *because* capitalists

calculated their individual capitals were “value productive,” that is, increased their rate of profit, that overall the forces increased.

Defending “something like” the Capacity Thesis, Cohen argued, “the ground of the Marxian claim that the advent of socialism is inevitable is that a sufficient number of workers are so placed that the rational thing for them to do is to strive to bring socialism about” (Callinicos 2005, 66, 68). As he said, “the future of socialist revolutions are, for Marx, inevitable, they are inevitable not despite what men do, but because of what men, being rational, are bound, predictably, to do” (Cohen 2000, fn.1, 147). However, Cohen sees workers’ inevitable socialist ‘rationality’ as the consequence of the development of the productive forces, rather than the consequence of their rational calculations of the social surpluses foregone from capitalist fettering. Without this, just because “the exploited class has an interest in social revolution, it does not follow as the Capacity Thesis asserts, that it has the means to act on this interest,” the necessary “organizational, ideological and material resources” (Callinicos 2005, 68). As formulated, this means the “Capacity Thesis, and with it the Primacy Thesis, must be rejected” as “untenable” (Callinicos 2005, 69). However, as Callinicos points out, it does not follow “that the outcome of the class struggle is simply indeterminate” (2005, 106).

First, historical materialism “specifies the structural capacities possessed by agents by virtue of their position in production relations, i.e. their class position. Second, it claims that these capacities, and also the class interests which agents share, have primacy in explaining their actual behaviour” (Callinicos 2005, 106). For Marx, according to the accounting interpretation, “class position” means the resources available to the direct producer and the controller of surplus extraction, and the necessary capacity, the critical capacity for social revolution in the pursuit of “class interests,” means the shared ability to calculate the foregone surpluses to its class from fettering by the existing social relations. Accounting history shows that the victors of class conflict in Western Europe following the collapse of the Roman Empire found the means of making the necessary calculations and acting on them, as we will see in chapter 6. To make the change to socialism will require the mass of workers to calculate the lost surpluses from capitalist fettering, and according to Marx’s mature writings to make this ‘inevitable,’ chapters 7–9 argue, requires ‘critical accounting.’

Determination of Production Relations

In *Wage Labour and Capital* (1849), Cohen argues, Marx “proposes an analogy between the determination of productive relations *by* productive forces and the determination of military relations *by* destructive forces” (2000 145,

emphases added). However, in using the analogy Marx did not argue for the “determination” of the relations of production “by” the forces, but argued they change “with” them, “naturally” and “necessarily,” that is, presuming collectively rational human beings:

These social relations between the producers, and the conditions under which they exchange their activities and share in the total act of production, will *naturally* vary according to the character of the means of production. With the discovery of a new instrument of warfare, the firearm, the whole internal organization of the army was *necessarily* altered, the relations within which individuals compose an army and can work as an army were transformed, and the relation of different armies to another was likewise changed. . . . We thus see that the social relations within which individuals produce, the social relations of production, *are altered, transformed, with the change and development of the material means of production*, of the forces of production. (Marx 1977, 212, emphases added)

Cohen claims that not only in “the 1840s, but similar comments will be found in the principal later writings,” and provides a list of quotations that “prove” it (2000, 146). However, in none of these quotations does Marx assert that the productive forces select or decide the productive relations, and what he does say is consistent with rational human behavior. In *Grundrisse* he said the relations “can be *reduced to*” the forces, implying that rational men would logically ‘reduce’ them; that when capitalist relations become a “fetter” they are “stripped off” by rational men for whom, as he said in *Capital*, technology “*lays bare* the mode of formation of his social relations” (quoted by Cohen 2000, 146, emphases added). There and elsewhere, Marx argued, it was in class conflict over surplus extraction, “the historical development of the antagonisms,” in which a “form of production can be dissolved and a new form established” (quoted by Cohen 2000, 146), the old “dissolved” by, and the new “established” with, a new mentality. In *Theories of Surplus Value*, Marx argued that the social relations of production and with them “the social, moral and political state of nations changes *with* . . . the material powers of production” (quoted by Cohen 2000, 146, emphasis added), alongside them, in their context, not because of them.

Instead of humans as social beings deciding through class conflict to change the dominant mentality, system of social relations, and control, Cohen argues, “a given level of productive power is *compatible* with a certain type, or certain types, of economic structure,” that is, the forces ‘decide’ the relations according to their ‘compatibility’ (2000, 158). Computer technology, for example, in his view is ‘incompatible’ with the social relations of slavery. “Slavery . . . could not be the general condition of producers in a society of computer technology,” Cohen suggests, “if only because the degree of *culture*

needed in labourers who can work that technology would lead them to revolt, successfully, against slave status” (2000, 158, emphasis added). Wright et al. (1992, 20) agree with Cohen’s “stress . . . [on] the social instability of the hypothetical combination,” because to develop and operate computer technology requires a ‘culture’ of individual freedom, whereas according to Cohen’s effective control definition, the slave master completely controls the slave. By contrast, according to the accounting interpretation, computers are incompatible with slave relations because they exist only as part of the highly developed forces of production of advanced capitalism, and capitalists agree that the social relations of free capital and ‘free’ wageworkers maximize their surpluses.

Cohen et al’s analytical approach produces, as Foley (1993, 299–300) puts it, an unsophisticated “mechanical model,” which by ignoring Marx’s concept of the mode of production as an integrated totality of forces and relations, and skipping the details of history, quickly goes “off the rails.” Accounting history supports Foley’s criticism that “this way of thinking is naive and unhistorical” because in the ancient world “literate slaves monopolized a rather sophisticated information-processing system” (1993, 300), often producing accounts, as we will see. This was also true in the antebellum Southern states of America where “literate and numerate slaves also had important roles as clerks and bookkeepers” (Foley 1993, 300). Cohen et al naively assume that control means only supervision (discussed below). However, while slaves had “little incentive to maintain the security and accuracy of their masters’ records,” “this contradiction was resolved by the widespread practice of allowing slaves to save in order to buy their own freedom, a system that gave strong incentives to the slave to retain the master’s goodwill by faithful service” (Foley 1993, 300). Owners of the means of production could not control skilled slaves employed on complex tasks by direct physical control or supervision, but slave masters could and did use results control, as we will see, and not just for skilled slaves.

Cohen (2000, 159) comes close to the accounting interpretation of the “moments when, as Marx so often says, the relations have become *fetters*, and because they shackle the forces, they will be broken,” that is, if we substitute ‘surpluses’ for “the forces.” Then, as Cohen says, “why should the fact that the relations restrict the forces foretell their doom, if not because it is *irrational* to persist with them given the price in lost opportunity of further inroads against scarcity [*sic*]” (2000, 159, emphasis added). Cohen sought support for the logical links in Marx’s writings between growing forces and constraining relations and their change, not the substantive links emerging from his theory of surplus value and its implications for pre-capitalist modes of production. He cites from the *Poverty of Philosophy*, where Marx said, “As the main thing is not to be deprived of the fruits of civilisation,

of the acquired productive forces, the traditional forms in which they were produced must be smashed” (1976b, 175). Cohen overlooked that the phrase “fruits of civilization,” that he read as the “inroads against scarcity,” does not reappear in *Grundrisse* and *Capital* and, when Marx used the word ‘fruits’ with reference to economic categories, he meant various forms of surplus (e.g., 1998, 803).

Rather than inroads against “scarcity,” given the new calculative mentality and the foregone surpluses it is ‘irrational’ to persist with the relations. This interpretation supports Wright et al’s warning, “there is no pure dichotomy between compatible and incompatible combinations of forces and relations of production. Incompatibility is always a matter of degree” (1992, fn.13). In other words, incompatibility is *quantitative*, a matter of calculating the foregone surpluses, but the incompatibility also becomes qualitative as the new mentality calculates them differently, postulating and then implementing different, more appropriate, social relations of production, social relations of accountability. Wright et al distinguish between “use compatibility,” which social relations maximize the use of the current forces, and “development compatibility,” which social relations best develop them, arguing against the latter because “It is hard to imagine a mechanism [*sic*] that could cause this loss to register as an interest compelling epochal social change. Certainly, neither Cohen nor Marx have proposed one” (1992, 28).

However, whereas Cohen did not, according to the accounting interpretation, Marx proposed a “mechanism” of many accounting calculations. It was because he conceptualized the social relations of production as a system of social control in pursuit of surplus labor that, he argued, they develop the forces of production and, at a certain point, they ‘fetter’ them, thereby preventing their development. That is, according to the accounting interpretation, the social relations limit development from the perspective of the rising dominant class who calculate the surpluses lost, which is why the mentality, the relations, and their system of control must change. Cohen is right, “It is because the capitalist system *forbids* ‘all rational improvement beyond a certain point’ that it is *destined* to go under” (2000, 159–60). However, it is important to understand how its system of control “forbids” “rational improvement” to understand why, limiting the surpluses available to all workers by fettering expansion of the productive forces, when they understand his theory of value, chapters 7 and 8 argue, according to Marx’s concept of socialism, capitalism is destined to go under.

Wood (2004, 74) agrees with Cohen that the implication of the claim, “productive forces determine production relations . . . is that a given state of society’s productive forces will place constraints on production relations, demanding or favoring some at the expense of others,” but Wood does not think it is an “adequate” interpretation of Marx. As Wood (2004, 74) says, “it

is equally true to say, as Marx himself often does, that production relations also place constraints on productive forces.” However, the “apparently contradictory texts . . . according to which, so it seems, the production relations control the development of the productive forces” (Cohen 2000, 147), do not contradict Marx’s primacy thesis, according to which ‘men’ choose social relations and systems of accountability to increase their surpluses given the forces at hand. Wood and others think they do contradict it:

The inclusion of modes of social cooperation among ‘productive powers’ is found not only in the *German Ideology*, but also in *Grundrisse* and even in *Capital*. . . . On the face of it, these passages seem to threaten Marx’s entire project of explaining social forms in terms of productive powers, since they appear simply to identify what is to be explained with part of what is to do the explaining. (The charge that Marx’s theory involves at this point a basic confusion, incoherence or explanatory circularity is a common one). (Wood 2004, 73)

To avoid the charge, Marx’s ‘teleology’ “positively implies,” Wood (2004, 110) argues, “that the teleological *explanandum* figures as a causal *explanans* of the result,” that is, the social relations must “figure in causal explanations of the state of the productive powers, and that superstructural phenomena causally influence the economic basis.” Allowing the social relations and superstructure causal influence, Wood (2004, 110) suggests, only “begins to threaten Marx’s theory” if they “exhibit tendencies of their own which diverge from the ‘basic’ ones,” but this merely begs the question. Many think the superstructure in particular does have such tendencies:

Many critics of historical materialism have focused on the problem that while Marx presents society’s ‘economic foundation’ as determining the nature of its political and ideological ‘superstructure’ (29:263), in reality it is impossible to distinguish or separate social and economic relations from political, legal, and ideological factors, since the latter are actually constitutive elements in the former. But if base and superstructure interpenetrate, and so cannot be separated, it would be illegitimate to derive one from the other or to claim a primacy of one over the other, a conclusion which would undermine the whole thrust of Marx and Engels’s social theory. (Rigby 2004, 508)

Wright et al. (1992, 36) seek an equally destructive compromise: “What is at issue is the relative causal *potency* of the forces of production and the superstructure in shaping the social relations of production.” Neither Cohen nor Marx, in their view, “offers any convincing general reasons why the destabilizing effects on the relations of production caused by the . . . forces of production is necessarily more powerful than the stabilizing tendency of the superstructure” (Wright et al. 1992, 36). Therborn agrees, there is “reciprocal

determination of the base by the relatively autonomous superstructure” (1976, 404). While neither Cohen nor historians offer an explanation, and accept the pluralism that arises from allowing base-superstructure ‘interaction,’ or criticize Engels’ interpretation that the base was primary in “a hierarchy of causal factors” (Rigby 2004, 509–10), according to the accounting interpretation, Marx did. The victors of class conflict select the social relations to increase their surpluses, and the superstructure of ideas and institutions to control them, which leads to the development of the productive forces, and therefore as ‘active’ as the superstructure may be, it survives only so long as it performs this control function and the mentality and relations do not change.

Therborn’s (1976, 402, 404) summary of Marx and Engels argument, that while we cannot reduce the superstructure to the base, “in the historical development of human society, the limits set by the economic base to that autonomy and efficacy are more important,” in other words, that the superstructure is “circumscribed” by the base, is consistent with this interpretation. If the function of the superstructure is to control the social relations, there is no question in Marx’s theory of the superstructure changing them, and it does not consist “of all non-economic properties of society,” but only “important” ones (Wright et al. 1992, 94), that is, only those institutions and ideas that have this function. Like many others stretching back to Weber, Cohen criticized Marx’s philosophical anthropology, his view that “humans are essentially creative,” productively creative, for being “severely one-sided,” for ignoring “culture,” “a whole domain of human need and aspiration” such as religion and nationalism (Cohen 2000, 346–47). Chapter 7 argues that this criticism is misplaced, that Marx’s theory does not ignore religion, and so on, but puts it in its place (Therborn 1976, 409).

Economic Determinism

Economic determinism is the idea that the primary cause of human behavior is external economic factors beyond their control, but Marx never used the phrase or idea. In *The German Ideology*, he and Engels rejected “the very possibility of distinguishing the material and the ideal as separate in the first place” (Sayer 1979, 4; see also, Avineri 1968; Giddens 1971). Rather than start from supposedly independent ideas, or an independent material reality, “consciousness” was an integral part of “life”:

In direct contrast to German philosophy which descends from heaven to earth, here we ascend from earth to heaven. . . . Life is not determined by consciousness, but consciousness by life. In the first method of approach the starting-point is consciousness taken as the living individual; in the second method, which conforms to real life, it is the real living individuals themselves, and consciousness is considered solely as their consciousness. (Marx and Engels 1976a, 36)

Marx was certainly a materialist who argued that circumstances “make men,” but “also insists that previous materialism has erred by overlooking the ‘active side,’ ignoring the complementary truth that ‘men change their circumstances’” (Wood 2004, 117). He rejected the separation of social reality into the ‘economic,’ ‘political,’ ‘sociological,’ spheres, and so on, insisting that its foundation was ‘production,’ not the ‘economy’ or ‘politics’ (Blackledge 2006, 22). He did not ask, “whether forces or relations of production play the determining role in transformations from one mode of production to another” (Foley 1993, 299). Consistent with the accounting interpretation, Foley argues, “It makes more sense to read Marx from a Hegelian point of view in which the forces of production and the relations of production are two ways of talking about the same thing, namely, the mode of production as a self-reproducing system” (1993, 299), that is, a system of social accountability and control. Marxists often see modes of production, “each characterized by a distinctive set of relationships of ownership *and control* of productive resources, *social relations of production*” (Wright et al. 1992, 13, first emphasis added). However, having rejected Marx’s theory of value and class conflict, analytical Marxist’s notion of ‘control’ is limited to action control, supervision, as we will see.

Many Marxists reject the economic determinism interpretation as an evidently “false view and a simple minded misinterpretation” (Wood 2004, 63) because for them the economic and the social, while ‘distinct,’ do ‘interact.’ Marx repeatedly argued that contradictions between the forces and relations explain changes in the ‘economic basis,’ and that these changes explain changes in political and intellectual ideas, and so on. However, according to some analytical Marxists, “nothing said by either Marx or Engels commits them to any such view” (Wood 2004, 63), because they do not rule out “social life” influencing the economic “base.” For example, Wood’s (2004, 64) view: “Marx does say that the ‘economic base’ of society ‘conditions’ and even ‘determines’ its political and intellectual life-processes. But this is not incompatible with saying that the ‘conditioned’ and ‘determined’ aspects of social life cannot also have some influence [*sic*] on the economic sphere.” Even allowing “some influence,” the defense overlooks the apparently formidable problems of explaining how the forces of production “condition,” “determine,” and so on, the economic base, and how this ‘conditions’ and ‘determines’ the intellectual life-process, if it is not naïve determinism.

The defense, in short, leaves open the question of how “According to Marx, a society’s production depends on and is determined by its productive powers” (Wood 2004, 67). Against this defense, Cohen insists that production relations are not forces of production but “forms of development” of them. However, insisting on a rigid separation, he finds “an ambiguity in the phrase ‘forms of development’” to describe the functioning of the social

relations of production because this could mean the forms or *means by which*, or the forms *within* which, the forces develop (Cohen 2000, 171), but according to the accounting interpretation, the meaning is clear. A system of control is necessarily both the means by which the forces develop, and is therefore a force of production, a means of increasing production, and it also sets the calculative limits within which the development of the productive powers occurs.

Mode of Production

Cohen (2000, 78) takes issue with “the expression ‘mode of production’ which occurs so copiously in Marx’s writings” because “a mode is a way or manner, not a set of relations,” because “a mode of production is a way of producing.” Cohen (2000, 79) objects, “The economic structure is not a way of producing, but a framework of power in which production occurs,” and that Marx uses ‘mode of production’ in three ways, “(i) the material mode, (ii) the social mode, and (iii) the mixed mode.” Cohen reduces Marx’s notion of the economic structure as a framework of “power,” to supervision, overlooking that in his mature concept Marx meant by “the way or manner” the modal or dominant way of extracting surplus, the relations of social accountability on which producing and extracting the surplus labor depend.

It would be strange if Marx used mode of production to mean “the way men work with their productive forces, the kinds of material processes they set in train,” whether they used handlooms or power looms, the quill pen or the typewriter, when these are forces of production. To make his point Cohen (2000, 80) quotes Marx from Volume 1 of *Capital* to show that sometimes “‘mode’ means nearly [*sic*] the same as technique”:

A greater number of labourers working together, at the same time, in one place (or, if you will, in the same field of labour), in order to produce the same sort of commodity under the mastership of one capitalist, constitutes, both historically and logically, the starting-point of capitalist production. With regard to the mode of production itself, manufacture, in its strict meaning, is hardly to be distinguished, in its earliest stages, from the handicraft trades of the guilds, otherwise than by the greater number of workmen simultaneously employed by one and the same individual capital. The workshop of the medieval master handicraftsman is simply enlarged. (Marx 1996, 327)

To Cohen this means, “Capitalist relations replace gild relations, but the [material] mode of production is unchanged because the physical character of the labour process has not yet been transformed” (2000, 80). However, when capitalists first appear they do not change the material process of production

because they do not have the necessary “structure of power,” the system of accountability, which Cohen forgets required an extended period of class conflict because, as Marx put it, “capital is constantly compelled to wrestle with the insubordination of the workmen” (1996, 373). Cohen references a passage from *Grundrisse*, which again says that the material process did not change immediately when the capitalist appeared, but here Marx explicitly notes that the subsumption of labor is initially only “formal,” that the social relations of production, of accountability, have not yet changed:

The simplest form, a form independent of the division of labour, is that capital employs different hand weavers, spinners etc. who live independently and are dispersed over the land. (This form still exists alongside industry.) *Here, then, the mode of production is not yet determined by capital, but rather found on hand by it.* The point of unity of all these scattered workers lies only in their mutual relation with capital, which accumulates the product of their production in its hands and, likewise, the surplus values which they created above and beyond their own revenue. The coordination of their work exists only *in itself*, in so far as each of them works for capital—hence possesses a centre in it—without working together. Their unification by capital is thus merely *formal*, and concerns only the product of labour, not labour itself. Instead of exchanging with many, they exchange only with the one capitalist. This is therefore a *concentration of exchanges* by capital. (Marx 1973, 586)

As usual when talking of the mode of production, Marx sees its material aspects from the social point of view. Cohen dissects his “social mode” of production into three dimensions, “its purpose, the form of the producer’s surplus labour, and the means of exploiting producers (or mode of exploitation),” which he calls “social properties of the [material] production process” (2000, 80). By contrast, according to the accounting interpretation, these dimensions of the social relations of production are dimensions of social accountability, not the “social properties” of a material process. As aims, Cohen distinguishes production for use or exchange, and within for exchange fits barterers who exchange only use-values, simple commodity producers, and merchants, those who do not pursue “maximum exchange value,” and those who do, either not for capital accumulation (e.g., charities), or capitalists (2000, 81, Table 3). Cohen recognizes “what we shall call a *capitalist mentality* . . . , the quest for exchange-value which is not controlled by a *desire* for use-value,” which is based on “*capitalist principle*, the use of exchange value to increase exchange value” (2000, 300). He accepted “The reality of the principle and the mentality is undeniable,” and that his “story . . . of their genesis is highly stylized,” but ducks the issue because he fears that “the extent to which the mentality informs an individual or society is a highly complex question” (Cohen 2000, fn.3, 300).

Rejecting Marx's theory of value, Cohen (2000, 298) cannot articulate the capitalist mentality, identifying it instead with "exchange value," apparently meaning sales, rather than the rate of profit. However, maintaining the theory of value and grounding it in accounting, simplifies the question of assessing its influence (Bryer 2017). Instead, Cohen (2000, 299–300, 302) follows the early Smithian Marx in arguing that the "capitalist principle" and "mentality" appear from the growth of the market and increasing division of labor until "the formation of the labour market completes the subordination of production to exchange." Cohen quotes from the *Theories of Surplus Value*: "The immediate purpose of capitalist production is not [quoting Ricardo] 'the possession of other goods,' but the appropriation of value, money, of abstract wealth," but neglects to add that this, as Marx said, was to "turn his . . . commodity capital, back to money capital to *realise* his profit" (1968, 503). Cohen, by contrast is happy for zealous charity workers to embody the "capitalist principle," but not the "mentality," for a miserly artisan to have a "capitalist mentality," but not to follow the "capitalist principle," and for a modern corporation to "aim at profit or growth [*sic*], for they are different modes of increasing exchange value" (2000, 301–2).

Of the two other "aspects of the social mode of production [which] are *the form taken by surplus labour*, and the *mode of exploitation*," Cohen (2000, 82) argues, "Marx thought the first so important that he sometimes [*sic*] recommended individuation of social forms by reference to it." Cohen overlooks that Marx made this the centerpiece of his mode of production in his mature work, the significance of the fact he "recommends" this only in *Grundrisse* and *Capital* (Cohen references the passages in Volumes 1 and 2). This is because by the "form of surplus labour" Cohen means "the way it manifests itself," whether as "the portion of the slave's product retained by the master" or "as a quantity of exchange value: surplus labour is revealed only in the disguised form of profit on investment of capital" (2000, 82). Cohen comes close here to the accounting interpretation, that the key difference between slavery and capitalism is that the former's aim is production and the latter adopts economic and social accountability for ROI. However, rather than refer to *Grundrisse*'s analysis of pre-capitalist economic categories, Cohen distinguishes the 'mode of exploitation' using his effective economic control interpretation. He refers to a passage from Volume 2 that, he argues, shows that by the social relations of production Marx meant "relations of effective power over persons and productive forces," which while "not relations of legal ownership," it was "convenient to represent" them as such (Cohen 2000, 63). Marx wrote, for capitalism to appear

The separation of the free worker from his means of production is the starting-point given, and . . . these two elements are united in the hands of the capitalist,

namely, as the productive mode of existence of his capital. The actual process which the personal and material creators of commodities enter upon when thus brought together, the process of production, becomes therefore itself a function of capital, the capitalist process of production Every enterprise engaged in commodity production becomes at the same time an enterprise exploiting labour-power. (Marx 1997, 42–43)

According to Cohen, Marx was thinking here of the capitalist's "effective power" as rights of ownership, action controls, the right to supervise the use of the means of production and keep some or all of the benefits. However, when Marx wrote of the "separation of the free worker from his means of production" he meant more than "his non-ownership" (Cohen 2000, 78), loss of his right to use them, to incur the costs, and take the benefits, which he does, but separation from their economic control. According to Marx the worker comes under the control of capital, becomes accountable to capital. By contrast, according to Cohen, "Unlike the slaveholder, the lord of the manor only has some ownership of the labour power of the producer subordinate to him. He is entitled to tell the serf what to do with his labour power only some of the time," whereas by implication the capitalist can 'tell the proletariat what to do' all the time because, unlike the serf, the 'free' wage worker "has no rights over the means of production he uses" (Cohen 2000, 65). In short, as we saw in the previous section, like the slave owner, according to Cohen, the capitalist has complete powers of supervision.

While a capitalist could tell workers what to do all the time, like a slave, this does not demarcate capitalism from pre-capitalist modes of production, whereas economic coercion, including financial results control, does define capitalism's specific mode of accountability. Cohen accepted that ownership rights are limited, and that by this test "Today, individual capitalists have less legal discretion over their holdings than they once did. They have fewer rights over what they own, and may be said, in our usage, to own what they do to a lesser extent" (2000, 63–64; see also, Wright et al. 1992, 92). It is true that, according to Cohen's usage, in which "power" means action control, "It does not follow that the capitalist *class* has less control over the means of production. A reduction in control by individual capitalists can result from increased control by capitalists as a class, e.g., through the state," which may for example intervene to supervise the length of the working day individual capitalists can impose on their workers (Cohen 2000, fn.1, 64; 294–96). However, although the capitalist class can effectively supervise the means of production through the state, this is also not distinctively capitalist. Cohen's definition of the social relations of production as a structure of power based on effective legal rights ignores the possibility of results control by total social capital, notions that do not exist for him and for many Marxists (Bryer 2017).

Cohen argues in the same vein that the only distinctive feature of the capitalist economic structure from the slave and feudal structures is that proletarians “own” their labor power, but accept that the only right they have is to choose to which capitalist to sell it. Cohen’s “at least three facts [that] warrant the ascription of subordinate status to our three types of immediate producer,” slave, serf and worker, are first and secondly action controls over the “product” and within the production process, thirdly having less income and wealth, which was the route to status (2000, 69). Cohen argues, “Through unionization . . . workers may use enhanced bargaining power to begin to wrest control of the means of production from capital” (Cohen 2000, 70), by which he means action control. In short, distinguishing between “right” and “power” seen as effective action control is Cohen’s “solution to a difficulty which arises for historical materialism If the economic structure is constituted of *property* (or *ownership*) relations, how can it be distinct from the *legal* superstructure which is it supposed to explain” (2000, 217–18). However, if the economic structure is the calculative mentality and system of social accountability, this is distinct from the legal superstructure, of which company (including accounting) law is a major element, and which explains it. Marx resorted to legal language, Cohen (2000, 224) argued, “Given the poverty of a vocabulary of power.” However, his rejection of Marx’s theory of value means he misses the extensive vocabulary of control Marx had created with it, which, *Accounting for Value* argued, he used to explain capitalist accounting, and which, chapter 7 (below) argues, he explained as capitalism’s most important ideological distortion.

Marx’s Theory of Power

Giddens (1995, xv, 3) accepts, “Marx’s emphasis that the economy is always a system of power surely remains necessary and useful,” but he nevertheless concludes, “power was never satisfactorily theorized,” and this failure is the origin of some of the chief limitations of Marx’s theory of history. Giddens argues, “power . . . concerns the capacity of actors to secure outcomes where the realization of these outcomes depends upon the agency of others” (1979, 93). He distinguishes “allocative resources,” those giving “control over nature,” from “authoritative resources,” those giving “control over social interactions,” and defined “domination” as “structured asymmetries of resources drawn upon and reconstituted in such power relations” (Giddens 1995, 50; Wright et al. 1992, 68). Only capitalism is a “class society,” he argues, because only in capitalism is control over “allocative resources” of prime importance, whereas pre-capitalist societies are merely “class-based” because their ruling class rely on “authoritative” resources, for example, ideology or force. By control of “allocative resources,” like the analytical

philosophers, Giddens means action or “direct” control. As Wright et al put it, “Giddens narrowly ties class to ‘sectional forms of domination created by private ownership of property, where ‘ownership’ means direct control over the use and disposition of means of production, and ‘private’ designates legally guaranteed rights over those means of production” (1992, 71). By “authoritative resources,” that Giddens narrowly associates with what was or would become the state, he also means ‘direct’ or action control: “When a group of individuals appropriates surplus coercively, without actually owning the means of production privately” (Wright et al. 1992, 71).

According to Giddens (1995, xvii), Marx ignored that “Surveillance, meaning the co-ordination of information and the direct supervision of some individuals or groups by others, is the prime generator of administrative power in modern societies. Who says surveillance says organisation.” Giddens includes not only “industrial organisations, but also the nation-state” (1995, xvii), but he overlooks the calculative mentality underlying Marx’s economic base and hence accounting as the vital means of “surveillance.” As Wright et al. (1992, 72, 73) put it, whereas Giddens defined class solely in terms of property relations, “Many Marxists define class in terms of the mechanisms by which surplus products or surplus labor is appropriated,” and therefore “the elements of social control . . . do not operate independently, but instead form a kind of system [*sic*].” However, many are hard-pressed to say what kind of “system” exactly, why “forms of resource control are not just contingently interconnected, but systematically linked in such a way that only certain kinds of variation can occur” (Wright et al. 1992, 73).

CONCLUDING COMMENTS

Rejecting Marx’s theory of value, Marxists have prevented themselves from understanding his theory of history, and rendered their criticisms irrelevant. Adding back Marx’s theory of value and class conflict, paying close attention to the distinct forms of mentality and accountability that define his pre-capitalist and capitalist modes of production, the accounting interpretation supports Cohen’s functionalist defense of productive force determinism.

Chapters 4–6 turn to world accounting history. Marx’s distinction between slavery and feudalism, chapter 2 argued, mirrors the difference between the aims and methods of ancient and feudal accounts. If Marx is right, we should find ancient slave owners’ accounts focused on accountability for production, on physically coercive control, accountability as a means of production, as a “laboring-machine.” We should find feudal accounts, by contrast, holding stewards accountable to their lord for their serfs’ surplus labor as labor rent, and their tenants for commodity and money rent, which became the general form of surplus, feudal ‘primeval profit.’

Marx sketched only elements of a history of the transition from the slave to the feudal mode. The accounting history of the ancient Near East, classical Greece and Rome, and the early Roman Empire, chapter 4 argues, is consistent with Marx's slave mode, with accounting for a laboring-machine, with effective slavery in Mesopotamia and Egypt where legal slavery was relatively rare, and in Greece and Rome where it was common only in particular regions and periods. The accounting history of the later Roman Empire, chapter 5 argues, is consistent with an intensifying slave mode, supports the hypothesis that effective slavery became increasingly important and continued in the east following the collapse of the Empire, whereas it retreated unevenly in the west.

We can use this difference, chapter 6 argues, to rework the model developed in Wickham's (2005) acclaimed, but criticized, *Framing the Early Middle Ages*, to explain the transition to feudalism in Northern Europe, not simply as the reassertion of "aristocratic" power, but its reassertion over what had become a tribal, "peasant mode of production," in a new form. The accounting history of Francia and England following the collapse of the Roman Empire in the west, it argues, is consistent with the transition to feudalism as the dominant mode of production from AD c. 800, whereas the accounting history of Egypt is consistent with the continuing domination of effective slavery in the east. This and other accounting evidence, it concludes, undermine the criticisms of the evolutionism in Marx's theory of history, that it is unspecified and unjustified. In short, the accounting history of the later Roman Empire, its collapse, the reassertion of power by large landowners in the west over free peasants and the transition to feudalism, chapters 5 and 6 argue, is consistent with Marx's sketch of this history, and with his evolutionary theory. It is, in short, consistent with the victors of class conflict choosing the feudal mentality, social relations of production, and system of accounts to control the production of increased surplus labor in the form of rent from the higher-level forces of production available, which led to their increase.

Chapters 7–10 examine the implications of the accounting interpretations of Marx's theories of history and value for understanding his claim that socialism was the 'inevitable' end of history. The necessary conditions, he argued, were high-level forces of production, the concentration and centralization of capital, and popular support for changing the social relations, which, these chapters argue, means workers understand his explanation of accounting as capitalist ideology, the accounting foundations of his mature concept of socialism, and the necessary tasks of 'critical accounting' to get to Day 1.

NOTE

1. For a discussion of action and results control, see Bryer (2017, chapter 2).

Chapter 4

Ancient Slavery

This chapter examines the accounting history of the ancient Near East and Greece and Rome, from c. 3100 BC to around AD 200–300. The earliest Near East civilizations emerged practising alluvial agriculture in river valleys, controlling irrigation, significantly increasing their surpluses, which accelerated population growth, producing large communities, the first cities and states, and conflict, creating the need for “complex organizational structures—especially within the field of economic administration” (Nissen et al. 1993, 1, 3; Mann 1986, 75–75, 78). Writing was integral to their development, the first true script (“proto-cuneiform”) probably appearing in ancient Babylonia, the fertile plains bordering the Tigris, Euphrates, Karun, and Kerkha rivers, the southern part of today’s Iraq, part of ancient Mesopotamia, toward the end of the fourth millennium BC, but similar developments occurred in other Near Eastern societies, particularly Egypt, and elsewhere.

In Mesopotamia and Egypt, historians agree, writing provided the foundation for extensive systems of administrative control (Nissen et al. 1993, ix, 1, 3) based on accounts. Dominating these societies were large palaces or temples “who owned a greater part of the arable, virtually monopolized anything that can be called ‘industrial production’ as well as foreign trade . . . , and organized the economic, military, political, and religious life of the society through a single, complicated, record-keeping operation” (Finley 1979, 28). Using elaborate systems of accounting, the Near Eastern societies became “rationing,” “redistributive,” and “centralized,” particularly Egypt, in contrast to the Graeco-Roman world “which was essentially and precisely one of private ownership” (Mann 1986, 87; Nissen et al. 1993, x; Finley 1979, 28, 29). For this and other reasons, historians generally separate the histories of the ancient Near East and Greece and Rome even though many

accept they are closely related (Morris 1999), whereas from Marx's perspective, the chapter argues, we should consider them together.

Historians recognize the central importance of accounts to ancient civilizations, and the importance of the many fragments and some complete sets that survive to understanding their functioning. However, without Marx's concept of the slave mode of production, we will see, they have failed to understand, as they recognize we must, "the social context and function of the documents" (Nissen et al. 1993, x). Historians also recognize the ubiquity of accounting in Greece and Rome, but generally overlook its significance in understanding what they see as their very different social relations and histories. Regardless of their historical and cultural differences, particularly whether the workers were legally 'free,' which they predominantly were in the Near East, or chattel slaves in Greece or Rome, the evidence from accounts, and from works on estate management from Xenophon's *Oeconomicus* (c. 300 BC), the chapter argues, supports the hypothesis that in all societies the slave mode was dominant.

If we see Greek and Roman accounts of production using chattel slaves as the benchmark of unambiguous 'real' slave accounting, as the basis for judging Near Eastern accounts of production using 'free' labor, the evidence shows they were essentially the same, implying that 'slavery,' effective or legal, was the dominant relation. In Egypt, Mesopotamia, ancient and classical Greece, in the Roman Republic and Empire, the chapter shows, the state accounted for taxes on production, and state and private businesses accounted for production, for stocks (inventories) of use-values, and for debts. This accounting history, it concludes, is consistent with Marx's concept of the slave as a 'laboring-machine,' holding workers coercively accountable for production, with the slave mode's dominance for more than 3,000 years.

The chapter first examines accounts from ancient Mesopotamia and Egypt, which, it argues, confirm that their workers were effective slaves in Marx's sense. Second, it examines Greek and Roman accounts, works on estate management, and an almost complete set of accounts from a large Roman-Egyptian estate for AD 249–68, all of which, regardless of the legal status of the workers, also confirm Marx's concept of the slave mode of production, which continued, chapter 5 argues, through the later Roman Empire. Finally, according to Marx's theory of history, constant social relations of production imply constant or only very slowly growing low-level forces of production, which the evidence, we will see, also confirms.

ANCIENT NEAR-EASTERN ACCOUNTING

Many thousands of documents, written on tablets of wet clay, and fragments, survive from ancient Mesopotamia, most of them accounting and

administrative records (Mann 1986, 88–89; Nissen et al. 1993, 21). Beginning c. 3500 BC, by c. 3100 BC proto-cuneiform writing had developed as a language of bookkeeping, an “accountant’s script,” and by c. 2100 BC in southern Mesopotamia, coinciding with the first centralized state (Ur III), “the human labor force was subjected to complete administrative control made possible through the techniques of writing” (Nissen et al. 1993, x, 4, 5, 19, 30). Mesopotamian temples that owned and exploited large amounts of land, rented small amounts to some families, and gave land to elite families, “budgeted and organized production and redistribution in a detailed, sophisticated way” (Mann 1986, 87). The dominance of accounts among the surviving documents shows that “their temples were merely decorated stores; the inscribers less priests than clerks,” but as Mann says, “these were important stores, being at the center of the production-redistribution cycle” (1986, 89). The clerks’ accounting language became a “powerful instrument of formalized control of economic procedures,” and independently was the point of departure for writing spoken language (Nissen et al. 1993, 30).

Writing did not create civilization if we define this as a “strict hierarchical stratification,” and “distribution of economic and social responsibilities,” which already existed (Nissen et al. 1993, 11, 19). Civilization created the bookkeeping writing that allowed its full development, but this invention, as Mann says, “reveals a new era by 3100 B.C.: that of civilized caged societies. The jump had been made” (1986, 89). Documents from the third millennium BC suggest that much of the population was “dependent on the institutions that controlled . . . and manage[d] . . . the labor force required in agricultural production and [in] specialised workshops” (Nissen et al. 1993, 70). For historians of the ancient Near East, however, an important unanswered question “is whether . . . the labor force should be called slaves, or . . . be regarded as having simply restricted freedom” (Nissen et al. 1993, 70). According to Marx, chapter 2 argued, the answer depends on the aim and methods of accounting control of the labor process.

Irrigated farming produced two guaranteed crops each year sustaining abnormally dense and large populations in Mesopotamia and Egypt, large segments of which, although legally free, ‘volunteered’ to work as bonded laborers, as “dependent laborers,” engaged in “more-or-less voluntary forms of labor subordination” (Mann 1986, 84, 85). In Mesopotamia much of this labor, Mann suggests, came from populations living in the relatively inhospitable periphery around the core irrigated areas (1986, 84). There were some slaves, but perhaps because for most workers there was little distinction between freedom and slavery, “it is impossible to translate the word ‘freedom’ . . . or ‘free man’ into any ancient Near Eastern language” (Mann 1986, 85; Finley 1979, 28). Whatever their legal status, the accounting evidence, we will see, supports Nissen et al.’s conclusion, that the hypothesis “that the administrative institutions relatively freely controlled large numbers

of laborers cannot be contested” (1993, 70). The evidence shows, in short, that the aim and methods of Mesopotamian accounting are consistent with the hypothesis that these laborers were effective slaves in Marx’s sense, controlled as ‘laboring machines,’ coercively accountable for production.

The simplest surviving documents from the third millennium reveal “the most rudimentary level of accounting operations in early redistributive states, namely, the bookkeeping control of the receipts and payments [*sic*] of storage facilities and stocks belonging to the palace and temple households” (Nissen et al. 1993, 30, 32). These were, in fact, what accountants today would call ‘income and outgo’ accounts, accounts for stores of use-values. More complex temple accounts of storage and production allow us to explore the nature of the “relations of production and redistribution and of social rights and obligations especially over property” (Mann 1986, 88, 89), they reported. For example, the accounts of ‘Kushim,’ presumed to be the name of an administrative official who was responsible for a storage facility containing malt and cracked barley, and for withdrawals for the production of beer (Nissen et al. 1993, 36–46). Kushim’s accounts tracked the withdrawals of ingredients, specified the amount of product expected, its quality, location, and who was responsible, measured the production of beer, and who received it (Carmona and Ezzamel 2007, 86). Kushim’s stores and production accounts provided accountability for use-values, and possibly measured the required labor for beer production (Nissen et al. 1993, 46), as we will see other accounts clearly did. This step, linking production with required labor was, as Nissen et al suggest, “perhaps the most important accounting operation introduced during the third millennium B.C., the balancing of theoretical debit postings with real *production*” (1993, 49, emphasis added). This development is consistent with Marx’s definition of a slave as a worker coercively accountable for production because balancing “theoretical debits” against “real production” required scribes to account for the production of workers controlled by overseers who were accountable to the state, temples or private owners for high target outputs, and there is evidence consistent with coercion.

Starting around 2500 BC, overseers and their laborers began to be accountable for “work performance on the basis of standardized performance expectations,” for example, the amount of barley to be harvested, the number of fish to be caught, amount of earth moved in digging, and so on, fixed by gender and age, set at “optimal performance” (Nissen et al. 1993, 82). The purpose of the accounts was to hold overseers accountable for the physical resources entrusted, but particularly for extracting production from the laborers: “foremen were responsible for the accomplishment of the tasks” (Nissen et al. 1993, 82).¹ In the accounts the targets set the workers’ required output, usually at the maximum possible, for a given labor input, the ‘debit,’ against which the accountant recorded the real output, the ‘credit,’ a technique that

reached its most developed form during the Ur III period (2100–2000 BC).² These accounts reveal the “continuous calculation of all labor performance together with theoretical credits and duties. Accounts relating to the balancing of expected and real labor performances were drawn up at regular intervals on the foreman of the state controlled labor force” (Nissen et al. 1993, 49). They also reveal their aim was maximum production because, “as a rule, the accounting balances of the foremen were ‘overdrawn,’ since it seems the expected performances were fixed at the maximum of what a foreman could reasonably demand of his workers” (Nissen et al. 1993, 49). An example from the Ur III period (2000–2100 BC) is an account for an overseer who was in charge of 37 female laborers working in a flour-grinding mill, summarized in table 4.1. The account was ‘debited’ with the number of laborer-days or workdays available and ‘credited’ with the flour produced by the milling team “converted into female laborer days,” dividing the output achieved by the standard time allowed per unit, to give the equivalent laborer-days, and it tracked the laborers when they were doing other work (Nissen et al. 1993, 51–54). The overseer was accountable for the balance of work and output for the year plus any uncleared balance from the preceding year, which was the incurred ‘surplus’ or ‘deficit’ he had to clear at the end of the year (see table 4.1).

The basis of the performance standards for different types of work were “explicitly formulated norms which were strictly adhered to,” which varied according to the sex and age of the laborer (Nissen et al. 1993, 49; Carmona and Ezzamel 2007, 87). Instead of laborer-days, the measure of equivalence could be the raw material. Every day for several months the accounts of another grain-processing workshop debited raw materials (barley) and credited finished products (flour) converted into standard units of barley, as well as debiting laborer-days and crediting the equivalent laborer-days of the output of the millers (Nissen et al. 1993, 83–84). The overseer of this workshop was responsible for 36 female laborers, one of whom died during the year. The account adjusted the overseer’s target for the death of the laborer, but held him accountable for it by debiting and crediting it with her ‘workdays,’ but did not, as was usual, credit her ‘free days’ as labor performance, that

Table 4.1 Mesopotamian Accounting for Labor Performance

<i>Debits</i>	<i>Workdays</i>	<i>Credits</i>	<i>Workdays</i>
Deficit from previous year	6,760		
Expected labor time of 37 female workers for 12 months of 30 days plus 3 workers for 33 days	13,419	Labor performances	12,758 5/6
Total	20,179	Incurred deficit	7,420 1/6

Source: Created by the author based on Nissen et al. (1993, figure 45, 53–54).

“had to be recovered for the state” for the remainder of the accounting year (Nissen et al. 1993, 88). There is, as Nissen et al say, “no detail of this text [that] exemplifies so drastically the high level of formalization achieved by bookkeeping of labor performance during the Ur III period” (1993, 88), in meticulously accounting for dead workers as lost instruments of production. Nissen et al found it “somewhat curious that the work days no longer fulfilled by a deceased laborer should appear in ‘credits’ as days of accomplished work” (1993, 88), but this held the supervisor accountable for the loss of the deceased while relieving him of accountability for most, but not all, of the lost output.

The surpluses, and more usually deficits, reported deviations from the overseer’s production target, measured in standard workdays or output, or both. Macve (2002) suggests this was similar to feudal charge and discharge accounting. He interprets the example in table 4.1 as “an account for a foreman in charge of a gang of thirty-seven female laborers in a mill [who] is ‘charged’ = ‘debited’ with the laborer-days output expected to be yielded in the form of flour from the grain provided over the year, and ‘discharged’ = ‘credited’ with the actual output achieved” (Macve 2002, 459). However, unlike feudal accounting, there was no calculation of Marx’s ‘primeval profit,’ receipts minus expenses. Instead, the overseer and his family were personally accountable for production deficits, which “had to be settled at all costs,” and if uncleared at death resulted in the confiscation of his possessions and his family becoming ‘laborers’ (Nissen et al. 1993, 54). The prospect of such “drastic consequences” (Nissen et al. 1993, 54) would have motivated the overseer to punish the laborers for not meeting targets. Evidence consistent with coercive accountability is the survival of “inspection lists,” inventories of workers, that “regularly report on large numbers of escaped labourers” (Nissen et al. 1993, 54). Given, as Nissen et al say, “the total control that the labourers were subject to, it is not difficult to understand why they tried to flee” (1993, 54). It was because, as the accounts show, the state, temples, or owners and their overseers controlled them as laboring machines, accountable for maximum production, probably coercively. Consistent with this interpretation, Mesopotamian bookkeeping for land production, crops produced and harvested from measured areas, and for animal production, followed the same principles as for laborers.

The largest group of surviving tablets from Mesopotamia are inventories of laborers and records of the distribution of their food rations, “fixed early at the amount of food approximating the minimum level of subsistence . . . to keep the workforce in production” (Nissen et al. 1993, 70), just like accounts for cattle, and so on. In Mesopotamia, and we will see in Egypt, “Land production was measured and recorded with criteria similar to those used in recording human performance,” with scribes using the notion of ‘normal’ performance

to work out estimates of future product and compare this with the actual (Carmona and Ezzamel 2007, 188–89). Exactly like the bookkeeping for laborers, the aim of bookkeeping for animal production was the “systematic control of all domestic animals, especially cattle, sheep, goats, equids—above all donkeys—and pigs,” and, like workers, domestic animals “were generally categorized not only according to sex but also according to age” (Nissen et al. 1993, 89, 92). Mesopotamian accounts held herdsman accountable for their herd and for its production, and for cows, for example, “the (expected) delivery of a certain amount of dairy product obtained from the milk produced during the accounting year” (Nissen et al. 1993, 92–97). Just as in accounting for laborers, “the greatest concern of the accounting of farm animals was undoubtedly control of the herds. Moreover, animal use, delivered products, and occurring expenses were registered in detail” (Nissen et al. 1993, 102). The supply of laborer’s rations figured strongly in labor bookkeeping, and likewise “the supply of fodder was . . . at all times of some concern for bookkeeping,” which gave “a systematic routine control of the monthly feed requirements of livestock of the central institutions” (Nissen et al. 1993, 102), as it did for their workers. Evidence of how deeply the mentality of employing laboring machines penetrated Mesopotamian society during Ur III is that “even the feed for fattened birds and rodents destined to be offerings for the temples was recorded in the accounts” (Nissen et al. 1993, 103–4).

At first sight, ancient Egypt, like ancient Mesopotamia, was not obviously a slave society. The ruling class of ancient Egypt—the state, temples and private individuals—“were in charge of substantial numbers of slaves who labored on building sites, in the workshops, and in the fields, as well as in private households,” which “included . . . peasants, convicted criminals and . . . prisoners of war” (David 2007, 361; Haring 2009, 5), particularly during the Middle Kingdom (c. 2040–1640 BC). However, although slaves’ “freedom of movement was always restricted” (David 2007, 361), slavery in Egypt did not mean the complete legal ownership associated with Greece and Rome. Their owners could sell them, but slaves could sometimes own land, marry freeborn people, and even employ servants (David 2007, 143, 361). Furthermore, nominally, ‘free’ peasants comprised as much as 80% of the ancient Egyptian population (David 2007, 141), most of them apparently ‘tenants’ on the estates of wealthy individuals, the state or temples (Haring 2009, 1). However, most came under a state *corvée* system, used for land cultivation, building, mining, quarrying, and so on, and for soldiers and sailors, “creating a class of serfs [*sic*] who were not legally ‘slaves,’ but who had few choices in their lives” (David 2007, 318). Peasants’ lives “were organized by the office to which they were attached—the state administration, temple, or private individual” (David 2007, 143). Below the peasants there was some “private labour commanding wages, or rations” (Carmona and Ezzamel 2007, 182).

“Distinguishing rations from wages in ancient Egypt is problematic,” however, as Ezzamel says, because both were for subsistence and typically did not vary significantly according to the amount of work performed (2012, 287, 331). Artisans had a higher status and standard of living than peasants, but “Many were organized in state or temple workshops where a range of activities were brought together under a high official” (David 2007, 318, 322–23).

Despite apparently ‘liberal’ slavery, ‘peasants,’ and ‘wages,’ accounts identical in concept to those from Mesopotamia also appeared in ancient Egypt (Carmona and Ezzamel 2007; Ezzamel 2012), which also reveal “the presence of forms of forced labour” (Carmona and Ezzamel 2007, 182), of effective slavery, consistent with Marx’s notion of the slave as a ‘laboring machine’ coercively accountable for production. In the Middle Kingdom, accounts for construction projects for the Pharaoh Sesostri I, and for royal workshops, for making and repairing tools, for boats and building materials, again reveal the core element of slave accounting, a focus on production targets and output, the punitive extraction of surplus labor. It was “a system of ancient human accountability . . . , allocation of predetermined work targets, regular reporting on actual achievements, remainder of work to be completed and a payment structure (in the form of fixed provisions) which reflected the rank of different task categories, individual position in the hierarchy, and specific responsibility” (Carmona and Ezzamel 2007, 192). Consistent with coercively forced labor, “Failure to pay assessed taxes, unauthorised absence from work, and embezzlement were dealt with through punitive measures extending beyond the individual to his/her immediate family” (Carmona and Ezzamel 2007, 192).

In bread making a system of accounts compared actual and expected daily output per baker, “using weighing, pure counting, a measure of quantity equivalence, a quality adjustment (the baking ratio), predetermined natural loss in baking, output targets, measures of actual output and calculation of variances between targets and actual achievements” (Carmona and Ezzamel 2007, 194). Based on moneys of account, these accounts allowed “a form of control and human accountability that visualized the performance of individuals and institutions, accounted for differences between theoretical targets and actual performance and calculated deficits,” the “loss allowed in the production process,” and the bread’s quality (Ezzamel 1997; Carmona and Ezzamel 2007, 194–95; Ezzamel 2012, 306). Anything over standard loss or under required quality was an unnecessary loss of output for which the scribe held the baker accountable (Ezzamel 2012, 306, 314–15). The same system of accounting applied to brewing beer (Carmona and Ezzamel 2009, 83), which with bread was an essential staple. It applied to brick-making, building work, metalwork, and so on (Ezzamel 2012, 279–87, 336). This

evidently was a system of “human effort” accounting, a system of “human accountability,” or in Marx’s terms, slave accounting:

In the individual-state sphere, accounting entries emphasized the exercise of accountability via the specification of prior targets, the allocation of tasks to individuals, the measurement of actual performance, the identification of differences between targets and actual achievements, and the reporting of action taken to deal with the differences. In setting expected levels of performance for individuals, differences in gender or age were taken into account, as was potential productivity of land (for tax levies), but within a particular group, say grown up men, it seems that expected performance was invariable, assuming all individuals within a category to be equally able This evidence points to a form of ancient accountability for human effort. (Carmona and Ezzamel 2007, 196)

Ancient Egyptian accounting was a system of accountability for work, for “detailed reporting on work progress,” for setting work targets and measuring output (Ezzamel 2012, 286–87). Rather than the capitalist focus on the “standard time required for an operator with acceptable competence to perform a particular task,” seeing labor time as a cost of production, ancient accounting saw labor time as required production. That is, “ancient accountability converted amount of work expected into a number of work days, noting days spent on a particular task and away from it, and emphasizing authorized or unauthorized absences” (Carmona and Ezzamel 2007, 196). For example, the *Papyrus Reisner: The Records of a Building Project in the Reign of Sesostri I* (King of ancient Egypt who reigned in 1908–1875 BC) shows that the basis of its management were a series of calculations of the man-days equivalence for various tasks (see table 4.2).

The differences in the time-volume or conversion ratios probably stem from differences in the weight of materials, difficulty in moving them, the distances involved, various “factors that impact the performance of a particular

Table 4.2 Man-Day Equivalence for an Ancient Egyptian Building Project

<i>Task</i>	<i>Volume (V)</i>	<i>Equivalence Metric (E)</i>	<i>Equivalent Man-Days (V/E)</i>
Earth rubble	4,435	1:10	443 ½
Builders	381 ½	2:9	85
Hauling stone	143; 2 palms	5:1	715
Carrying (items)	183	1:5	36 ½
Carrying sand	152 ½ ¼	2:3	101 ½
Brick	39,118	1:65	602
Loosening fields (earth)	556 ¼	1:10	55 ½

Source: Created by the author based on Ezzamel (2012, table 11.5, 281) and Simpson (1963, 128).

job” (Ezzamel 2012, 281). From examining several accounts, Ezzamel found the “pattern of reporting on work progress is similar” (2012, 287). Typically, accounts show the target work, the amount of actual work completed, and a remainder for completion (Ezzamel 2012, 286). First, calculate the work target and the equivalent target days. Then, as work progressed, the scribes would measure the output, an “inventory of *actual work*” and compare this to target (Ezzamel 2012, 287), which they could convert into the equivalent target days, and compare this with the actual days expended.³ By organizing workers into a hierarchy of groups, from ‘crews’ (the whole workforce) through progressively smaller ‘gangs,’ ‘phyles,’ and ‘divisions,’ drawing up work rosters, keeping attendance records, monitoring their locations and movements, and “by observing and recording their effort directly compared to targets, it was possible to impose strict order and discipline over the workforce” (Ezzamel 2012, 278). It was a “framework of accountability [in which] responsibility for results was firmly located either in humans (subordinates reporting to superiors) or institutions (e.g., temples provisioning for their personnel) and, hence, illustrating cases of hierarchical accountability. Deficits (balances between theoretical expectations and actual results) were calculated and traced to the relevant accountable entity” (Carmona and Ezzamel 2007, 197). The aim was to get the laborers “to work as hard as possible” (Ezzamel 2012, 284). Most of the accounting evidence from ancient Egypt comes from the state sector, accounts dealing with its dockyards, tax, baking, mining, transportation, temples and state projects, workshops and manufactories, and so on because it was the most important, but the same system of human accountability also applied in the private domain in the control of households and estates (Ezzamel 2012, 369, 410–11).

Overseers probably enforced targets through action controls. Carmona and Ezzamel speculated that targets could have worked as results control if the laborers internalized them: “the farming and land accounts along with those stipulating provisions for workers, while they may have been in the main intended for monitoring purposes, could have underpinned workers accountability to the self” (2007, 198). They provide no evidence that workers did this. Surviving Egyptian accounts say nothing about punishments and rewards, but this does not mean overseers took no action (Ezzamel 2012, 287). It could be that coercion and physical punishments were commonplace and not considered worth recording. Carmona and Ezzamel suggest, “Concerning the actions taken when actual achievements fell below expected targets, it is most likely that workers simply stayed on the job until it was completed, before being moved to other jobs” (2007, 196), but this does not rule out that the workers were punished. They could be right, “It may be that the conversion of tasks into equivalent number work-days was used only for planning purposes, rather than for ensuring that work was completed

on time” (Carmona and Ezzamel 2007, 196). However, again, this does not mean there were no consequences for the overseer, or his family, and therefore for the laborers. In ancient Egypt, as in Mesopotamia, “the concept of an accountable entity, particularly in the case of individuals, merged an individual with his/her family, so if the individual ran away from his duties or even died, accountability shifted to immediate relatives” (Carmona and Ezzamel 2007, 197). It would therefore be strange if this elaborate system of accountability had no consequences, and it is clear that “sanctions for embezzlement or work avoidance [*sic*] were extremely punitive, involving both corporal punishment and payment in kind” (Carmona and Ezzamel 2007, 197). The general view of the authorities was that “failure to discharge one’s responsibility was a violation of order that had to be undone with violence,” who also used “powerful social and religious sanctions which inflicted shame and physical and supernatural punishments upon those perceived not to have been diligent in their work” (Ezzamel 2012, 284, 337). Clearly, such a “punitive scheme that severely punishes failure but does not offer material reward for success, coupled with strong social sanctions, may function as a potent disciplinary regime” (Ezzamel 2004, 500).

Marx defined the dominant mode of production as the method of surplus extraction adopted by the ruling class, not just as private individuals, but also through the state, through control of production and trade, but principally in the form of its taxation. By this measure, Egypt had the slave mode of production. It calculated, coercively acquired, protected, and meticulously accounted for its legally demanded share of production, of crops and other produce, a tax apparently paid by all citizens with produce, possibly excluding royal officials, but the burden clearly falling on ordinary citizens (David 2007, 141; Ezzamel 2002; 2012, 141). The state assessed and extracted tax from produce based on an initial assessment of the crop, adjusted in a final assessment following harvest (Ezzamel 2012, 141–44, 168). The Ur III dynasty had a similar system (Bodley 2011), as, we will see, did the Greek and Roman Empires.

Wealth to the ancients meant above all food production—full granaries, large herds, and so on (David 2007, 319)—the basis of power, and to control it the ruling class employed coercive accountability. There is no evidence of the ancient Mesopotamians or Egyptians ever calculating ‘income’ as the difference between receipts and expenses, which was possible because, while they did not have coined money, they made extensive use of moneys of account (David 2007, 319–20; Ezzamel 2012, 22–26, 371–403). The only ‘income’ recognized in their accounts was of receipts of goods in the ‘income and outgo’ of stores accounts (Ezzamel 2005, 39–40; 2012, 232–33). Consistent with the accounting interpretation, this absence, which follows from their focus on accounting for production by laboring machines, was also the case

in ancient Greece and Rome where chattel slavery flourished, whose book-keeping, by also focusing on production, has a strong family resemblance to Mesopotamian and Egyptian.

GREEK AND ROMAN ACCOUNTING

The Graeco-Roman world existed between c. 1000 BC and AD 500 (Finley 1979, 29). Much less accounting evidence has survived from this period than for ancient Egypt and Mesopotamia, and comprises inscriptions, literary references, fragmentary potsherd and tablet evidence, and documentary evidence from only Egypt, where papyrus survives, which with its long pre-Roman and pre-Ptolemaic tradition of accounting may arguably not have been typical of the Roman Empire as a whole. Nevertheless, while their continued formality and quantification was, we will see, typical of ancient Egyptian accounts, we have no reason to suppose that the aim of accountability for production they reveal was atypical.

Most production during the Classical period was by free peasants and artisans, but extensive slave ownership by the ruling class, the “fact that the propertied classes derived their surplus above all through the exploitation of unfree labour,” made it according to de Ste. Croix, “indeed a ‘slave-owning society’ or ‘slave economy’” (1981, 4, 53, Appendix II). Simply estimating the numbers, for many historians this is “generally agreed” (Cartledge 2002, 159). Jameson, for example, concluded, “The evidence from all sources seems . . . consistent with the view that slave ownership reached far down among the free, though just how far down we cannot say, and that therefore examples of slaves on farms need not be limited to the wealthy” (1977–78, 133). The labor force, Finley accepted, included “a substantial sector, men who were to a greater or lesser extent not free . . . which I shall call ‘dependent (or involuntary) labour’ . . . [whether] by law or custom . . . usually for a long term or for life” (1979, 68–69). In Athens and other Greek cities “from the sixth century BC on and in Rome and Italy from early in the third century B.C. to the third century AD, [chattel] slavery effectively replaced other forms of dependent labour” (Finley 1979, 69). From the beginning of recorded Greek history, according to Cartledge, “It is an elementary fact that . . . slaves formed a substantial part of the workforce” (2002, 159).

It was not just numbers. Slavery was an essential element in the Greek way of life, which was primarily agricultural, and therefore “the large role slavery played cannot, even in Athens, be separated from agriculture” (Jameson 1977–78, 124). Classical Athens (BC 500–250) had a monthly slave market (Harris 2002, fn.11, 86). In classical Greece, “the addition of some slave help to the farmer’s own capacity was essential for all but the richest and the

poorest, that . . . permitted forms of intensification that enabled the farmer to be fully a citizen” (Jameson 1977–78, 125). Slaves were essential for the “model Athenian citizen,” not only for producing his and his family’s subsistence, but also “with sufficient surplus to purchase the specialized goods and services beyond the capacity of his own household,” and critically for his continued dominance, “with sufficient freedom from work to engage in his social functions-ritual, political and military. In these aspirations the Athenian was one with most other Greeks” (Jameson 1977–78, 124). As Jameson said of classical Greece, and the same was true of the Romans, this “general attitude towards land, should make us hesitate to assume the greatest cash return would naturally be sought” (1977–78, 131), and there is no accounting evidence that it was.

Greek and Roman accounts tracked receipts, payments, goods, debtors and creditors, and made no distinction between ‘capital’ and ‘revenue,’ which de Ste. Croix (1956, 1981) argued showed they were “rudimentary,” meaning not those of a modern capitalist. As Marx pointed out to those “philologists who speak of *capital* in antiquity, of Roman, Greek capitalists,” this “is only another way of expressing that labour in Rome and Greece was *free*,” which he thought, “these gentlemen would hardly wish to assert,” if only because “the word . . . capital . . . does not occur in antiquity” (1973, 513). In accounts from around the sixth century BC up to the early centuries of the Christian era, de Ste. Croix shows, “capital and income were not clearly separated” (1956, 33, 34), that is, there was no evidence of double-entry bookkeeping (DEB):

The Greeks and Romans did develop some quite advanced institutions in the fields of property law and commercial practice, but their bookkeeping, minutely detailed as it often was, remained rudimentary in method and never grew into an integrated double-entry complex, with interlocking accounts, or even into a unified single entry system. Greek and Roman accounting took the form of individual records of debts and of receipts and payments, and miscellaneous inventories. (de Ste. Croix 1956, 14)

Reviewing de Ste. Croix’s work and the subsequent evidence and literature, as Macve (1994, 83) said, “there is little to suggest that we need to revise fundamentally the view of the nature of Greek and Roman accounting given . . . nearly thirty years ago. Historians of accounting have been able to rely gratefully on his demonstration that the Greeks and Romans did not have double-entry bookkeeping.” De Ste. Croix agreed with Mickwitz (1937) that their accounts showed that the Greek and Roman ruling classes were not capitalists, and Finley (1979, fn.43, 201) agreed on what he judged “the inadequacy of the accounting technique,” seeing it as support for Karl Polanyi’s ‘primitivism’ thesis, that it showed a general lack of interest in

producing ‘wealth.’ The lack of capitalist accounts, Finley concluded, meant the absence of ‘economic rationality,’ that is, supposedly, understanding market (neoclassical) economics. Following Weber, Finley argued, the Greeks and Romans cared more for ‘status’ than they did for “maximizing gain” (Morris 2002, 27), that among the ancients there was a “lack of economic analysis,” that “reasoning by figures is more than mere counting and recording, and there lies the great divide” (Finley 1979, 26).

However, the defining characteristic of Greek and Roman accounts, that Finley dismisses as mere ‘counting and recording,’ was their preoccupation with detailed accountability for the slave’s production, ‘reasoning with figures’ for control of the means of producing the owners’ way of life. As Finley himself aptly put it, “The judgement of antiquity about wealth was fundamentally unequivocal and uncomplicated. Wealth was necessary and it was good; it was an absolute requisite for the good life,” but he is wrong that “on the whole that was all there was to it” (1979, 35–36). Underlying their wealth, the Greeks and Romans well understood, was ‘counting and recording’ the work and production of others.

It was common practice for the “men of property of Rome” to regularly update their permanent accounts—for receipts and payments of money, special accounts with individuals, schedules of property, debts—from memoranda (de Ste. Croix 1956, 42, 43). However, there is no evidence of bi-lateral accounts from “hundreds of pages of accounts kept by Greeks and Romans over a period of a thousand years,” no evidence of accounts with receipts on one side, or in one column, and expenses (expenditures) on the other (de Ste. Croix 1956, 19, 21). There is, in short, no evidence of any accounts that calculate ‘income’ as the difference. De Ste. Croix “demonstrated that the content of accounts comprise ‘receipts and payments’ . . . not ‘income’” (Macve 1994, 58). Where a grouping of the entries of receipts or payments does sometimes occur, de Ste. Croix concluded, “it can only have been adopted for convenience in perusing the account and identifying individual items within it” (1956, 21). “Classical period accounts are normally set out in narrative form, in what seems to us a clumsy and confusing manner: receipts and payments are often intermingled and flow in a continuous stream. . . . There is never more than a rough tabulation” (de Ste. Croix 1956, 26). While a capitalist whose aim is financial results control would find accounts written as a continuous narrative ‘clumsy’ and ‘confusing,’ to a slave owner whose aim was day-to-day control of their laboring machines they were arguably functional.

The Greeks invented coined money, which meant they and the Romans could have kept monetized accounts if they had wished, but “they often failed to do so” (de Ste. Croix 1956, 21–22). Greek and Roman accounts tracked movements in property as well as money receipts and payments, for example, grain accounts that recorded receipts and issues of grain in physical units. Not

translating physical assets and their changes into their monetary equivalent is consistent with the hypothesis that slave owners had no interest in calculating their 'income.' De Ste. Croix concluded, "it is probable that no Greek ever had occasion to reckon his total income in money; and I see no reason to suppose the situation was different in the Roman world," because "Wealth in antiquity was conceived in terms of capital [*sic*] not income" (1956, 29). By 'wealth,' Greeks and Romans meant mainly land and slaves, but included personal possessions. A wealthy Roman "would have an inventory or inventories of his property in which different possessions were entered up under different headings" (de Ste. Croix 1956, 45).

Accounting for receipts and payments, often in kind, but including coin, and keeping inventories of use values (including coin) is consistent with accounting for production. Thus, in addition, "The owner of a large [Roman] estate might have a running record kept for him in narrative form, containing notes of interesting occurrences on the estate as well as matters of financial importance: this would probably go by the name of *commentarii*" (de Ste. Croix 1956, 45). Ordinary Greeks, who would not usually employ an overseer, typically did not keep accounts, except for "a note of debts owing to him," which was true of "Anyone who had money out on loan [who] would keep records of it in a *kalendarium (kalendarii liber)*" (de Ste. Croix 1956, 29, 45). Evidence consistent with a general disinterest in calculating income is that "at no time in the ancient world were taxes assessed on money incomes," but was based on annual produce, per head (poll tax) or "total capital," predominantly land (de Ste. Croix 1956, 29). From Marx's perspective, evidence that production was the predominant basis of taxation in antiquity, as we will see, reinforces the claim that slavery was the dominant mode.

Greek and Roman slave owners did not hold their overseers accountable for 'profit' or 'income' despite the fact that, for example, "the Athenians appear to have understood the difference between gross and net income and between principal or assets and the revenue derived from them" (Harris 2002, 83). The aim of the merchant, as Xenophon put it in his *Memorabilia* (3.7.6) (c. 300 BC), was "buying cheap and selling dear," which implies a notion of net income as receipts (revenues) minus expenses, which was widely accepted in the Classical world. However, there is "no evidence that [Greek slave] masters ever calculated the net profits they would make through the employment of their slaves" (Kyrtates 2002, 142), and none from Rome. These masters "knew what they earned when they hired their slaves out by the day to a third party; and they knew what slaves working on their own paid in. But as a rule they did not subtract the expenses they made on their behalf," or slaves' subsistence expenses, which merged into one entry for "household expenses" (Kyrtates 2002 142), that is, they did not calculate and hold their slaves accountable for the profit.

The slave master also operating as a merchant would calculate the profit, and a simple rate of profit, but hold the slaves accountable for production, would be a ‘semi-capitalist.’ The orator Demosthenes (384–322 BC), for example, who brought a legal case against his guardians for embezzling the properties his father had left him, which he valued, and estimated the 10 years of accumulated “net income” from the “income-producing assets,” slave workshops producing knives and furniture, and loans, due to him when he came of age (see table 4.3):

Demosthenes did not provide any details of how he calculated what he called the “net income” from the workshops (MacDowell 2004, 24), but adding it to interest received implies his notion was receipts minus expenses, that he and his father were semi-capitalists, merchants standing on a slave foundation. Harris (2002, 83) speculates that Demosthenes compared an inventory of all his assets at the beginning and end of a period after deducting

Table 4.3 Demosthenes’ Calculation

	<i>Drachma</i>
Income-producing assets	
<i>Workshop of knife-makers:</i>	
32 or 33 slaves worth 5 or 6 minai, none worth less than 3 minai (32 or 33 × 5 minai = 160–5 minai)	16,000
<i>Workshop of furniture-makers:</i>	
20 slaves pledged as security for a loan of 40 minai	
Average value 3–3½ minai = 60–70 minai	7,000
Talent lent out at 12% interest 60 minai	6,000
Total value of income-producing assets	29,000
Other Assets	
Ivory and iron for knives, wood for furniture	8,000
Copper and gall	7,000
Family house	3,000
Personal items of Demosthenes’ mother	10,000
Silver (unminted)	8,000
Maritime loan to Xuthos	7,000
Money deposited in the bank of Pasion	2,400
Money deposited in the bank of Pylades	600
Money entrusted to Demomeles	1,600
Total of other assets: 8 talents 50 minai rounded down from	53,600
Total of all assets: 14 talents rounded up from	82,600
Annual net incomes	
Manufacture of knives	3,000
Manufacture of furniture	1,200
Interest on loans	720
Total annual net income	4,920

Source: Created by the author based on Harris (2002, 81–82) and MacDowell (2004, table 1, 20).

necessary expenses, but this seems unlikely because “systematic records were . . . lacking” (Macve 1994, 85–86). It would also therefore, alternatively, be “misleading to give the impression” that Demosthenes worked out the value of his claim “by consulting records of the estates ‘income’ and adding it to the opening ‘capital’ to get the closing ‘capital’” (Macve 1994, 85). Demosthenes expected the guardians to “report the income,” but they “didn’t” (MacDowell 2004, 33). Most likely, he chose the maximum figures consistent with ‘reasonable’ rates of return (around 18% for the knife workshop and 16% for the furniture workshop compared with 12% on the loan and land rents of 8%) in the fourth century BC (Davies 1971, 128; Harris 2002, 81–82). To make his case, Demosthenes referred to “accounts of expenditure . . . on work, ivory for the workmanship and knife-handles and other supplies,” and for “a fee for three slaves . . . in my workshop,” and as he had “no landed property at all” (Davies 1971, 128), there were expenditures “on food for the men” (MacDowell 2004, 27). These accounts would hold the “man in charge, Milyas, our freedman” (MacDowell 2004, 27) accountable for production from the slave workshops. As a semi-capitalist, Demosthenes held his guardians accountable for income, for receipts minus expenses, as a return on his capital, not Milyas, the man in charge of the slaves.

The Helots and the Peculium

The Spartan controlled ‘helots’ and the Roman *peculium*, Finley argues, illustrate the “profound” ambiguity of the notion of slavery, that the “*ineradicable* double aspect of the slave, that he was both a person and a property . . . created *ambiguities*” (1979, 63, emphases added). However, seen in the light of the above accounting evidence and that to follow, these cases present no problem of principle. The helots who worked the Spartans’ estates, who Spartans called ‘slaves,’ Finley argues, “were not free men, but they were also not the property of individual Spartans; and . . . were self-perpetuating,” whose status was therefore ambiguous (1979, 63). Finley, we have seen, rejects the “notion that . . . in the work force, there are three and only three categories, slaves, serfs and free wage-earners. So the helots become serfs” (1979, 65). The helots were serfs in Marx’s sense, but not simply because they “were permitted some kind of family life and some property rights,” or because “the burden of their reproduction fell exclusively on the community itself” (Kyrtates 2002, 144). The issue is the system of control, how the Spartans extracted surplus labor, for what they held helots accountable. From the Greeks’ perspective the helots were ‘slaves,’ even if legally they were ‘public slaves’ that ‘belonged to a city,’ because “what mattered to them was that serfs were dominated by other people” (Kyrtates 2002, 144). Kyrtates calls the helots ‘serfs,’ but the Greeks did not distinguish them from slaves: “In common parlance, all types of serfs were often referred to by

Greeks simply as slaves (*douloi*)” (2002, 144). There are no surviving Spartan accounts, but as the ‘domination’ of the helots meant they were forcibly accountable for production, they were ‘serfs,’ part time ‘slaves,’ despite their denials and revolts.

Slaves could not legally own property, but under Roman law a master could grant a *peculium* for situations where “property (in whatever form) [was] assigned for use, management, and, within limits, disposal to someone who in law lacked the right of property, either a slave or someone in *patria potestas*” (Finley 1979, 64). This allowed the slave to accumulate a *peculium*, money and property ‘owned’ by a slave, which the slave could accumulate and use to buy freedom. From the third century BC, “a substantial part of the urban commercial, financial and industrial activity in Rome, in Italy, and wherever else in the empire Romans were active, was being carried out this way by slaves and freedmen” (Finley 1979, 64). Because a slave with a *peculium* “normally had a free hand in the management and . . . unlike slave bailiffs and managers, those who had a *peculium* were working independently, not only for their owners, but also for themselves” (1979, 64), Finley argued, we could not simply classify those with a *peculium* as a ‘slave.’ However, from Marx’s perspective those who worked unsupervised but were coercively accountable for production were effective slaves. As the purpose of a *peculium* was that these “slaves enriched their owners by working as ‘independent’ craftsmen, shopkeepers and ‘businessmen,’” and Roman law “retained the fiction that the *peculium* was the property and responsibility of the master” (Finley 1998, 150, 170), the master needed accounts.

A master’s legal liability was limited to the amount of the *peculium*, but it was “a purely voluntary grant by the master or *pater* . . . which he was free to withdraw at any time” (Finley 1979, 65). For the *peculium* to exist, “both intent of the master, and de facto control of the slave are necessary. If the one or the other do not exist, there can be no *peculium*. Thus if the master takes a thing away, or expresses his determination that it is not to be *in peculio*, it ceases to be so” (Buckland 1908, 205). In short, “the *peculium* does not alter the slave’s legal character: it implies certain authorities and makes others possible. But he is still a slave, and his faculties are still derivative” (Buckland 1908, 206). The master could punish him as a slave. Furthermore, “if a slave trades with the *peculium* or part of it to the knowledge of his *dominus*, (though not necessarily with his consent,) the *dominus* is liable so far as that part of the *peculium* will go, its proceeds and profits being included” (Buckland 1908, 33). The reality was that the master often sought ‘enrichment’ through the *peculium*, was liable to its creditors to that amount, and the ‘fiction’ that the master owned the *peculium* could become reality. We have no evidence of accounting for *peculium*, but as Buckland said, “all freed slaves may be called on to render an account of what they hold, the importance of making it a condition is that less risk is run,

since he must make the statement and render before he is free” (1908, 494). The fact that the master could grant a slave with a *peculium* “liberty with an exemption from rendering accounts” suggests that rendering accounts was normal, that generally “a slave is to be free on rendering accounts” (Buckland 1908, 189, 472, see also, 496, 613, 690). It therefore seems likely that masters of a *peculium* would typically follow the normal accounting practice of the Roman rich, who we saw generally kept accounts of receipts and payments of money, lists of properties and debts, and held their slaves accountable for (a share of) their production (or ‘proceeds’) and the slave’s accumulation of the *peculium*.

ESTATE MANAGEMENT

On the great private estates of Ptolemaic Egypt, a Hellenistic kingdom, such as the estate in Fayum owned by Apollonius, chief finance minister to Ptolemy II in mid-third century BC, the accounts of his personal agent Zenon “are far more elaborate and varied than earlier ones . . . but the system of accounting remains essentially the same” (de Ste. Croix 1956, 31). The aim, de Ste. Croix (1956, 32) concludes, “was not to enable Apollonius to draw up at regular intervals complete ‘profit and loss accounts’ and ‘balance sheets’ (nothing of this sort appears in antiquity), not to assist him to obtain the highest rate of profit out of his estate.” Rather, it was, as he puts it, “simply to prevent theft, embezzlement, fraudulent conversion and other avoidable losses due to carelessness and the like” (de Ste. Croix 1956, 32). Preventing ‘avoidable losses,’ we will see, meant extracting the maximum work from the slaves, and this had not changed since the third millennium BC. De Ste. Croix found, “no very important advances in method can be traced in the Roman period,” from the late Republic to the Imperial period when “the basic purpose of accounting remains what it always was in antiquity—to expose losses due to fraud or inefficiency on the part of the proprietor’s servants and others” (1956, 33, 34). ‘Losses’ due to ‘fraud’ meant slaves taking the master’s property for themselves, and ‘inefficiency’ meant working less intensively than the master demanded. He said little about accounts, but this mentality is evident in Xenophon’s *Oeconomicus* (circa.350 BC), and in the later widely read Roman works on ‘estate management’ by Cato and Columella who give accounts an important role.

Xenophon

Translated by Cicero, *Oeconomicus* was “the ‘standard’ ancient work in the field” (Cartledge 2002, 157). Xenophon wrote it as a Socratic dialogue, first with Critoboulus, son of Crito, during which Socrates first discusses ‘estate

management' and the meaning of 'wealth,' and then, when Critoboulus asks for details, Socrates recounts a discussion with a gentleman farmer, Ischomachus. According to Finley (1999, 18–19), Xenophon's *Oeconomicus* was "Fundamentally . . . a work of ethics"; "there is not one sentence that expresses an economic principle or offers any economic analysis, nothing on efficiency of production, 'rational choice,' the marketing of crops." Xenophon and other such 'household' literature, according to Finley (1999, 20), following Schumpeter (1954, 9, 54), had no "superstructure" of ideas, that is, Adam Smith's notion of the 'economy' as a set of inter-linked markets. Harris (2002, 72) cites a passage from Plato's *Republic* showing that "Plato was aware that specialization led to greater efficiency and to a general increase in wealth," which contradicts Finley's claim. However, Plato's answer to the question "how will these craftsmen exchange their products," "by buying and selling" in a market, does not necessarily show that Plato understood market economics, as Harris (2002, 72, 73) suggests, because these Athenian craftsmen did not 'buy' to sell as producers, but sold as a producer in order to 'buy' as a consumer. As Harris himself concludes, "When men enter the *agora* [market], they looked at what things cost and nothing else" (2002, 77). In short, they were not semi-capitalists, but consumers.

The ancient Greeks and Romans did not understand modern economics, but as Marx put it, it would be "comical" to imagine that they did not understand their "economy," the idea that they "lived by plunder alone . . . [because] there must always be something at hand for them to seize; the objects of plunder must be continually reproduced" (1996, fn.1, 92). Evidently, "even Greeks and Romans had some process of production, consequently, an economy, which just as much constituted the material basis of their world, as bourgeois economy constitutes that of our modern world" (Marx 1996, fn.1, 92). Reflecting this material basis, the books on estate management, written for the wealthy and their offspring, were not merely "practical works" (Finley, 1999, 18) with no "superstructure" of "principles," no "rational" calculative mentality and social relations appropriate for the forces of production. Xenophon began his dialogue by arguing for the proposition that "there is such a thing as a *science* of household management" (II, 12, emphasis added). His objective was to educate Critoboulus, the representative son of the landed wealthy elite, a rich Athenian at the turn of the fourth and fifth centuries (Cartledge 2002, 157), to make him "a clever man of business" (II, 18). By this Xenophon meant controlling the production of 'wealth,' the aim, defined as the use-values (including money) appropriate to his way of life, and saw the means as predominantly the physically coercive control of his slaves as laboring machines, the key element in his 'political economy' of war and agriculture.

Socrates first has Critoboulus agree that estate management is a “branch of knowledge, like medicine, smithing and carpentry” (I, 1), and it would therefore be possible for a good estate manager to “earn money by managing another man’s estate, just as he might do by building him a house” (I, 4). “Yes, of course; and he would get a good salary if, after taking over an estate, he continued to pay all outgoings, and to increase the estate by showing a balance” (I, 4). By increasing the “balance,” Socrates did not necessarily mean a money balance, as he has Critoboulus agree that the “estate” that is increased is “everything a man possesses” (I, 5) that is “profitable,” by which he meant is useful to him:

“You seem to use the word property of whatever is profitable to its owner.”

“Certainly; but what is harmful I regard as loss rather than wealth.”

“Yes, and consequently if a man buys a horse and doesn’t know how to manage it, and so keeps on getting thrown and injuring himself by trying to ride it, the horse is not wealth to him, I presume?”

“No, if we assume that wealth is a good thing.”

“It follows that land is not wealth either to a man who works it in such a way that his work results in loss.”

“To be sure: even land is not wealth if it makes us starve instead of supporting us.” (I, 7–9)

It followed that to maximize his ‘wealth’ the estate owner should ‘sell’ everything that had no use for him:

“That is to say, the same things are wealth and not wealth, according as one understands or does not understand how to use them. A flute, for example, is wealth to one who is competent to play it, but to an incompetent person it is no better than useless stones.”

“True unless he sells it.”

“We now see that to persons who don’t understand its use, a flute is wealth if they sell it, but not wealth if they keep it instead of selling.” (I, 10–11)

‘Selling,’ however, could and probably did mean barter because in ancient Greece, “which was mainly agricultural, not commercial, use-value predominated over exchange-value” (Kyrtates 2002, 151):

“Yes, commented Socrates, provided he knows how to sell; but again, in case he sells it for something he doesn’t know how to use, even then the sale doesn’t convert it into wealth, according to you.”

“You imply, Socrates, that even money isn’t wealth to one who doesn’t know how to use it.” (I, 12)

By Socrates' definition a friend was part of a man's estate if they were 'profitable' to him, and even an enemy is 'useful' if he can be used profitably, which made war a 'profitable' pursuit:

"it follows from what you say that enemies too are wealth to anyone who can derive profit from them."

"Well, that is my opinion."

"Consequently it is the business of a good estate manager to know how to deal with enemies so as to derive profit from them too."

"Most decidedly."

"In fact, Critobulus, you cannot fail to notice that many private persons have been indebted to war for the increase of their estates, and many princes too." (I, 15)

Socrates explained the interrelated 'economics' of war and farming, how they go together, using the king of Persia as his model: "Need we be ashamed of imitating the king of the Persians? For they say that he pays close attention to husbandry and the art of war, holding that these are two of the noblest and most necessary pursuits" (IV, 4). He explained all the benefits of agriculture for war, and used military control as his model of estate management. "Even the wealthiest," Socrates argued, "cannot hold aloof from husbandry. For the pursuit of it is in some sense a luxury as well as a means of increasing one's estate and of training the body in all that a free man should be able to do" (IV, 25). Agriculture "supplies good things in abundance," but "she suffers them not to be won without toil, but accustoms men to endure winter's cold and summer's heat. She gives increased strength through exercise to the men that labour with their own hands, and hardens the overseers of the work by rousing them early and forcing them to move about briskly" (V, 4). It provided horses for cavalry, and hunting for their training, which helped in controlling the slaves by carrying "the overseer early to the scene of his duties and enabling him to leave it late" (V, 6). All in all, "To me indeed it seems strange, if any free man has come by a possession pleasanter than this, or has found out an occupation pleasanter than this or more useful for winning a livelihood" (V, 11). Agriculture and war were, Socrates emphasized, symbiotic in the process of control:

Moreover, husbandry helps to train men for corporate effort. For men are essential to an expedition against an enemy, and the cultivation of the soil demands the aid of men. Therefore nobody can be a good farmer unless he makes his labourers both eager and obedient; and the captain who leads men against an enemy must contrive to secure the same results by rewarding those who act as brave men should act and punishing the disobedient. And it is no less necessary for a farmer to encourage his labourers often, than for a general to encourage his

men. And slaves need the stimulus of good hopes no less, nay, even more than free men, to make them steadfast. It has been nobly said that husbandry is the mother and nurse of the other arts. (V, 14–17; see also XI, 19)

Critoboulus agreed, “since after hearing what you have said so far, I seem even now to discern rather more clearly than before what I must do to earn my living” (VI, 1), and Socrates had him “recapitulate” the argument:

. . . estate management is the name of a branch of knowledge, and this knowledge appeared to be that by which men can increase estates, and an estate appeared to be identical with the total of one’s property, and we said that property is that which is useful for supplying a livelihood, and useful things turned out to be all those things that one knows how to use. . . . We came to the conclusion that for a gentleman the best occupation and the best science is husbandry, from which men obtain what is necessary to them. For this occupation seemed to be the easiest to learn and the pleasantest . . . (VII, 4, 8–9)

Having convinced Critoboulus that he should devote himself to the management of his estate, Socrates recounted his discussion with Ischomachus who described to Socrates the methods he used to educate his wife in housekeeping, in ruling and training his slaves, and gives some advice on farming techniques. Socrates has already established that one vital element to the management of a successful estate was a ‘well-trained’ wife, the estate owner’s “partner,” a division of managerial labor between the control of income and consumption:

I think that the wife who is a good partner in the household contributes just as much as her husband to its good; because the incomings for the most part are the result of the husband’s exertions, but the outgoings are controlled mostly by the wife’s dispensation. If both do their part well, the estate is increased; if they act incompetently, it is diminished. (Xenophon, III, 15)

Ischomachus explained to Socrates that he trained his wife (VII, 4) having explained to her, “I am paying into the common stock all that I have, and you have put in all that you brought with you. And we are not to reckon up which of us has actually contributed the greater amount, but we should know of a surety that the one who proves the better partner makes the more valuable contribution” (VII, 13). The master and mistress were “a perfect partnership in mutual service” (VII, 19) controlling the outer and inner spheres of their life. The mistress managed the household:

. . . your duty will be to remain indoors and send out those servants whose work is outside, and superintend those who are to work indoors, and to receive the

incomings, and distribute so much of them as must be spent, and watch over so much as is to be kept in store, and take care that the sum laid by for a year be not spent in a month. And when wool is brought to you, you must see that cloaks are made for those that want them. You must see too that the dry corn is in good condition for making food. One of the duties that fall to you, however, will perhaps seem rather thankless: you will have to see that any servant who is ill is cared for. (VII, 35–37)

For the man, the primary task was to train, instruct, and supervise the estate's bailiff(s). "If you want to make men fit to take charge, you must supervise their work and examine it, and be ready to reward work well carried through, and not shrink from punishing carelessness as it deserves" (VII, 19). Ischomachus told the story of the king of Persia who bought a horse and asked an expert, "what would fatten a horse soonest, 'The master's eye,' replied the man. I think we may apply the answer generally, Socrates, and say that the master's eye in the main does the good and worthy work" (XII, 20). Like the master, the role of the bailiff was to "rule": to "be a perfect bailiff . . . he must learn to rule the labourers" (VIII, 3). To rule the bailiff, and teach him how to rule the laboring slaves, the fundamental principle Ischomachus applied was punishment and reward, the same principle he applied to training animals:

Well now, Socrates, other creatures learn obedience in two ways by being punished when they try to disobey, and by being rewarded when they are eager to serve you. Colts, for example, learn to obey the horsebreaker by getting something they like when they are obedient, and suffering inconvenience when they are disobedient, until they carry out the horsebreaker's intentions. Puppies, again, are much inferior to men in intelligence and power of expression; and yet they learn to run in circles and turn somersaults and do many other tricks in the same way; for when they obey they get something that they want, and when they are careless, they are punished. And men can be made more obedient by word of mouth merely, by being shown that it is good for them to obey. But in dealing with slaves the training thought suitable for wild animals is also a very effective way of teaching obedience; for you will do much with them by filling their bellies with the food they hanker after. Those of an ambitious disposition are also spurred on by praise, some natures being hungry for praise as others for meat and drink. (XIII, 6–10)

The bailiff could also reward and punish by the clothing he allocated (XIII, 10). Xenophon's 'balanced' reward and punishment approach was, however, evidently not universally followed because, as Socrates said, "in some households nearly all the servants are in fetters and yet continually try to run away, whereas in others they are under no restraint and are willing to work and to stay at their posts" (III, 4). Only "excellent" leaders could get men to obey

willingly: “I think you have one clear proof of a ruler’s excellence, when men obey him willingly and choose to stand by him in moments of danger” (IV, 19). While this was desirable, but perhaps not often attainable, a necessary quality of a bailiff was ‘honesty,’ which was not easy to teach except by pointing to the harsh punishments the master could apply to transgressors, particularly if they were slaves, as they often were:

. . . ‘Of course, Socrates,’ returned Ischomachus, ‘he must be honest and not touch his master’s property. For if the man who handles the crops dares to make away with them, and doesn’t leave enough to give a profit on the undertaking, what good can come of farming under his management’?

“‘Then do you take it on yourself to teach this kind of justice too?’”

‘Certainly: I don’t find, however, that all readily pay heed to this lesson. Nevertheless I guide the servants into the path of justice with the aid of maxims drawn from the laws of Draco and Solon. For it seems to me that these famous men enacted many of their laws with an eye on this particular kind of justice. For it is written: “thieves shall be fined for their thefts” and “anyone guilty of attempt shall be imprisoned if taken in the act, and put to death.” The object of these enactments was clearly to make covetousness unprofitable to the offender. By applying some of these clauses and other enactments found in the Persian king’s code, I try to make my servants upright in the matters that pass through their hands’ . . . (XIV, 3–6)

Socrates asked, “And when you want a bailiff, Ischomachus, do you look out for a man qualified for such a post, and then try to buy him as when you want a builder, I feel sure you inquire for a qualified man and try to get him or do you train your bailiff’s yourself?” (XII, 3), implying the bailiff was a slave. The advantage of a slave bailiff was that “servants . . . carry, tend and guard their master’s property, and only in this sense have a share in it; they have no right to use anything except by the owner’s leave; but everything belongs to the master, to use it as he will” (IX, 16), who could apply his own justice.⁴ Wealthy owners could trust their business affairs to slave agents because “if the slave failed to obey, his master did not need to appeal to the court to enforce laws about agency . . . : the master simply beat or tortured his slave until he performed his duty as an agent” (Harris 2002, 83).⁵ Socrates summed up Ischomachus’ ideal bailiff as one who accepts the master’s interests as his own, who rules the slaves, and is trained and instructed to “ensure that every piece of work done shall add to the profits”:

Well, well, I won’t go on to ask whether anything more is wanting to your man, after you have implanted in him a desire for your prosperity and have made him also careful to see that you achieve it, and have obtained for him, besides, the knowledge needful to ensure that every piece of work done shall add to the

profits, and, further, have made him capable of ruling, and when, besides all this, he takes as much delight in producing heavy crops for you in due season as you would take if you did the work yourself. For it seems to me that a man like that would make a very valuable bailiff. (XV, 1)

Such a man would be an automaton with his master's eyes, but one whose aim was not to maximize the estate's total 'profit,' the net result in money, but that 'every piece of work done' should be 'profitable,' produce something useful for the master. The key to success therefore was the owner holding the bailiff accountable in detail for extracting the maximum useful production from the laboring machine. "'Farming,' he added, may result in profit or in loss; it makes a great difference to the result, even when many laborers are employed, whether the farmer takes care that the men are working during the working hours or is careless about it" (XX, 16). Just like the military commander, Ischomachus concluded,

So too in private industries, the man in authority bailiff or manager who can make the workers keen, industrious and persevering he is the man who gives a lift to the business and swells the surplus. But, Socrates, if the appearance of the master in the field, of the man who has the fullest power to punish the bad and reward the strenuous workmen, makes no striking impression on the men at work, I for one cannot envy him. (XXI, 9)

Xenophon assumed that settling accounts was necessary when money was involved, "O yes; when several are jointly interested in money, it is pleasant to have no disagreement in going over the accounts" (VI, 3). He implied an important role for accounts in his depiction of the king of Persia's 'political economy' of war and agriculture (V, 6–8), demanding "reports" from "trusted agents" on the numbers and conditions of soldiers and the stocks of trees, crops, and so on, which are unlikely to have been only verbal. However, Xenophon said nothing explicitly about the role of accounts in estate management. By contrast, possibly because the greatly increased wealth of the Roman upper class made the need pressing, in the *De re rustica* (On Agriculture) written in 160 BC, the first such book in Latin, Cato did discuss the important role of accounts in estate management, making the slave owner's calculative mentality explicit, showing us its phenomenal form.

Marcus Porcius Cato

During the agricultural boom of the last two centuries of the Republic and the first century AD, the wealthy invested in land and became wealthier using the 'villa system,' intensively cultivated estates using primarily slave labor, usually near the coast, producing wine and other cash crops, to supply

Rome and other Italian cities (Kehoe 2006, 300). Individual estates (farms) were compact, not more than a few hundred hectares, but “The wealthiest landowners might possess numerous compact estates, often located in diverse regions within Italy. This pattern of ownership lessened the landowners’ exposure to the substantial risk posed by the irregularity of rainfall in Roman agriculture” (Kehoe 2006, 300), but increased the managerial problem.

Greek writers strongly influenced the Roman agriculturalists (de Ste. Croix 1981, 234–35). Like Xenophon, Cato stressed that the duty of the owner of an estate was to hold the overseer accountable for the maximum ‘profitable’ work. He advised the owner to visit regularly to observe the results of work, that to deal with “excuses” he should calculate for himself how long work should take, and should require frequent accounts of the “results obtained” compared to “the program of work” (Cato 1910, 23) from his overseer. On the landowner’s arrival at his estate, Cato advised, “you should make the rounds of the farm the same day”:

When you have observed how the field work has progressed, what things have been done, and what remains undone, you should summon your overseer the next day and should call for a report of what work has been done in good season and why it has not been possible to complete the rest, and what wine and corn and other crops have been gathered. When you are advised on these points you should make your own calculation of the time necessary for the work, if there does not appear to you to have been enough accomplished. The overseer will report that he himself has worked diligently, but that some slaves have been sick and others truant, the weather has been bad, and that it has been necessary to work the public roads. When he has given these and many other excuses, you should recall to his attention the program of work which you had laid out for him on your last visit and compare it with the results attained. (Cato 1910, 22–23)

We could say that these comments mean, “Control of costs was identified as a key concern . . . by Cato the Elder,” that “the text makes it clear that the overseer was accountable to the master for the work carried out with particular emphasis on the economy of the operations” (Dobie and Oldroyd 2019, 4). However, without qualification, employing the modern terminology of ‘costs’ and ‘economy,’ which have capitalist connotations, is not helpful in understanding Cato’s mentality. It is more helpful, what follows argues, to recognize that Cato’s accounting bears a strong family resemblance to, for example, ancient Egyptian “Accounting for temple activities [that] identified work targets, monitored work progress, and dealt with payment to appropriate individuals in the form of rations or wages” (Carmona and Ezzamel 2009, 91). Comparing output against targets shows that the major ‘cost’ or ‘loss’ slave masters were keen to avoid was lost production because for the

Mesopotamians, Egyptians, Greeks, and Romans, and so on, the major outgoing was rations for labor, which continued regardless of production. Like the ancients, we will see, Cato's aim was to hold the overseer and slaves accountable for maximum production and minimum consumption or waste of use-values, including in his case coin, not the minimum 'cost' of production, because he thought of his slaves as 'instruments' requiring largely fixed outgoings, not as fixed capital requiring depreciation or amortization for its calculation.

Cato advised the owner to visit the estate regularly to motivate the overseer with the anticipation of judgment, and therefore to build his house "well in a good situation and on good property, and [to] furnish the house suitably for country life" because then "you will come there more often and more willingly. The farm will then be better, fewer mistakes will be made, and you will get larger crops. The face of the master is good for the land" (Cato 1910, 29–30), his version of Xenophon's "master's eye." To hold the overseer accountable for the day-to-day work it was necessary that "orders should be given (and take care that they are in writing) for all work which is next desired to have done" (Cato 1910, 25). The owner should require his slave steward (*villicus*) to "state his accounts with his master frequently" (Cato 1910, 34–35), that is, examine the cash accounts and the inventories of grain, fodder, wine and oil, every time he visited the estate (de Ste. Croix 1956, 44–45). Having checked the work, "The accounts of money, supplies and provisions should then be considered. The overseer should report what wine and oil has been sold, what price he got, what is on hand, and what remains for sale" (Cato 1910, 25). Requiring accounts of money (coin), supplies and provisions, imposed accountability for the income and outgo of use values, and requiring the overseer to report sales of wine and oil required accountability for their production, measured in money, not for the capitalists' 'cost' of production, or 'profit' as their difference.

Cato advised, "He [the overseer] should not sell anything without the knowledge of the master" (1910, 36), who should also agree all the required purchases, and advised selling off everything that was superfluous on the farm, making no distinction between slaves and animals: "You should go over the cattle and determine what is to be sold. You should sell the oil, if you can get your price, the surplus wine and corn, the old cattle, the worn out oxen, and the cull sheep, the wool and the hides, the old and sick slaves, and if any thing else is superfluous you should sell that" (Cato 1910, 25–26). The aim was producing and accumulating use values, including coin, and for this "The appetite of the good farmer is to sell, not to buy" (Cato 1910, 26). Slaves were to Cato an instrument of production, just one element of "stocking," for example, an olive farm of 160 acres. It "ought to be stocked as follows: an overseer, a house keeper, five laborers, three ox drivers, one swineherd, one

ass driver, one shepherd; in all thirteen hands: three pair of oxen, three asses with pack saddles, to haul out the manure, one other ass, and one hundred sheep" (Cato 1910, 32–33). The "hands," all slaves, in short, were laboring machines, just like the cattle and asses.

Marcus Terentius Varro (BC 116–28) agreed in his *Rerum rusticarum libri III* (*Agricultural Topics in Three Books*), written in BC 36, that the aims of agriculture were 'utility' and 'pleasure,' but that 'utility' was more important: "Utility seeks profit, pleasure what is agreeable. What is useful plays a more important part than what is agreeable" (Varro 1912, 21). Varro agreed with Cato, "The owner should have an inventory of all the implements and furniture of the farm—one copy at the farm, the other in town" (1912, 62), and like Cato he made no qualitative distinction between slaves and other means of production, which were subdivisions of "farm equipment." Marx noted in *Grundrisse*, "According to Varro, the slave an *instrumentum vocale*, the animal *instrumentum semi-mutum*, the plough *instrumentum mutum*" (Marx 1986a). Under the heading of "Farm-Equipment—Slaves," Varro wrote,

I shall now go on to speak of the instruments of agriculture. These are divided by some into two parts, namely (i) men who work, and (2) men's tools without which they cannot work; others divide them into three classes, namely (i) the class gifted with speech, (2) that which has inarticulate voice, and (3) that which is voiceless. To the first belong slaves, to the second oxen, and to the third wagons. (Varro 1912, 49–50)

Categorizing slaves as instruments of agriculture, Anderson argues, reflected the legal reality that "slavery represented the most radical rural degradation of labour imaginable—the conversion of men themselves into inert means of production by their deprivation of every social right and their legal assimilation to beasts of burden" (1974, 24, emphasis added). From this perspective it is true, as he says, "in Roman [legal] theory, the agricultural slave was designated an *instrumentum vocale*, the speaking tool, one grade away from the livestock that constituted an *instrumentum semi-vocale*, and two from the implement which was an *instrumentum mutum*" (Anderson 1974, 25). However, according to Cato, Varro and Marx's economic category, men, tools and beasts were all laboring machines, were all the same "grade," all fell under the same heading, as they did in Roman accounts.

The first duty of the overseer for Cato was to "maintain discipline" among the slaves, to "settle all quarrels among the hands; if any one is at fault he should administer the punishment" (1910, 33). The overseer "should keep the hands busy, and should see that they do what the master ordered" (Cato 1910, 33, 34). To manage his stock, "First up in the morning, he should be

the last to go to bed at night; and before he does, he should see that the farm gates are closed [i.e. locked], and that each of the hands is in own bed, that the stock have been fed” (Cato 1910, 36–37). When Cato was writing, many “agricultural slaves, called *vinciti*, were kept in chains and housed in slave-barracks, or rather jails, called *ergastula*. These were dimly lit buildings that provided slaves with basic shelter and few comforts, if any. At the same time, slaves were subject to violent punishment if they shirked their labor” (Kehoe 2006, 301).

Cato urged the proprietor to ensure that the overseer minimizes the slave’s consumption, cutting rations when on light work, and to “Remember that while work may stop, expenses still go on” (1910, 24, 37, 39–40). This, Cato’s only use of the word ‘expenses,’ meant the slaves would still need their rations even “When it rains” and they could not work in the fields (1910, 37), eating into the owner’s wealth. To minimize stealing, “He should take care that no one on the place is in want, or lacks food or drink”; he “can afford to be generous, for he will thus more easily prevent picking and stealing” (Cato 1910, 34), and would create a potent source of punishment and rewards. As Col. John Taylor, an early nineteenth century American slave owner put it, “One great value of establishing a comfortable diet for slaves is its convenience as an instrument of reward and punishment” (Harrison 1910, fn.1, 34). Varro added that the overseer should be older than the slaves were, should read and write, lead by example and give rewards, but physical punishment remained the backstop. “Nor must an overseer be allowed to enforce his orders by the whip rather than by words, provided that the same result can be obtained equally well by the latter” (Varro 1912, 51).

Marx (1998, fn.42a, 773) noted, “Adam Smith emphasises how, in his time (and this applies also to the plantations in tropical and subtropical countries in our own day), rent and profit were not yet divorced from one another, for the landlord was simultaneously a capitalist, just as Cato, for instance, was on his estates.” Did calling Cato “a capitalist” contradict Marx’s denial that the capitalist mode of production existed in the ancient world? Fox-Genovese and Genovese think it “make[s] no sense” (1985, 20). Marx (1996, fn.1, 178) certainly criticized historians who claimed, like some today (e.g., Konstan 1975, 155–56), “in the ancient world capital was fully developed,” that Roman slave estates were ‘capitalist,’ but he did not argue that Cato was a modern capitalist. Marx continued: “But this separation is precisely the *prerequisite* for the capitalist mode of production, to whose conception the basis of slavery moreover stands in direct contradiction” (1998, fn.42a, 773, emphasis added). He emphasized, “rent and profit are *not yet* divorced,” that Cato was “simultaneously” a landlord of a slave estate and “a capitalist” who sold his farm surpluses, just like a merchant capitalist sold his stock. Rather than a modern capitalist, Marx saw Cato as a hoarder, the close relative of the merchant:

“a hoarder of money must sell as much as possible and buy as little as possible, as even old Cato preached—*patrem familias vendacem, non emacem esse*. [The head of the family should be eager to sell, not eager to buy . . .]” (Marx 1971, 128). For Cato himself, “The pursuits of commerce would be as admirable as they are profitable if they were not subject to so great risks,” but commerce was less “esteemed” than farming from which “spring the best citizens, the staunchest soldiers” (1910, 17, 18). Cato’s political economy was still, as it had been in ancient Greece, agriculture and war.

Marx’s (1998, 773) comment on Cato was a footnote to his conclusion that Carthage and Rome showed “most analogy with the capitalist rural economy,” but did not “truly correspond . . . to the capitalist mode of exploitation,” just as Cato was an ancient slave owner who ran his estate for a surplus that, from the capitalist viewpoint, included “rent and profit.” Instead, Cato’s estates showed “more similarity to a plantation economy” (Marx 1998, 773), such as the American South where the merchant capitalist mentality prevailed (Bryer 2012), than to capitalism. Rather than capitalism, adding the merchant capitalist’s mentality to a slave owner’s (or feudal lord’s) meant, “the civilised horrors of overwork are grafted on the barbarian horrors of slavery, serfdom, etc” (Marx 1996, 244). Marx’s view, in short, was that “in the ancient world, the growth of trade led to slavery; in the modern world it led to capitalism” (Rigby 2004, 496).

There were concentrations of slave labor in mass production workshops in the Republic exporting large quantities of Roman fine-ware, and in the first century BC slave production of wine and olive oil was the foundation of a large export trade (Banaji 2011, 116). Banaji (2011, 116) argues, “It would make more sense to call these economic regimes ‘slave-capitalism,’ following Max Weber and Otto Hintze, than anything as vague as a ‘slave-mode of production,’ since it is far from obvious that there is a commonly-agreed definition of the latter.” However, according to Marx’s definition of a slave as a laboring-machine, Cato’s accounts are consistent with the slave owner mentality, and show that, whereas his market orientation is consistent with him also being a merchant capitalist, that is, a semi-capitalist, he was not a modern capitalist.

Lucius Junius Moderatus Columella

Columella’s *De re Rustica* from around AD 60, influenced by Cato and Varro, included a calculation that, he concluded, showed wine production would “enrich” the proprietor (3.3.7-15). Mickwitz (1937), de Ste. Croix (1956), Finley (1973), Duncan-Jones (1974) and others, see Columella’s calculation as evidence of ancient ‘primitiveness,’ whereas Carandini (1983) defends its rationality in a two-sector economy with a market sector for

Table 4.4 Columella's Calculation

	<i>HS [sestertii]</i>
Purchase price of land	7,000
Purchase price of slave vine dresser	8,000
Preparation outlays	14,000

Initial investment	29,000
Two years interest @ 6% [29,000 x .06 x 2]	3,480

Total investment	32,480
	=====
Annual sales from vineyard	2,100
Annual interest @ 6% on 32,480	1,950

Source: Created by the author based on Columella (1951, 259, 261).

selling high quality wines, and a traditional subsistence sector. However, the calculation, shown in table 4.4, what follows argues, reveals Columella's slave owner mentality, that by "enrich" he meant produce more use values, measured in coin.

To calculate the initial investment Columella added together the "outlay" or "costs" for land, the slave vinedresser, and preparation, which had a "total cost" of HS 29,000 (1951a, 259), "cost" meaning simply the outlay of coins for use values. He added a simple interest charge on the initial expenditures at 6% for two years, until the vines were producing, and then compared his estimate of the annual sales of wine from the vineyard of HS 2,100 (Columella 1951a, 261) to the annual interest of HS 1,950 he would earn from loaning the total investment of HS 32,480 at 6%. Investing in "viticulture will *enrich* the proprietor," Columella concluded (1951a, 253, emphasis added), but the question is what this meant. Adding foregone interest as part of the investment, and comparing an income stream with foregone annual interest, is not necessarily evidence of a "fairly sophisticated," that is, an almost modern capitalist mentality that would have charged compound interest (cf. Macve 1994, fn.39, 69). Rather, it more likely reflected the money capitalist's mentality, which for Marx was the oldest form of capital, requiring only the existence of money and trade (1998, 588–91). If a borrower at simple interest does not pay interest for two years, like Columella, the lender will add the interest to the debt. Alternatively, what follows argues, we can interpret Columella's 'interest' charge as the gross revenue given up in making the investment until the vines were productive, and his annual interest on HS 32,480 as the gross revenue sacrificed for continuing with the vineyard, which he compared with its annual sales, the money value of its production. Thus, Columella claimed, the owner, "like a careful accountant, he sees, when his calculations are made, that this kind of husbandry is of the greatest advantage

to his estate" (1951a, 259), implying that the "careful accountant" mentality that underlay them was normal or generally accepted.

Columella evidently did not have a capitalist's mentality because, as de Ste. Croix (1956, 38) argued, agreeing with Mickwitz (1937, 585–86), he "takes into account, in making his calculations, nothing but the cost of the land, of the slave vine-dresser, and of the vines and stakes and setting them out and interest at 6 per cent on this expenditure." Furthermore, Columella "ignores the amortisation of the vine-dresser, the cost of maintaining him, and of fertilisation, the hiring of casual labour, and all other current expense" (de Ste. Croix 1956, 38). Finley (1973, 117), following Duncan-Jones (1974), also criticized Columella because "he forgets the farm buildings, equipment, ancillary land (for cereal grains for example)."⁶ To Finley (1999, 117) the calculation "was merely a perfunctory desk exercise," which showed that "the landowners worked from crude empirical knowledge alone. . . . Investment in land, in short, was never in antiquity a matter of systematic calculation policy, of what Weber called economic rationality."⁷ Columella was not a modern capitalist, Finley concluded, because he gave us "faulty . . . calculations," which was typical: "Graeco-Roman bookkeeping was exceedingly rudimentary, essentially restricted to a listing of receipts and expenditures, from which it was impossible to determine the profitability or otherwise of any single activity in a polyculture" (1999, 181).

From Marx's perspective, however, rather than faulty calculations, Columella revealed his slave-owner mentality by ignoring "just those items which the ancient accounting system ignored" (de Ste. Croix 1956, 38). Looking at his accounts Columella would not have found cash entries for the 'costs' of maintaining the slave, fertilizer, paying casual labor, and other expenses (Macve 1994, 67). Columella said little about hired workers, but may reasonably have assumed that other slaves on the estate could cope with the harvest, particularly if it grew different varieties of grapes or other crops that ripened at different times, and so on (Yeo 1952, 461). As expenses would mostly be in kind, Columella's calculation could presume that the slaves would produce their own food, and any food for paying casual labor, and to meet the 'expenses' (Carandini 1983, 194–95), and also the necessary means of production, which was generally the case, or the money to acquire them. It is possible that he included the cost of tools, etc., that is, the 'dowry' of the vineyard, in the initial planting costs (Carandini 1983, 191–94). However, as Varro noted, "Concerning the other mute instruments of production—baskets, casks, etc., the following rules are to be laid down: nothing should be bought which can be grown on the farm and made by the household" (1912, 60). Buying vine props, Macve (1994, fn.36) argues, contradicts this rule, but accepts that Columella only "implies that good planning can reduce, if not eliminate, the need to go outside and purchase the 'dowry' for the vines."

Macve is “not entirely clear why even the land for the vineyard would need to be purchased if the owner already had a sufficiently large estate” (1994, fn.36, 68), but the question for Columella was whether vineyards would “enrich the proprietor,” and he therefore started by discussing

. . . the principle that we would have carefully weighed and investigated in advance whether viticulture will enrich the proprietor; for it is well-nigh purposeless as yet to give directions for planting vines, as long as the prior question is not yet affirmatively answered—whether vines should be kept at all. And most people would be doubtful on this point, to such an extent that many would avoid and dread such an ordering of their land, and would consider it preferable to own meadows and pastures, or woodland for cutting. (Columella 1951a, 253)

Carandini (1983) defended Columella’s ‘rationality’ by drawing on Kula’s (1976) notion of a ‘bisectoral’ economy, a ‘capitalist’ market or monetary sector, and a ‘traditional’ subsistence sector. Like Poland in the sixteenth to eighteenth centuries, Carandini (1983, 183) argued, in first century Italy “everything produced on the estate appeared to be as free as the air we breathe. This, according to Kula, is . . . valid for . . . all precapitalist conditions.” However, as Finley (1999, 180) pointed out, “it is obvious that . . . [Kula’s] account refers to feudal societies alone, in which the two sectors of the economy, one producing goods for subsistence only, the other producing for the market, were both parts of *a single domain belonging to the lord in which there were no labour costs in the market-producing sector.*” By contrast, Columella’s “vinedressers were slaves, who had to be maintained” (Finley 1999, 181). In other words, although Finley did not draw this conclusion, the social relations and calculative mentalities of feudalism that imposed serfdom to extract surplus labor as rent, and the ancient world that pursued production, were qualitatively different.

Carandini (1983, 195) is right that in Columella’s calculation of the ‘profitability’ of a vineyard there are “items quite properly absent,” but not because “they belong in quite another set of books, that of the natural sector,” which forces him to the non-conclusion that “Columella cannot be defined as a non-capitalist, nor yet as a capitalist.” As Macve (1994, 79) pointed out, “it is clear that ancient accounts in fact classify items into monetary and non-monetary in a way that does not neatly correspond with Carandini’s sectors of the economy.” Instead, given Columella’s focus on use values, including coin, what mattered for the accounts was “whether or not money has actually changed hands; until then the wine produced for sale would be accounted for purely in physical terms, in the same way as, say, corn produced in and for the natural sector” (Macve 1994, 79). Columella kept one ‘set of books,’ aimed at controlling the laboring machines

to produce the owner's way of life, actual and potential use values, including money, and Carandini is right, his calculations showed the vineyard would add to that (1983, 191). They are consistent with Marx's concept of the slave owner's mentality, with producing a way of life, seeing labor *as* production, not a *cost* of production. Columella therefore does not count the cost of the estate, the depreciation of its buildings, the cost of the land necessary for the subsistence of the slaves, the means of production, operating costs, or the amortization of his slaves.

Should Columella have 'amortized' his slave? From the money capitalist's perspective a slave is a *monetary* asset that earns its owner a rate of interest and recovers the initial investment through 'amortization' over a period of years, just as the industrial capitalist recognizes the recovery of the cost of machines by depreciation. However, as Marx pointed out, the money capitalist view of a slave, the equivalent of the industrial capitalist's "fixed capital," appeared where the slave was put to "industrial employment" (usually mining), or when the owner leased the slave to another master (e.g., Finley 1963, 72; 1979, 72, 73), which would explain why Columella ignored the "amortisation" of his slave:

In the slave system, the money-capital invested in the purchase of labour-power plays the role of the money-form of the fixed capital, which is but gradually replaced as the active period of the slave's life expires. Among the Athenians therefore, the gain realised by a slave owner directly through the industrial employment of his slave, or indirectly by hiring him out to other industrial employers (e.g., for mining), was regarded merely as interest (plus amortisation) on the advanced money-capital, just as the industrial capitalist under capitalist production places a portion of the surplus-value plus the depreciation of his fixed capital to the account of interest and replacement of his fixed capital. (Marx 1997, 478)

The slave owner, in other words, buys the capitalized money value of the slave's labor power, paying the PV of its earning stream: "The price paid for a slave is nothing but the anticipated and capitalised surplus-value or profit to be wrung out of the slave" (Marx 1998, 795). By "surplus-value or profit," Marx clarified, he meant the "profit, surplus labour . . . extracted from him" (1998, 795). By contrast, Columella the slave owner used simple not compound interest. Unlike in capitalism, where the capitalist buys the worker's labor power for a limited period, the slave owner buys the slave's life. By comparing the income from the vineyard with interest on the initial capital, Columella recognized the money lending option and the slave as a perpetual asset who would reproduce (see below). As he put it, "And if the husbandman would enter this amount as a debt against his vineyards just as a moneylender does with a debtor, so that the owner may realize the

forementioned six per cent, interest on that total as a perpetual annuity, he should take in 1950 *sesterces* every year” (Columella 1951a, 259).

The difference was that Columella did not lease out or employ his slave in ‘industry’ (mining) and therefore ignored amortization because he expected the slave working for him in agriculture to participate in breeding and training a successor, which was common (Carandini 1983, 194; Yeo 1952, 477), whereas an industrial slave probably would not. As Carandini put it, slaves were “condemned to the mines” (1983, 190). Such slaves were “replaceable, disposable, infinitely exploitable chattel slave labour, as we might have predicted from the appalling conditions of work” (Cartledge 2002, 164). “Effort-intensive work, such as mining, quarrying and building make heavy use of pain and other penalties” (Jameson 2002, 172). Marx (1996, 244) noted, “in antiquity over-work becomes horrible only when the object is to obtain exchange-value in its specific independent money-form; in the production of gold and silver. Compulsory working to death is here the recognised form of over-work. Only read Diodorus Siculus.”

Columella presumed slave breeding on the estate when he recommended lighter fieldwork for women with sons, and giving them freedom if they produced more than three (1951, 95). Scheidel calculates, “natural reproduction made a greater contribution to the Roman slave supply than child exposure, warfare, and the slave trade taken together and was in all probability several times as important as any other single source” (1997, 156). Harris thinks this is exaggerated, but accepts that slave reproduction accounted for “large numbers” (1999, 62). Ending the republican wars of conquest, Kehoe concludes, “reduced the importation of large numbers of slaves into Italy. As a consequence, agricultural slaves were increasingly bred on Roman estates” (2006, 301).

It is therefore not the case that “the trouble is of course that, unlike the interest on the loan with which he compares it (3.3.9) the annual income of the vineyard will not go on forever”; that “the explanation for his poor calculations must . . . be that he did not give the matter a great deal of thought” (Macve 1994, 66). Macve is clearly right that the two-year “delay (together with the later inclusion of non-annual sales of nursery plants) seriously complicates the calculations of profitability,” the money capitalists’ return on investment, “based on accounting profits” (1994, 69). Because the assets would deteriorate, the slave would get old and die, and so on the vineyard would not continue “forever” or, “equivalently,” “at the end of their life the assets initially purchased cannot be sold for the HS 32,480 originally invested, whereas the capital of the loan would be repaid” (Macve 1994, fn.27, 66). In the same vein, Macve (1994, 66) criticizes Columella because he made “no explicit allowance . . . for the difference in the risks that might be associated with the two forms of investment.” While on the right lines by asking whether the “return is better than the interest one could get elsewhere,” Columella

should, Macve suggests, have thought his investment problem through and calculated the vineyard's internal rate of return (or its NPV), which Macve (1994, fn.39, 68; fn.43) does for various scenarios. While Macve's criticisms confirm that Columella did not have the modern money capitalist's mentality, they do not prove that his calculations were "poor." Because slaves reproduced and produced their own means of subsistence and means of production, were a perpetual asset, the vineyard also provided the owner with income in 'perpetuity,' which Columella evidently saw as relatively riskless, like a 'perpetual' loan in reality with some default risk. His annual sales estimate was cautious: he assumed "that the vineyards are of the very worst sort," and "the lowest market price" for the wine (Columella 1951a, 261). Columella did therefore make explicit allowance for risk by seeing the options as equally relatively riskless. Comparing the sales of the vineyard with the interest from a loan is also consistent the slave owner's notion of income as production (sales) because a money capitalist (e.g., a banker) would account for 'interest' as 'income' (sales).

If Columella had seen the need for external expenses he might well, like Demosthenes, have calculated the vineyard's 'net income,' but even if he had it is unlikely that he would have held his overseer accountable for it. Having advised the proprietor to acquire an estate near a town and plant a vineyard, Columella advised him how to manage his estate. Like Xenophon and Cato, the owner's key problem was securing the accountability of his overseers and slaves for production, for carrying out their "duties," which required the owner's presence, and his model for control is, again, the military:

And, as I have stated, not even those aids, nor the constant toil and experience of the farm overseer, nor the means and the willingness to spend money, avail as much as the mere presence of the master, for if his presence does not frequently attend the work, all business comes to a standstill, just as in an army when the commander is absent. (Columella 1951a, 37, 39)

Columella presumed a wealthy owner who would have a residence in a town or city. It followed for accountability, for the "apprehension" of observation and potential punishment, "that land should be purchased nearby, so that the owner may visit it often and announce that his visits will be more frequent than he really intends them to be; for under this apprehension both overseer and labourers will be at their duties" (Columella 1951a, 39). This was the master's key task: "especial care is demanded of the master . . . most of all in the matter of the persons in his service; and these are either tenant-farmers or slaves, whether unfettered or in chains" (Columella 1951a, 39, 79). Columella's advice was physical control (e.g., fetters), close personal supervision, "the strict enforcement of labour," and the virtuous circle of

“fatiguing toil,” in pursuit of maximum production, “that the proper tasks be performed”:

There is, moreover, no better way of keeping watch over even the most worthless of men than the strict enforcement of labour, the requirement that the proper tasks be performed and that the overseer be present at all times; for in that case the foremen in charge of the several operations are zealous in carrying out their duties, and the others, after their fatiguing toil, will turn their attention to rest and sleep rather than to dissipation. (Columella 1951a, 89)

Columella assumed action controls (chains, prison, supervision, etc.), but advised the master to also use rewards, and to inflict punishment ‘fairly’ so that his slaves “rather fear his sternness than detest his cruelty” (1951a, 89). Even so, as Kehoe says, “He still kept slaves in chains, and fair treatment of slaves was recommended only in order to avoid making his labor force intractable through the excessive cruelty of their overseers” (2006, 302). Columella emphasized, if “the climate is moderately healthful,” so the owner could live there, “and the soil moderately good, a man’s personal supervision never fails to yield a larger return from his land than does that of a tenant” (1951a, 81, 82).⁸ So important was the master’s presence, he advised leasing out grain land estates, but not vineyards, if the owner could not personally supervise them. On distant estates, which the owner could not visit easily, “it is better for every kind of land to be under free farmers than under slave overseers” (Columella 1951a, 81). However, whereas tenants could harm vineyards and tree plantations, they could not harm grain land, whereas slaves on grain land when not closely supervised “do it tremendous damage,” they steal, and give dishonest accounts:

[They] . . . let out oxen for hire, and keep them and other animals poorly fed; they do not plough the ground carefully, and they charge up the solving of far more seed than they have actually sown; what they have committed to the earth they do not so foster that it will make the proper growth; and when they have brought it to the threshing-floor, every day during the threshing they lessen the amount either by trickery or by carelessness. For they themselves steal it and do not guard against the thieving of others, and even when it is stored away they do not enter it honestly in their accounts. The result is that both manager and hands are offenders, and that the land pretty often gets a bad name. Therefore my opinion is that an estate of this sort should be leased if, as I have said, it cannot have the presence of the owner. (Columella 1951a, 81, 83)

Columella presumed the overseer was a slave, which was common throughout the classical period. Most “management, Greek as well as Roman, urban as well as rural, was the preserve of slaves and freedmen, at least in all larger

establishments” (Finley 1979, 76; see also de Ste. Croix 1981, 145).⁹ In Greek and Roman society, according to their political economy of agriculture and war, “men of the highest status would not and indeed could not devote themselves to managing their own estates and other business affairs” (1979, 76). In this context, the advantage of having slaves as managers was that it allowed the master to hold them coercively accountable as such, requiring them “to submit to dictation and reproof” (de Ste. Croix 1981, 181), and because, being unable to own property, slave-managers could never lawfully gain at their master’s expense.

Columella (I, VII, 13) assumed “an accounting” between the master and overseer reckoned in money, but based on table 4.4, of production (sales). Consistent with this, he advised the master not to allow the overseer to conduct business of his own, or trade with the “master’s funds,” because the overseer could not then be accountable for his master’s production:

He shall carry on no business on his own account, nor invest his master’s funds in livestock and other goods for purchase and sale; for such trafficking will divert the attention of the overseer and will never allow him to balance his accounts with his master, but, when an accounting is demanded, he has goods to show instead of cash. (Columella 1951a, 91)

Allowing the bailiff to “employ his master’s money . . . diverts him from his duties as bailiff and makes him a trader rather than a farmer” focused on production, and “when reckoning-up in money is being held,” this “makes it impossible to balance accounts with his master” (Columella 1951b, 65), that is, it “impedes checking the accounts” (Rathbone 2002, fn.30, 167). It did because allowing the bailiff to trade would make it impossible to hold him accountable for production, which the master wanted as a stock of money, not part of it tied up unverifiably in the overseer’s trade goods.

During the late first and second centuries the villa system was substantially transformed, “with the compact villas in many locations giving way to larger estates cultivated less intensively” (Kehoe 2006, 302), to estates that leased to dispersed tenants. This is consistent with the growing wealth of the landed elite who necessarily could not personally supervise an ‘estate’ with many separate components, and with the advice of the agricultural writers to lease in such circumstances. As the *latifundia* grew, they typically comprised many small and scattered units leased to ‘tenants’ (Kehoe 2006, 303), many of whom chapter 5 argues may have become effective slaves. Chattel slavery probably ceased being dominant, even in Italy, by the fourth or fifth century (Finley 1999, 180), but it had never been dominant in the eastern Roman Empire, which had a large and nominally ‘free’ peasantry. Nevertheless, the accounting evidence is consistent with the slave mode of production, that is, with effective slavery continuing from ancient Egypt.

A Large Roman Estate AD 249-68

Rathbone's (1991, 1994) study of the 'Heroninos archive,' surviving papyrus documents from a large Roman estate in Egypt in the mid-third century AD, he argues, reveals a system of accounting that contradicts de Ste. Croix and Finley's view that ancient accounts were 'rudimentary.' The Heroninos archive is a collection of mainly letters and accounts involving the 'manager,' Heroninos, of an agricultural unit centered on the village of Theadelphia in the Fayum area of Egypt, belonging to an estate owned by Appianus, a city councilor of Alexandria with equestrian rank. The 'estate' comprised scattered small fields, vineyards, and orchards, organized "into managerial 'units' called *phrontides* (literally 'concerns'); these units were centred on and named after particular villages in which the estate often owned residential and other property. Each unit (*phrontis*) was run by a permanent 'manager,' normally called a *phrontistes*" (Rathbone 1994, 15). The estate had a central administration in the regional capital managed largely by town councilors, who also worked for Appianus, under the supervision of a 'general manager' (Rathbone 1994, 15).

The estate's household used domestic slaves, but the estate nominally did not (Rathbone 1991, 107). However, many of these legally free workers bound themselves permanently, or for long periods, wholly to the estate. There was a core of "permanent labourers: *oiketai*, who were lifelong dependents on the estate, and received accommodation, their subsistence (basically a monthly ration of wheat) and a small cash allowance for clothing" (Rathbone 1994, 15). The *oiketai* "were free men," many with "families and a certain independence of economic action," but Rathbone admitted, they were "vaguely similar" to slaves:

On the other hand their terms of employment were relatively unfavourable: their remuneration . . . was set at not much above subsistence level and . . . their attested periods of service on the estate strongly suggest that they were tied to the position for a long term, perhaps for life. More widely in the Greek-speaking world the term '*oiketes*,' when it did not mean 'slave,' was used of dependent labourers in non-Hellenistic cultures who were in a vaguely similar [*sic*] but not identical to position to slavery. (Rathbone 1991, 115)

The problem with literary evidence, as de Ste. Croix says, is the word "*oiketai* . . . is uncommon in Ptolemaic papyri but when it is used seems always to designate slaves," but "It also seems probable that . . . serfs are referred to in inscriptions mentioning *oiketai* (or *oiketeia* . . .) and in other epigraphic and literary sources" (1981, 152–53). Rathbone surmised that a poor peasant freeman, burdened with taxes and obligations, probably chose to be an *oiketes* to avoid "poverty," as a "way of avoiding starvation," a means of "fiscal

protection,” and giving a man with a family “free [*sic*] accommodation” (1991, 116). As the corn allowance was only sufficient for the worker, his family had to work to provide the necessary extra food to survive (Rathbone 1991, 109–11). The estate also employed “*metrimatiaiouis*, individuals who contracted to work for the estate for a set number of years, bonded labourers, who received their subsistence and a monthly cash salary,” and variable amounts of casual laborers whose socio-economic position was not very different from the permanent and bonded laborers, although more precarious (Rathbone 1994, 15, 119, 145–46, 165).

Given the very different economic and political history of Roman Egypt compared to classical Greece and Rome, “The complete absence [*sic*] of slave labour is not surprising” (Rathbone 1991, 391), but the result was effectively the same. Chattel slavery grew when other forms of dependent labor did not “meet the needs of landowners,” and failed to appear when they did, as in large portions of the old Near East, where conquerors “found an independent peasantry coexisting with a large dependent labour force . . . and they took the obvious course . . . of retaining the tenure system” (Finley 1979, 70). Given their unfree, low socio-economic status, “No complex calculations were (or are) required to demonstrate that slaves could not have been maintained more cheaply than the *oiketai* and many *metrematiaioui*, leaving aside the extra expense of their purchase” (Rathbone 1991, 391). Both types of workers suffered a “loss of freedom,” had “surrendered freedom of movement” (Rathbone 1991, 119, 120). They appear to have been in the same position as peasants in Ptolemaic Egypt (300 BC–AD 30), “often *basilikoi georgoi* (‘cultivators of Crown land’), who were undoubtedly free in the technical sense that they were not slaves and cannot properly be described as serfs either, but were subject to very strict controls and supervision” (de Ste. Croix 1981, 153).

Historians make judgments, but although the Appianus estate used nominally free men, according to its accounts they were costless, ‘voluntary,’ effective slaves. The estate accounts’ focus was the accountability of the *phrontis* for the production of its workers as laboring-machines, as the means of producing the owner’s way of life, his actual and potential consumption. It is true, as Rathbone says, “the primary aim was not self-sufficiency . . . but the production of marketable surpluses, mainly of olives (for oil) and wine” (1994, 15). He is probably right that the estate’s system of accounts “is the most sophisticated presently known from the Graeco-Roman world,” but his suggestion, “although clinching proof is as yet lacking,” “that it was used to measure the monetary profitability of each unit of the estate” (Rathbone 1994, 16), is unproven and unlikely.

Rathbone questions de Ste. Croix’s, Finley’s view that Greek and Roman estates kept only detailed records of the income and outgo of various goods and cash, as Macve puts it, “primarily to ‘keep track’ of assets and

to monitor the honesty of those entrusted with them—basic stewardship accounts” (1991, 369). They did not systematically convert physical assets into money values—“The cash account itself was really a ‘coin stock’ account” (Macve 1993, 184)—or attempt to produce interrelated accounts, or to produce an overall measure of performance “which might be of some economic or management interest. On this basis scholars have also disputed the extent to which ancient societies may be regarded as exhibiting ‘economic rationalism’ and ‘profit maximisation’” (Macve 1993, 184). However, Macve’s interpretation overlooks the possibility that the basic stewardship function was not simply ‘honesty,’ but accountability for production. De Ste. Croix also stressed accounting’s role in checking ‘inefficiency,’ ‘avoiding all losses,’ whereas Macve reduces his list to ‘honesty’: “the overriding objective was control over the honesty of those handling cash or other assets, not the calculation of profitability” (1994, 79). Rathbone’s case is that previously fragmentary findings, seeing only the detailed, day-to-day accounts, not any summary accounts or reports, had misled historians. However, although the Heroninos estate accounts were monetized and interrelated, and there were summary accounts and reports, it is clear, as Rathbone admits, “the main purpose of the accounting system was to provide a check on the efficiency [*sic*] of *production* on the *phrontides* as measured in monetary terms” (1991, 369, emphasis added).

The *phrontisai* kept detailed day-by-day accounts of the employment of the men and draft animals, of all production and transactions in cash and produce, and retrospectively wrote monthly summaries for submission to the owner of the estate (Rathbone 1994, 19). They were, in effect, a series of interlocking stock accounts, including their cash accounts, albeit with some additional complexities arising from using some credit (Rathbone 1991, 370, 371), just like the earlier accounts described by de Ste. Croix (1956). The stock records were subject to physical check by the central administration (Rathbone 1991, 370). Their detail and comprehensiveness explains why keeping the account was a “task which must have occupied a considerable part of the time of the *phrontistai* of the Appianus estate” (Rathbone 1991, 335). Rathbone reproduces two draft monthly accounts of Heroninos in Greek and English that cover 15 or so pages of print (1991, 426–63). The *phrontistai*, probably the sons of prosperous local families, wrote them because they were accountable, as Rathbone said, as “the *production* managers of the estate’s units” (1991, 390, emphasis added).

The monthly return, Rathbone argues, was designed to assist management of the estate, and the expenditure records, by recording costs as incurred rather than as paid, helped it make comparisons, for example, with monthly expenditure in previous years, and therefore helped it control at least the significant ‘production costs’ of the crops on each *phrontis*. In short,

Rathbone suggests, the central administration used the ‘monthly’ accounts to control the ‘cost of production,’ but the evidence does not show this. First, the *phrontistai* organized the summary accounts on a monthly basis, but prepared them all at once at the year-end (Rathbone 1991, 338). The central administration could not therefore have used them for real time decisions about production, but they could still be useful for retrospective accountability for production. The administrators could look back at the monthly accounts and use them to hold the stewards accountable for their performance on that basis, for example, judging the pattern or trend of the costs. There is no evidence that the *phrontistes* themselves used monthly accounts to monitor significant outgoings on an ongoing basis to keep them as low as possible, but this is likely because they knew they would be accountable for costs at the end of the year when they returned the monthly summaries.

Second, the accounts did not systematically allocate all the disbursements of produce and cash to the money costs of production. When the *phrontistes* issued wine in part payment to hired contractors (*kurponai*), he did not treat the amounts as cash payments or as the sale of wine, but recorded them only in the physical account of wine stock movements (Rathbone 1991, 291). Furthermore, the *phrontistes* did not account for wheat or bread issued to estate staff, or for seed corn, in money terms. Finally, each *phrontistes* had to account for all the expenditure for which he was responsible even if it did not control the resources, for example, the ‘salaries’ of various central employees and administrative staff. Rathbone highlights that there were “exceptions” to the general rule that “almost all [*sic*] the expenditure recorded was incurred directly in the running of the *phrontis* and, conversely almost no conceivable cost was omitted” (1991, 373). He suggests that “assignment of centrally employed staff to the payrolls of different *phrontides* was in effect a way, even if a somewhat crude one, of apportioning the cost of the central services they provided—which we could call the estate’s general ‘overheads,’” which he thought “adequate for practical purposes” (Rathbone 1991, 373). Rathbone provides no evidence that overhead allocation was the aim, or specifies what the ‘practical purposes’ were for which it was ‘adequate.’

The central administration had the information it needed to calculate monetary profitability if had wanted to, and Rathbone could be right that “monetary profitability probably was calculated” (1994, 44–45, 369). What is clear is that while the central administration could use the monthly accounts to hold the *phrontistai* accountable for production, they could not use them to hold them accountable for ‘monetary profit’:

At the end of each record of cash the *phrontistes* totalled ‘income’ and ‘expenditure’ and calculated the balance to be carried forward to the account for next month. . . . [T]his monthly balance in no sense indicated the monetary

profit or loss made by the *phrontis* in that month, but instead showed whether or not sufficient assets had been realized to meet the expenditure incurred. . . . The running balance was therefore just an accounting device of no real external significance. (Rathbone 1994, 44)

Internally, however, the monthly accounts were of great significance as a means of enforcing accountability for production. As Oldroyd and Dobie put it, Rathbone's work "revealed an interlocking and centrally controlled system that went far beyond tracking rights and obligations to encompass cost control [*sic*] and performance measurement [*sic*]" (2009, 97). De Ste Croix was mistaken, Rathbone (1994, 16–17) argues, in concluding that the aim of Graeco-Roman accounting "was just to act as a check against carelessness or dishonesty on the part of subordinates," also overlooking de Ste. Croix's stress on its role in checking 'inefficiency,' 'avoiding all losses.' That is, overlooking their role in a system that supervised, and if necessary physically coerced, the production of the proprietor's use values. Rathbone shows that the accounts focused on production, and sees "strong hints that the format of the monthly accounts had been deliberately designed to facilitate investigation of the financial efficiency [*sic*] with which each *phrontistes* was running his *phrontis*" (1994, 52). It is clear, however, that the accounts aimed at monitoring significant outgoings to keep them as low as possible, particularly avoiding all 'idleness' or 'time wasted' (Rathbone 1991, 380).

Rathbone speculates that the central administration, who handled the sales, used their sales data and the costs from the accounts to perform a "calculation of the monetary profitability [*sic*] of each *phrontis* . . . to compare the return [*sic*] of one *phrontis* against another" and thereby, because they specialized, compare wine-production versus corn production (1991, 384). He points out that the management of the estate could "put little faith" in calculations comparing the profitability of wine versus corn production because "landowners were severely constrained by the relative difficulty of transport which limited both the availability of labour and access to markets" (Rathbone 1991, 385). He claims only that there are some "hints" that the central administration did make these calculations (Rathbone 1991, 377–78), but he provides no evidence that holding the *phrontistes* accountable for the money surplus from his unit was even an inchoate aim. As Rathbone says, if a "central account for each *phrontis* was kept," the question arises "why it was the central administrators . . . rather than the *phrontistai* who kept the accounts which could have shown the monetary profitability of each *phrontis*" (1991, 378). From Marx's perspective, the answer was the detailed accountability demanded of the *phrontistai* for production from the laboring-machine, or as Rathbone put it, the reason was

. . . almost certainly managerial, that is the principle and practice . . . that the *phrontistai* accounted only for transactions and activities for which they were

personally and directly responsible.¹⁰ The *phrontistai* were responsible for the production on their units, and hence they had to account for its costs [*sic*]. The profit [*sic*] made by each *phrontis*, however depended equally if not more on the prices at which the surplus produce had been sold, and since the marketing of all produce was centrally directed, it followed that the accounting for it was the responsibility of the central administration, to whom was therefore left the drawing up of profit [*sic*] accounts. (Rathbone 1991, 379)

Rathbone does not ask why this particular division of “responsibility” arose, whereas according to the accounting interpretation it was because the estate was a laboring-machine, a means of producing use-values for consumption that could be controlled and accounted for only as such, not as a means of producing realized surplus value. Labor was neither free as under capitalism, nor self-sufficient as under feudalism, and the estate could not therefore exploit their worker-slaves solely for surplus labor. Making the *phrontistai* accountable for surplus could have encouraged them to over-exploit its workers, to consume rather than preserve them as the means of production, as slave overseers did in the American South when paid according to financial results (Bryer 2012, 539). Rathbone notes that “the Appianus estate was doubtless capable of harsh treatment of its staff” (1991, 146).

Rathbone claims that his evidence questions “the whole academic tradition of taking the form of the accounts as a direct reflection of, if not as a major or even the whole explanation for, the level of sophistication of economic thought and organization in the society which produced them” (1994, 17). However, he does not distinguish between ‘reflection’ of the ‘organization of society’ and ‘explanation’ of the ‘sophistication of economic thought,’ which are different positions. Werner Sombart argued that DEB was a precondition of capitalism, was necessary for ‘rational calculation,’ and its invention *explained* capitalism’s appearance and development (Yamey 1949; Bryer 2000b), whereas from Marx’s perspective it *reflected* a revolutionary development in the social relations of capital (Bryer 1993).

From Sombart’s perspective, Rathbone was right that for de Ste. Croix, Finley, and Mickwitz, “the simplicity of ancient accounts reflects the alleged simplicity of Greek and Roman thought” (Rathbone 1994, 17), that what held the ancient world back was its failure to discover DEB. De Ste. Croix (1956, 34), however, also concluded, consistent with Marx’s view, “We must not belittle the intelligence of the Greeks and Romans because they did not try to do what the nature of their economic system made it unnecessary for them to attempt.” What was ‘simple’ from Marx’s perspective was not their thought, economy or culture, but their forces of production, their low level of development, and their social relations of production and calculative mentality, their system of social accountability based on coercive control of slaves to produce the master’s ‘wealth.’ However, this is not to say this mode of control was simplistic or naïve, that it was not a particular kind of ‘economic rationality,’

a distinct and appropriate mode of production, as de Ste. Croix (1981) well understood. He strongly endorsed Marx's view that to understand the "nature of the economic system," "the most distinguishing feature of each . . . 'mode of production' . . . is . . . *how the dominant propertied classes, controlling the conditions of production, ensure the extraction of the surplus* which makes their own leisured existence possible" (de Ste. Croix 1981, 52).

There is, as Rathbone says, an "alternative view, which . . . holds that the economic rationalism of modern capitalism has been exaggerated, that complex systems are often of dubious value for anything other than checking the accuracy of the records, and that simpler accounting systems were and are quite adequate for economically rational management of relatively uncomplicated economic enterprises" (1994, 17). For example, Macve's argument that it was "the combination of limited opportunities, multiple constraints and cultural preferences [that] would seem to have provided little incentive for ancient farmers to develop more analytical [*sic*] approaches to decision-making" (1994, 77). This is the view from neoclassical economics that 'rationality' expresses itself only in discounted cash flows. Accounts are always of dubious value for this form of 'rational decision-making,' but those who stress this often ignore their role in systems of social accountability (e.g., Macve 1994, 71–75).

CONCLUSIONS AND IMPLICATIONS

Accounting evidence from Mesopotamia, Egypt, Greece and Rome, from c. 3100 BC to AD c. 300, supports the hypothesis that slavery in Marx's sense, forced labor accountable for production, chattel or effective slavery, was the dominant mode of production for several thousand years. There are some differences, the main one being that Greek and Roman accounts do not emphasize the detailed and highly quantified labor schedules (output targets) of Mesopotamia and Egypt, probably because the latter were particularly vulnerable to the vicissitudes of nature, and therefore were highly centralized and controlled, "rationing" societies (Finley 1979, 28, 29). The rationale of the Egyptian state granaries, for example, was not just appropriating surplus by the pharaoh to sustain his way of life, but also the production of food reserves to sustain the working population during periods of famine when the inundation of the Nile failed, no rain ever falling on Egypt itself. Ancient accounting in this sense "affirmed . . . the responsibility of the state towards its subjects . . . [by] determining precise rations or wages to be paid to individuals . . . to secure [their] sustenance" (Carmona and Ezzamel 2009, 91) and preserve their labor power. The Egyptian taxation system predicted yields, which taken together with the high degree of labor control evident

in the accounts, suggests that accounting also facilitated central planning of food reserves.

The accounting difference with Greece and Rome, societies based largely on private property, was one of emphasis. Cato required accountability for “the program of work,” which required some form of quantification, advising the owner, “you should make your own calculation of the time necessary for the work” (1910, 23), but like Columella, emphasized action controls. This could be a consequence of chattel slavery encouraging a tendency toward reliance on coercive supervision, rather than coercive results control for nominally free labor as in Egypt and Mesopotamia, a geographical-historical difference. Egypt in particular, essentially a river with inhospitable desert on both sides, was relatively easy to control (Wickham 2005), as we will see in chapter 5, and therefore had little need for chattel slavery to retain its workers, or reliance on direct supervision to motivate them. Regardless of the differences, however, the accounting evidence shows that ancient near East and Greek and Roman accounting shared the aim of holding their agents and workers accountable for production, who were therefore, according to Marx’s definition, “laboring-machines,” slaves, whether chattels or not.¹¹

This accounting evidence is consistent with constant social relations of production for several thousand years despite the different cultures and histories of these societies, which is consistent with Marx’s theory of historical change, with only gradual increases in the forces of agricultural production, particularly clearing land, which was a slow, laborious task (Williams 2010, 35). In Western Europe, farming began c. 7000 BC and by AD 1300, some 8,000 years later, ‘only’ around a third of its forests had gone, whereas by 1900, following development of the necessary technologies, 600 years later only around a third remained, mostly in Scandinavia and Russia (Williams 2010, 40, figure 5.1, 88, 369). From the beginning of the ancient world to the end of the Roman Empire, despite many cultural and historical differences, the social relations of production did not change because, according to Marx’s theory, the predominant basis of production remained land, requiring intensive labor to cultivate it using low-level farming technologies. The Greek and Roman Empires, from c. 1000 BC to AD 500, accelerated the rate of accumulating forces of production, but a significantly higher level had accumulated only by the end.

As their empires grew Greeks and Romans spread agriculture and engaged in large-scale land clearance; their populations, urbanization, division of labor, and trade increased; iron tools replaced bronze and copper; technologies improved in agriculture, shipping, irrigation, draining, construction, etc.; literacy increased, science and philosophy flourished, particularly from c. 500 BC (Williams 2010, 62–63). Water mills, heavy plows, and improvements in horse traction, the key technologies required to exploit the increasing amount

of cleared land, began to appear in the later Roman Empire (Wickham 2008; Langdon 1986, 2004). Greece and Rome were therefore a “prologue to the modern world” (Williams 2010, 62), but they were not its origin. Following the collapse of Roman rule in the west, during which knowledge was lost, markets disrupted, populations fell, (Ward-Perkins 2005), large landowners’ power decreased, and peasants’ power increased (Wickham 2005). However, consistent with Marx’s theory of history, we will see, when large landowners regained power they chose feudal rather than slave relations because this gave them increased surpluses from the higher-level forces at hand, the fundamental agricultural forces bequeathed by the ancient world, and improved by free peasants during the early middle ages, AD c. 400–800. The accounting evidence of the transition to feudal relations, and historical evidence of the development of the forces across the middle ages, chapter 6 argues, is consistent with this explanation.

Because so-called “sophisticated accounting and economically rational estate accounting were practised in Roman Egypt” in the mid-third century AD, Rathbone could be right that “the probability must be that they were practised in Roman Italy too and at a much earlier date” (2002, 167), and probably also at later dates. He could also be right that from the second or third century “the labour situation in Egypt was in broad terms ‘normal’ rather than ‘exceptional’” (Rathbone 2002, 159), which would be consistent with the later Roman Empire retaining the slave mode until its collapse in the west from the fifth century. However, Rathbone’s view that the Roman “agronomists describe the basics of farming exhaustively, [but] they omit crucial aspects of estate management such as accounting,” that they “could not stomach accountancy” (Rathbone 2002, 166), is erroneous. None of these writers gave detailed descriptions of the accounting systems such as that found in the Heroninos archive, but even Xenophon, who said the least, proselytized the fundamental principles of slave management that underlay them.

Allowing for de facto or effective powers permitted de Ste. Croix to argue that ancient Greece and Rome were ‘slave economies’ even when the ruling classes’ surplus was not produced by chattel slaves, but by various forms of ‘unfree labor.’ De Ste. Croix (1981) focused on chattel slavery, which meant total legal control, but to include ‘illegal’ slavery added a notion of effective or de facto legal slavery, equivalent control to that given by legal ownership. He highlighted the definition in Article 1 (1) of the Slavery Convention of the League of Nations in 1926 that a slave was the “status or condition of a person over whom any or all the powers attaching to the right of ownership *are exercised*” (de Ste. Croix 1981, 135, emphasis added). It “stresses . . . not so much the fact that the slave is the *legal property* of another as that ‘the powers attaching to the right of ownership are exercised over him’” (de Ste. Croix 1981, 135). With this definition it “was realistic . . . to describe slavery

as the dominant form of ancient ‘unfree labour,’ not in the quantitative sense . . . but in the sense that slavery . . . was the *archetypal form of unfree labour* throughout Graeco-Roman antiquity” (1981, 173). Slavery, in other words, was the ideal form of unfree labor to the ruling class and this ideal colored their attitude to all forms of unfreedom.

De Ste. Croix therefore rejected criticism that the “term . . . ‘unfree labour’ . . . is objectionably broad” because, he accepted, there was a “profound change . . . between the earlier period of slavery and the . . . widespread serfdom which . . . began around A.D. 300 and eventually covered a large part of the Graeco-Roman world” (1981, 172–73). However, there was no fundamental change, he argued, because “Slavery and serfdom are in many respect similar, and . . . fundamentally different from capitalist society, founded on wage labour” (de Ste. Croix 1981, 173). They were similar because a serf “is not a fully free man: he is to a considerable extent under the control of his lord, and he is ‘bound to the soil’” (de Ste. Croix 1981, 135). They were different because, for example, “In Roman law, enslavement was regarded as closely resembling death,” and slaves had very few enforceable legal rights, whereas serfs had some legal rights and, in particular, were “not the legal property of another” (de Ste. Croix 1981, 135, 210).

However, where chattel slavery was ‘archetypal’ like Greece and Rome and became “omnipresent in the psychology of all classes”—revealed by the fact that neither had a general word for ‘serfdom,’ that “had to be expressed in slave terminology”—they remained slave economies “even if . . . serfdom . . . provides the propertied class with much of its surplus” (de Ste. Croix 1981, 173). De Ste. Croix therefore rejected the view that the late Roman Empire was ‘feudal’ when from around AD 300 de facto serfdom, the legal requirement that nominally free peasants generally called ‘*coloni*’ remain where they were as ‘slaves of the land,’ became the dominant form of ‘unfree’ labor (Blackledge 2006, 109). Chapter 5 supports his rejection of the label ‘feudalism’ for the late Roman Empire, which is “widely accepted” (Blackledge 2006, 109), but there are notable dissenters, particularly Wickham (2005), as we will see. The accounting evidence supports de Ste. Croix’s conclusion that the slave mode effectively continued, but not because serfdom was a form of slavery where “the essential elements in the slave’s condition are that *his labour and other activities are totally controlled* by his master” (1981, 135), and a serf’s labor somewhat less. Surviving accounts, chapter 5 argues, support the hypothesis that the *coloni* in the late Roman Empire were effectively slaves whether free or unfree, because they were coercively accountable for production.

Shaw (1984, 224) rightly criticizes de Ste. Croix’s definitions because “they are fundamentally ideal and legalistic in nature. For example, slavery is not defined as a type of labour, but as ‘a legal status or condition’ . . . and

a type of ‘ownership.’” However, Shaw argues, “Most Marxists . . . would tend to define slavery in terms of a specific type of control of means of production, including the ultimate tool—the body of the labourer himself” (1984, 224) citing “Cf. Hindess and Hirst (1975) 125 ff,” who chapter 3 argued misunderstood Marx’s concept. Shaw neglects the fundamental weakness of de Ste. Croix’s view, shared with Hindess and Hirst (1975), and other prominent Marxists, that slavery meant ‘total control,’ whether through legal ownership or the effective equivalent, which leads to Finley’s ‘spectrum,’ and also overlooks Marx’s definition of a slave as a laboring machine, coercively accountable for production.

The accounting evidence presented in this chapter does away with Finley’s “Paradoxical” conclusion that “nothing creates more complication in the ancient status picture than the institution of slavery” (1979, 62). It makes it impossible, as he claims to have done, to “lay the ghost once and for all of the slave mode of production as the hallmark of the ancient economy” (Finley 1999, 179). Nor is it possible, we will see, to accept Finley’s (1999, 180) conclusion, following Wallerstein (1979), that Marx’s idea of “the ‘transition’ from antiquity to feudalism” is “a blurry non-concept,” which would be true only if we cannot define their qualitative difference and observe it. Certainly, literary sources cannot verify it. As de Ste. Croix says, “In the Greek (and Roman) world it is particularly hard to separate slavery and serfdom because . . . neither the Greeks nor the Romans recognised serfdom as a distinct institution, and neither had a general word for it” (1981, 173). He therefore merely poses the question, “Was there not, then, a profound change in the conditions of production, as between the earlier period of slavery and the period of widespread serfdom,” while accepting that slavery and serfdom “are in many respects similar” (de Ste. Croix 1981, 172, 173), which concedes the Giddens critique. Marx, however, chapter 2 argued, had defined their qualitative difference as their different ways of extracting surplus labor, and therefore surviving accounts, in which their phenomenal forms appear, the following two chapters argue, allow us to observe the transition to the feudal mode in Western Europe.

By contrast, because leading medievalist Marxists accept that slavery was rare, possibly had “ceased to be dominant even in Italy by the fourth or fifth century” (Finley 1999, 180), and probably earlier, they argue there was no transition because throughout ancient history ‘feudal’ social relations were the norm (Wickham 1984, 1985, 2005; Bertkay 1987; Haldon 1989). The accounting evidence, however, chapters 5 and 6 argue, is consistent with effective slavery in the late Roman Empire, and with feudalism first emerging in Western Europe, possibly from the late seventh century. If slavery ended in the fourth or fifth centuries, and is “improper to speak of feudalism before . . . Charlemagne” (AD 747–814), according to Finley (1999, 180) Marx

leaves us with a “blurry” “transition lasting no less than three or four hundred years.” However, evidence of slavery dominating the west until the fifth or sixth centuries, followed by the peasant mode and the feudal mode from AD c. 800, would answer Finley’s complaint.

NOTES

1. The overseers controlled “labor troops” of between 5 and 50 laborers (Nissen et al. 1993, 70). The norm was one overseer for 10 laborers (Nissen et al. 1993), as it was in Egypt (Carmona and Ezzamel 2009, 87) and Rome (Cato 1910).

2. Nissen et al note that their use of ‘debit’ and ‘credit’ does not imply DEB.

3. There is indirect evidence of concern with “some notion of time productivity” in a collection of nearly complete Egyptian bakery accounts, particularly the fact that the scribes kept “separate accounts for each individual baker, thereby indicating *the potential* to hold each baker accountable for his performance,” and a letter discussing measures of output per man (Ezzamel 2012, 329–30, 337).

4. Later writers confirm this ‘advantage,’ as we will see.

5. Greek law did not therefore distinguish between larceny and embezzlement (Harris 2002, fn.21, 88).

6. Duncan-Jones (1974) also criticized Columella’s data, the prices and costs he used, but Carandini (1983) defended it. This is not relevant to the discussion of accounting methods.

7. What Weber called ‘economic rationality,’ that he argued was expressed through ‘capital accounts,’ was NPV (Bryer 2000a).

8. Varro had advised hiring freemen in an unhealthy district or for harvests, otherwise slaves (1912, 50).

9. In agriculture, slave-managers usually remained slaves, whereas freedmen managers usually had an urban *peculium* (Finley 1979, 76).

10. Allocating central employees to each *phrontis* was an ‘exception’ to this rule.

11. A link between chattel slavery, coercive supervision, and accountability for production, also appears in accounts of slave owners from the British West Indies and the American South. Crude by the capitalist standards of the day, and even compared to ancient accounts, they show that, largely driven by coercive supervision, “The quantity and quality of the gross output,” and its precondition, “the preservation of the slaves’ value [,] were regarded by owners as the main measures of success” (Tyson and Oldroyd 2019, 226; Bryer 2012).

Chapter 5

Slavery in the Late Roman Empire

Marxists have long debated whether there was a transition from the slave to the feudal mode of production in the west following the collapse of the Roman Empire. Medievalists seek to understand “the nature of the transition between ancient and medieval socio-economic and political structures, notably . . . that from the ancient or post-classical world of the late Roman state . . . to the medieval and ‘feudal’ world of Europe after the fifth and sixth centuries” (Haldon 1989, 5, 6). One reason for continuing controversy is the apparent scarcity of evidence. Historians traditionally call the 400 years after the collapse of the Roman Empire the ‘Dark Ages’ because it has left relatively little literary evidence. Compared to some other periods there is “very little evidence” (Wickham 2005, 4), but modern Marxist medievalists reject the ‘Dark’ characterization (Haldon 1990, 1–2), highlighting among other documentary evidence the importance of surviving taxation legislation and records and estate accounts (Banaji 2001; Wickham 2005; Sarris 2006). Compared to the ancient world, relatively little accounting evidence survives from the early Middle Ages (AD c. 400–800), most from the east. Marxist historians draw on these accounts, but they do not appreciate their significance, or the significance of the many estate accounts surviving from thirteenth-century England, this and the following chapter argue, in understanding whether a transition to feudalism occurred in the west.

Marx’s distinction between the slave and feudal mode’s phenomenal forms, chapter 2 argued, was that slaves were accountable for production, whereas peasants were accountable for rent in various forms, for ‘primeval profit.’ The late Roman accounting evidence, this chapter argues, supports the hypothesis, contrary to the view of many historians, that the slave mode remained dominant until the collapse of the Empire from the fifth century in the west, and from the seventh century in the east. Wickham’s (2005) tax

accounting evidence, chapter 6 argues, supports the hypothesis that slavery then retreated unevenly in the west but continued to dominate in the east. Estate accounting evidence from Francia and England from the early and later Middle Ages, respectively, it shows, supports the hypothesis that a qualitative transition to feudal relations in the west in Marx's sense had occurred by AD c. 800. This evidence, it concludes, supports chapter 2's interpretation of Marx's theory that the victors of class conflict chose new social relations of production calculated to give them larger surpluses, more surplus labor in the form of 'primeval profit,' from the higher-level forces available, which was a progressive evolutionary step toward capitalism.

The chapter first explains the importance of Wickham's (2005) *Framing the Early Middle Ages: Europe and the Mediterranean, 400–800* for testing the accounting interpretation. Second, it critically examines Wickham's Marxism. Third, it argues, contrary to Wickham and other leading historians, that the Apion estate accounts surviving from sixth-century Egypt, and other accounting evidence, support the hypothesis that the slave mode continued to dominate the late Roman Empire.

FRAMING THE EARLY MIDDLE AGES

Wickham's *Framing* is important, first, because historians hail it as "a compelling analysis of the impact of the fragmentation of the Roman Empire on state structures, social relations and economic systems," unique in its detailed coverage of east and west (Sarris 2005, 400; 2009, 4), which has attracted considerable interest. Wickham (2005) compares ten geographical regions: (North) Africa, Egypt, Syria/Palestine, the Byzantine heartland (Greece and Anatolia), Italy, Spain, Gaul/Francia, England and Wales, Ireland, and Denmark. Joint winner of the Wolfson Prize, and outright winner of the Deutscher Memorial Prize, *Framing* has attracted several lengthy reviews and detailed critical attention in special issues of the *Journal of Agrarian Change* and *Historical Materialism* (Wickham 2011, 222). Historians are critical but, as Whittow (2007, 697) puts it, "Let us be clear about this. C. Wickham's book is one of the most important works of late antique and Early Medieval history to have been written in the last 50 years."

Second, Wickham is one of a few world-leading historians who have "stood out against a general trend away from Marxism in particular, and class analysis in general, in the decades since the heyday of social history in the 1960s and 1970s" (Blackledge 2011, 37). Wickham is not alone, and "to a certain degree, this unfashionable stance has been made easier by the fact that, in his area of specialism, medieval economic and social history,

Marx's voice has become somewhat normalised" (Blackledge 2011, 37). Nevertheless, a distinctive feature of Wickham's *Framing* for historians is that "the various regional and thematic studies of which the work is made up are held together by a carefully articulated and empirically driven theoretical framework" (Sarris 2006, 401). In other words, we will see, Wickham accepts the standard criticisms of Marx's historical materialism—the causal primacy of the forces of production, and its teleology—and uses Cohen's (2000) interpretation of the social relations of production. This and the following chapter question Wickham's interpretation and reinterpret his (and other) historical evidence in light of the accounting evidence. Wickham (2011, 223) admits that *Framing* "is theory-light," but says he is "a bit more theoretically elaborate" in Wickham (2008, 6), where he accepts the Giddens critique, agreeing that Marx's comments in the *Preface* and *Capital* were "not consistent." He rejects productive force determinism: "I have dissented from Marx's own tendencies to teleology before, and I wish here to do so again. As with Darwin on evolution, I do not see economic systems, or even the dynamic of economic systems, as 'naturally' going anywhere in particular" (Wickham 2008, 20).

Third, nevertheless, the attractive feature of Wickham's work for accounting historians is its focus on the history of the state and its resources, particularly its differential effectiveness in raising taxation following the end of Roman rule, and his emphasis on surviving estate accounts, as major sources of evidence for the social and economic history of the early Middle Ages. This, we will see, puts accounting, which is also central to the assessment and collection of tax, at the heart of his comparative history of the differential consequences of the collapse of Roman Empire.

Historians, including Wickham we will see, dispute Marx's view that class conflict generated by the slave mode of production drove the "internal history" of ancient Roman society (Marx and Engels 1983, 527), which according to his theory of historical change was ultimately transcended by revolutionary conflict leading to a transition to the feudal mode. The slave mode dominated antiquity, Marx argued, but historians misunderstand his view that the conflict driving its internal history was not between slaves and their masters, but between large landowners, the "free rich," and small landowners, the "free poor." After taking "another look at Roman history (ancient)," in 1855 Marx wrote to Engels, "Its internal history resolves itself plainly into the struggle between small and large landed property, specifically modified, of course, by slavery relations" (Marx and Engels 1983, 527). In the preface to the second edition of *The Eighteenth Brumaire* (1869), Marx repeated, "in ancient Rome the class struggle took place only within a privileged minority, between the free rich and the free poor," and clarified, "while the great productive mass of the population, the slaves, formed the

purely passive pedestal for these combatants” (Marx and Engels 1985, 57). Overlooking that Marx’s dominant mode of production was the way the ruling class extracted surplus labor, its “pedestal,” and presuming slavery’s unimportance, Konstan (1975, 148–49) complains that Marx’s comments make it “open to serious question whether the chief tension in Roman society was that between the classes of slave and slaveholder,” in Marx’s theory, or in reality. Wickham and others agree when, as we will see, they also see slavery as unimportant and ‘feudalism’ as the norm.

Marx’s comments, however, follow from his theory in which slavery was the dominant mode of production in antiquity, but other social relations existed and the ruling class was therefore also in conflict with serfs, wageworkers, and particularly free peasants, which is consistent with the accounting evidence. If we include effective slaves, the accounting evidence in chapter 4 is consistent with the hypothesis that the “great productive mass” supporting the ruling class was slaves in ancient Rome. Accounting evidence from the later Roman Empire, we will see in this chapter, supports the hypothesis that from around the third century the “free rich,” the ruling class, represented by the state and as individuals, was effectively enslaving the “free poor,” which was how the class conflict between them became “specifically modified, of course, by slavery relations.” This evidence is also consistent with the hypothesis that the Empire collapsed because sustaining it meant intensifying the slave mode, which meant devolving public power to large private landowners, who imposed effective slavery on free peasants and became fabulously wealthy from their estates, and by tax evasion, both of which fatally weakened the Roman state.

The accounting evidence, in short, supports the hypothesis that the slave mode of production was dominant until the Roman Empire collapsed in the west from the fifth to sixth centuries, from when there was an uneven, retreat of what Wickham (2005, 153) calls “aristocratic” power. Wickham’s aristocrat is “a member of a (normally landed) political elite, someone who could wield some form of power,” which leaves it open “where to draw the line” (2005, 153). By contrast, according to Marx, an ‘aristocrat’ is a member of the ruling class who lives on the surplus labor they obtain from the dominant mode of production, either a slave master who holds slaves accountable for production, or a feudal lord who holds tenants accountable for rent. Wickham’s tax accounting evidence, we will see in chapter 6, supports the hypothesis that the slave mode survived in the eastern empire, and survived the Arab conquests. In the west, however, it confirms that the power of aristocrats weakened significantly, in some regions virtually disappearing, undermining the slave mode and ushering in an era of non-exploited, peasant-based, simple commodity production, Wickham’s (2005) “peasant societies.”

Aristocratic power began to revive in the west only during the seventh and eighth centuries from when, although slavery lingered, and might have revived, the accounting evidence, chapter 6 argues, is consistent with the hypothesis that large landowners, the ultimate victors of class conflict, chose feudal relations of production to increase their surpluses given the forces at hand. For the first time, *pace* Wickham (and others), from AD c. 800 feudal social relations became the *dominant* mode of production, when the production of ‘primeval profit’ in the form of rent first became the dominant aim of production. This evidence supports the hypothesis that the transition to feudalism resulted from the revival of internal Roman class conflict, again between the “free rich,” wealthy landowners—including the state, as the representative of landed wealth, and individual wealthy landowners—on one side, and “free peasants” on the other, but which this time led to a revolutionary transition. Marx did not analyze late Roman and early medieval history in any detail, but the accounting evidence, chapter 6 argues, supports his claim that the “Germanic conquests” started a process of “reciprocal interaction” between the slave and peasant modes that produced “something new” (1973, 97–98). Consistent with Wickham’s differential histories following the collapse of the Roman Empire, it argues, in “strong” states Roman taxation continued because the slave mode’s dominance continued, whereas the “something new” was the transition to feudalism that occurred in the west where states were “weak” because peasant power had undermined the slave mode’s dominance. The estate accounting evidence from Francia and England, it concludes, supports Marx’s claim that this transition was an evolutionary step toward capitalism.

WICKHAM’S MARXISM

As Wickham (2005, 257) says, an “account of how a society based on slavery was replaced by a society based on serfdom . . . was an image . . . developed, among others, by Karl Marx and Friedrich Engels . . . [that] still exercises a strong hold in the field as an underlying metanarrative,” but he has reservations. Wickham “operates explicitly inside a Marxist interpretative frame,” but finds its “ideal-type opposition between ‘ancient’ and ‘medieval’ economies . . . problematic” because “the path between them was by no means a straight one, and in the period 400–800, the actual period of the shift between the ancient and medieval, the contrast is considerably less useful” (2005, 4, 257, 262). Marx’s theory and the accounting evidence, we will see, are consistent with the transition not being “straight,” but this means Wickham’s interpretation is problematic, not Marx’s historical materialism.

For his interpretation Wickham (1984) refers to Hindess and Hirst (1975) and Cohen (2000 [1978]), who chapter 3 criticized for their failure to understand Marx's modes of surplus extraction as different modes of accountability. Following Cohen (2000 [1978]) in particular, in *Framing*, Wickham argues, the distinctions between the slave, feudal, and the (agrarian) capitalist modes were, respectively, that "a master fed and directed his slaves, . . . a lord took surplus from a subsistence peasant, . . . an employer paid and directed a worker who then used the money to pay for food and shelter independently" (2005, 261). Each of the three modes, Wickham says, has a "different economic logic" (2005, 261), but he says nothing about their different ways of appropriating surplus labor, the different aims (production, rent, or surplus value) and relations of accountability. In line with the conventional Marxist interpretation, for Wickham the differences are their degrees of 'control,' by which he means action control (supervision) over production and consumption. By "how surplus is extracted," Wickham therefore means whether "through slave or servile or wage labour" (1984, fn.3, 8), the distinctions between the slave and feudal modes being, Wickham concludes, that whereas the slave master "fed and directed" his slaves, who were "wholly under his direction," had total supervisory control over production and consumption, in feudalism

Peasant families control a given set of lands at any one time, cultivate it, rely on its produce to survive, and also give a part of the produce to a landlord if they have one, and/or to the state if it exists. The structural economic shift, away from a peasantry, comes when agricultural workers are not given that control. This may be because they are slaves, who are, like animals, wholly the property of the lord, wholly maintained by him/her, and—this being the crucial point here—wholly under the lord's direction in their economic activity. (Wickham 2005, 260)

Peasants usually did not own the land, but by 'possessing' it, Wickham (2007, 39) argues, tenants typically did control their labor process, lords only relatively rarely resorting to the expensive organizational effort of using forced labor on their demesnes. Following Marx, he argues that in demanding labor-services, rent in kind, or money, feudal lords "focused on controlling peasant surpluses, which they took from peasants by force or by threat of force" (Wickham 2007, 39), but Wickham is not interested in the form of feudal surplus, Marx's view that it was 'primeval profit.' For Wickham the critical facts are that peasant families had control of their own production, but had to give part of their output (potential consumption) to the landowner or state, whereas in capitalism wagedworkers have no control over production, but feed and shelter themselves, control their own consumption, whereas slaves control neither. Table 5.1 summarizes Wickham's interpretation.

Table 5.1 Wickham's Interpretation of Marx's Modes of Production

	<i>Slave</i>	<i>Peasant</i>	<i>Feudal</i>	<i>Capitalist</i>
Control of production	None	Full	Full	None
Control of consumption	None	Full	Part	Full

Source: Created by the author based on Wickham (2005).

Haldon, a leading Marxist medievalist, agrees: “slavery or the slave mode of production . . . [is] where human beings are treated as chattels, as (potential) commodities, being both separated absolutely, as the property of their owners, from the means of production, and therefore without any means of subsistence or reproduction except those granted by their owners” (1989, 11). By contrast, capitalist workers “have complete possession only of their labour power,” whereas “peasant producers . . . possess . . . their own means of subsistence and reproduction” (Haldon 1989, 11). Overlooking Marx’s different methods of extracting surplus labor, however, Haldon struggles to define what a ‘dominant’ mode of production means. He is clearly right that there is a “difference between . . . a slave mode of production, on the one hand, and . . . societies in which slavery as an institution is usual. In the former case, slavery is a central feature of the extraction of surpluses and dominates the relations of production as a whole; in the latter, while slaves may be extremely numerous, they are marginal to the main processes of surplus extraction” (1989, fn.13, 31). Large numbers of domestic slaves, for example, would not constitute a slave mode of production. However, like Wickham, Haldon overlooks that the “central feature” of Marx’s dominant mode of production is the method of extracting surplus labor adopted by the ruling class, that these methods are the “main processes of surplus extraction” in the different modes, that the aim of slavery was production whereas the aim of feudalism was rent.

According to Wickham and Haldon’s definitions, the slave mode was restricted to “directed slave production [which] is often called plantation slavery,” which was rare after the second and third centuries, whereas the feudal mode was “the basic economic structure,” and wage labor was of “relative unimportance outside Egypt” (Wickham 2005, 260, 262, 264). Feudalism, Wickham concludes, has “dominated nearly the whole of human history since class society appeared” (2008, 5). He adds the “peasant mode” of production for periods or areas when “landlords or the state do *not* take a surplus in any systematic way” (Wickham 2005, 261), a form of society that Marx and Engels called ‘archaic’ or ‘primitive communal,’ with little or no surplus extraction. Wickham’s peasant mode is a form of simple commodity production, in Marx’s notation C-C’ or C-M-C,’ where peasants fully control production and consumption. For him, therefore, the history of the early

middle ages (400-800) revolves around change in the relative control of aristocratic landowners over peasants. Using archaeological and other evidence, he argues, this generally declined in the west as the Roman Empire collapsed, dramatically in some regions, particularly Britain, and began to revive there only at the end of his period (c. 800) in the form of labor services and the demesne.

Slavery and feudalism, Wickham accepts, are not qualitatively distinct categories in his control model. When they had them, the feudal lords' demesne, "worked by the labour service (*corvée*) of tenants, as part of their rent, and/or . . . by household slaves," as a form of "directed labour resembles the slave mode, and in the latter variant could indeed be characterized as the slave mode" (2005, 263), which were therefore not fundamentally different. For him, what the slave mode and the feudal demesne "have in common . . . [is] they are both signs of the intensification of lordly control over agrarian production," and both are "responses to the needs and opportunities of exchange" (Wickham 2005, 264, 265). In both cases, landowners were "intervening in ways that might increase the surpluses [*sic*] that could be sold" (Wickham 2005, 265), implying that the nature of the "surpluses" did not change. Wickham admits that *Framing* is "unspecific as to what the economic logic of the feudal mode actually was; . . . the crucial admission that I have not got more than part way towards an answer as to how that logic worked," but insists, "Nor has anyone else" (2008, 8). However, consistent with Marx's distinction, we will see in chapter 6, according to the accounting evidence the difference was that whereas in the slave mode masters sought production, in the feudal mode the lord sought rent in the form of 'primeval profit.' There were, as historians have noted, slave relations on the demesne post-800, but the dominant mode of production according to the accounting evidence was feudal. Wickham assiduously notes evidence of surviving accounts, and stresses their importance—"It is hard to direct agriculture without some form of accounting"—but asks only if there were "tight accounting procedures" (2005, 265), overlooking their forms of calculation and control.

To explain the differential histories of the aristocracy's dominance following the collapse of Roman rule in his ten regions, its retention in the east, its loss and its reconstruction in the west, Wickham works with an ideal type of 'state' identified by five criteria. These are "(i) the centralization of legitimate enforceable authority (justice and the army); (ii) specialization of governmental roles, with an official hierarchy which outlasted the people who held official position at any one time; (iii) the concept of a public power; (iv) independent and stable resources for rulers; and (v) a class-based system of surplus-extraction and stratification" (Wickham 2005, 303). Similar to Marx, the first three "ideological elements" depend on "an economic underpinning to ruling-class power, elements (iv) and or (v)" (Wickham 2005, 304).

Independent and stable resources for rulers, according to Wickham, come in the forms of 'tribute,' 'tax,' and/or 'rent,' and class-based exclusive ownership of the means of production, essentially land.

Like Marx, Wickham separates 'tribute' from 'tax,' which Wickham and others accept is the state's legal claim to surplus assessed according to "mode of surplus extraction" of the dominant mode of production. As Haldon puts it, "tax represents a mode of surplus extraction, the particular form of which is in turn the hallmark of a particular mode of production" (1989, 8), but neither he nor Wickham distinguish the slave from the feudal modes of exploitation. Because Wickham (like Haldon) sees only the feudal mode, he defines 'tax' as the surplus extracted from "assessments of relative wealth" largely in land, in effect, the value of the land determined by 'rent,' overlooking that, as we will see in chapter 6, the predominant Roman land tax was, consistent with the slave mode, assessed on production. Wickham argues, "'Tribute' can in fact be conceptually separated from 'tax,' with the former consisting of lump sums due from communities or individuals, determined essentially by relations of armed force, and often arbitrary or irregular in their incidence; tax, by contrast, was based on assessments of relative wealth, in land or movables" (2005, 70). By contrast, for Marx the key distinction was that whereas tribute was 'attenuated rent,' a charge for tribe membership, which could involve arbitrary and irregular lump sums, tax was a calculated legal extraction based on the dominant method of surplus extraction employed by the ruling class, in other words, "based on *assessments* of relative *wealth*" using the mode's calculative mentality.

In Wickham's history, the distinction between tribute and tax is not conceptual, but historically tax clearly "is an important one for state resources: for it is unlikely that any system of tribute will be as remunerative as an exactly assessed tax can be, simply because only the latter will effectively pinpoint who has the resources to pay" (2005, 70). States that acquire resources through taxation are "strong," Wickham argues, because state resources dominate individual resources, so those that do not assiduously tax are "weak." From Marx's perspective, the conceptual distinction between 'tribute' and 'tax' is important because the shift from tribute to tax marks the transition from a tribal-peasant mode with notions of communal property, to the slave or feudal modes founded on individual property, as Wickham (2005) himself stresses. The social relation expressed by 'tax' depends, as Wickham (2005, 70) says, on the assessment of 'wealth,' and to assess wealth an individual or legally constituted entity must own it, making it possible to identify "*who*" has the resources to pay.

Following Marx, Wickham distinguishes between tribal (primitive-communal) societies, those "societies in which peasants are mostly independent producers, and the local rich and powerful are dominant only over a minority

of the peasantry, or are partly direct producers themselves,” and societies where “landlords dominate over peasants and live off the surpluses of dependent tenant cultivators, ‘feudal-mode’ societies” (2005, 304). Wickham calls the non-dominated form “peasant-mode” societies “when analysing their economic structure, or ‘ranked’ societies when analysing their social patterns,” an important form of which is “tribal” (2005, 304, 305). In tribes, the ruler or local lord “is less the owner of land than the leader of a free people, who are often at least in theory his distant relatives, but who are above all tied to him by tight bonds of mutual obligation and loyalty, of common identity” (Wickham 2005, 305). Tribe members, “dependents,” were mostly free peasants who “owe military obligations, and/or (often intermittent) tribute, but on an economic level they are largely autonomous, and indeed rulers also have to give to them in return, for example, by means of elaborate hospitality and feasting” (Wickham 2005, 305). Unlike the class-based state, the tribal leader did not extract tax, and rights to land were not exclusive, unlike slave and feudal societies. Consistent with Marx’s distinction, Wickham concludes, rights to tribal land “are frequently overlapping, without the exclusivity of feudal-mode land tenure, in which one person is an owner and the others tenants” (2005, 305).

The Romans conquered and subdued tribes to create and sustain their empire, tribes surrounded it, and tribes invaded it. When Roman rule collapsed in the west from the early fifth century, much of Northern Europe, particularly Britain, Wickham (2005) argues, reverted to peasant-mode tribal societies and aristocrats lost power, while in the south peasant societies existed only in isolated patches, and the aristocrats’ loss of power was less severe. It took western aristocrats some 400 years from the Empire’s collapse to reconstruct their domination of the free peasants, he concludes, to re-impose feudal relations of production and reconstruct the state. In short, according to Wickham, the historical transitions were feudal → peasant → feudal, a model which leading historians question. To Banaji, for example, “The stereotype of slave-run *latifundia* being turned into serf-worked estates is no longer credible as a model of the transition from antiquity to the middle ages, but Chris Wickham’s anomalous characterisation of the Roman Empire as ‘feudal’ is scarcely a viable alternative to that” (Banaji 2011, 109). The obvious problem is that “if a fully articulated feudal economy only emerged in the later middle ages, what do we make of the preceding centuries” (Banaji 2011, 109).

The remainder of this chapter and the following chapter argue that the preceding centuries saw an intensification of effective slavery, followed by the collapse of the Empire, the appearance of the peasant mode in the west from AD c. 400, and the transition to feudal relations by AD c. 800. Rather than reproduce the previous slave mode, surviving ‘charge and discharge

accounts,' chapter 6 argues, confirm that English aristocrats, following other western aristocracies, particularly Francia's, reconstructed their economic and political power as feudal relations of production, which for the first time became the dominant mode. In short, the transitions in the mode of production in the west were slave → peasant → feudal. This sequence is consistent with Marx's theory, with a history (unavailable to him) in which the collapse of empire curtailed a process of revolutionary class conflict developing in the late Roman Empire between individual large landowners and the slave-mode state, and its continuation against free peasants. What had been an internal class conflict in ancient Rome that intensified in the late empire became a revolutionary 'external' conflict after the slave mode collapsed and large landowners eventually faced instead the peasant mode, a conflict between those who benefited from the current (peasant) mode and those who would benefit from a new (feudal) mode.

THE LATE ROMAN EMPIRE

A trend toward slave-breeding and 'serfdom' to offset the reduction of captured slaves and the wealth they generated for the ruling elite began, de Ste. Croix argued, with the "the advent of the Principate in the last generation BC and the marked decrease in the numbers of wars producing large slave-hauls" (1981, 453).¹ This, he concluded, began "the ever-increasing exploitation of the vast majority of the population of the Graeco-Roman world by the all-powerful wealthy classes (a tiny minority)" (de Ste. Croix 1981, 7). Following military and economic crises, he argued, 'serfdom' (not feudalism) began to appear around 300 and eventually covered a large part of the Graeco-Roman world, even suggesting that it became the dominant mode of labor in what remained a "slave economy" (de Ste. Croix 1981, 53, 155, 172–73). Historians generally reject this, but they agree that by the end of the fourth century most tenants (*coloni*) had legally become 'serfs' tied to the land, the '*adscripticiate*,' subject to direct exploitation, and to indirect and collective exploitation through taxation, military conscription, or forced services to the state or municipality (de Ste. Croix 1981, 5, 33). The state-imposed legal requirement on peasants to register for taxation and remain on their allotted land appeared in the fiscal reforms of the late third and fourth centuries designed to make the collection of taxes more predictable (Sarris 2006, 150).

At the same time, "the economic institution of tied estate labourers was developing autonomously at provincial level" as large landowners exploited the situation for personal gain, exploiting both the pools of dependent labor this created and by *autopragia*, having their estate workers pay their

taxes through them (Sarris 2006, 150–51). The laws creating the adscript colonate and *autopragia* “tightened the landowner’s control over his resident labourers. Landowners who became *pagarchs* and *vindices* acquired greater authority over those who were not already their direct social and economic dependants” (Sarris 2006, 175). Roman law forbade private armies, but from the late fourth century alongside the growing wealth of the large landowners on their estates appeared the *buccellarii*, bodies of armed men, soldiers under their control, who they used to maintain their “authority . . . and the profitable management of their estates,” using them to “instill fear in neighbour and employee alike” (Sarris 2006, 162). The accounting evidence, we will see, clarifies that these developments in landowner control reflected the intensification of the slave mode of production.

By the late third century, Wickham has long argued, “the slave plantations of the first century had already virtually disappeared, though some may have continued here and there. Instead, dependent cultivation was by now carried out through tenants, that is, organized through the feudal mode of production” (1984, 8–9). Legally there “were certainly still very many slaves,” but according to Wickham, “those slaves had been turned into tenants, and thus controlled the land and their own work process” (1984, 9). Also confirming feudalism, he argues, “we begin to encounter free tenants (*coloni*) in the texts more and more, often at levels of very considerable personal dependence; the giant landowners of the fourth and fifth centuries increasingly relied on them” (Wickham 1984, 8–9). Many historians dispute Wickham’s claims. Even Finley, as we saw, thought that chattel slavery only “ceased to be dominant . . . by the fourth or fifth centuries” (1999, 180), and “Today, almost no serious scholar accepts . . . [Wickham’s] view, if only because feudalism itself is still so contested” (Banaji 2011, 111).

Wickham’s notion of the feudal mode, Banaji complains, is “construed so loosely that it covers both the Roman Empire and (probably) the whole medieval world and much else besides” (2011, 112). He criticizes what he sees as the “tendency to *dehistoricise* categories such as ‘serfdom’ (Ste Croix) and ‘feudalism’ (Wickham, Haldon) in order to be able to extend their application to antiquity [a] surely a retrograde one,” bemoaning “the lack of a more sophisticated Marxist theory of the feudal mode” (Banaji 2011, 112). Banaji (2011, fn.16, 112) attributes Wickham’s “long-standing belief” that “limited landowner-control over production is . . . part of the ‘economic logic’ of feudalism: ‘landowners could only influence production by indirect methods’ . . . [as] one which almost certainly stems from Hindess and Hirst,” but he does not replace it with a historical definition. Instead, Banaji (2011, 138) complains, “It would be foolish to deny that Marx’s handling of these categories was far from finished. He never left us with a developed or mature theory of modes of production, and a whole strand of his thinking on these issues can easily be mobilised to support the sort of equations that Wickham

works with.” The weakness of Hindess and Hirst’s (1975) conceptualization of the feudal mode, chapter 3 argued, was its failure to recognize Marx’s focus on feudalism’s method of surplus extraction in the form of ‘primeval profit,’ which is his “profoundly historical vision . . . that should form the point of departure for us” (Banaji 2011, 138).

Using charter and legal evidence, Roman traditions of direct management, Banaji (2009) argues, continued in the early medieval west, and that Romano-Germanic successor elites rapidly blurred the distinction between free *coloni* and slaves, which produced a mass of undifferentiated “servile labour.” Wickham exaggerates, Banaji (2011, 110–11) argues, how much control many apparent ‘tenants’ actually had in the later Roman Empire and beyond. However, because both Wickham and Banaji, in effect, accept Cohen’s (2000 [1978]) economic control model, the issue between them comes down to judgment. Wickham happily accepts that Banaji (2003) “has . . . effectively argued that the coercive environment of much wage labour lessens the distinctions between it and other modes,” because the model’s subjectivity allows him to nevertheless maintain, “this does not change the fact that each presupposes a different economic logic” (2005, fn.2, 261). “Banaji, for some years, has sought to disaggregate the category of tenancy, separating out more dependent groups of workers who are more subject to the control of landlords, and whom he wishes to see, rather, as rural proletarians. He makes the same point here” (Wickham 2011, 224). Wickham is “not . . . convinced. . . . Some peasants indeed ‘had very little control over their working lives,’ in Banaji’s phrase. But they still lived off the land they worked, and paid rent to lords” (Wickham 2011, 224). Wickham judges that owners turned their slaves into ‘tenants,’ whereas Banaji raises the question, “does the persistence or revival of slavery mean that a slave-mode of production dominated the class-relationships of this period?” (2011, 110). Banaji insists, “there is certainly enough evidence, both in the legal sources and elsewhere, to suggest that late-antique large estates depended on a *tied* labour-force,” and did not abandon direct management (2011, 124). Focusing on the mode of surplus extraction, we will see, the accounting evidence supports Banaji’s judgment that “it would be more accurate to describe [it] as involving a *mutation* of slavery than its outright supersession” (2011, 116), a mutation into effective slavery.

Historians debate whether slaves or freemen who became ‘tenants’ really controlled their land and work processes because legal categories are not decisive tests of effective control. Wickham agrees, “how labour was actually organized is more important than the issue of legal disability discussed by other historians” (2005, 261). According to his control model, in the slave mode the legal and economic seem to coincide because “for such totalizing economic control presupposes denial of rights . . . ; but *servi*, *ancillae*, *mancipia* do not have to be organized as the slave mode. Plenty of tenants throughout the ancient and medieval periods were referred to in these

words . . . and were unfree in legal terms, but their *economic* relationship to their lords was effectively identical to that of their free tenant neighbours” (Wickham 2005, 261). Alternatively, they might be effectively identical to their slave neighbors. The problem, as Banaji (2011, 109) puts it, is that “by postulating a ‘general dominance of tenant production’ throughout the period [400—800], Wickham fails to offer any basis for a closer characterisation of the post-Roman rural labour-force and exaggerates the degree of control that peasants enjoyed in the late Empire and post-Roman world.”

To get closer to the underlying reality of the ‘economic logic’ of labor-force control we need evidence from accounts written during the late Roman Empire. Such evidence exists, the following section argues, in the well-known estate accounts for the properties of the wealthy Apion family near the Middle Egyptian city of Oxyrhynchus, from the last half of the sixth century. These and other documents are part of an extensive papyri archive from the fifth century through to the early seventh century (Sarris 2004, 282), most from after 540 (Hickey 2012, 21). They are “our best guide to how estates worked” (Wickham 2005, 245), “by far the best documented aristocratic estate from the early Byzantine world” (Hickey 2012, 2), which is our best (but not only) guide to the late Roman Empire landowners’ calculative mentality, social relations, and system of control.

The Apion Estate Accounts

The Apion accounts are at the heart of a dispute between historians of the period, between ‘primitivists’ and ‘modernizers,’ between conventional ‘descriptive’ history and the ‘theoretical’ history of the ‘historical-materialists.’ Some of the arguments based on “recent work on the Apion estate has emphasized its modernity: its ‘commodification,’ its ‘monetization,’ its rationality,” and according to Hickey (2012, 4) they “have ideology at their root,” singling out “Banaji and Sarris [who] write in the tradition of historical materialism.” What follows supports Hickey’s skepticism about using “Western capitalism as a touchstone for the ancient economy” (2012, 4), but rejects his ‘small-estate,’ primitivist interpretation of the Apion estate accounts. It criticizes the historical materialists’ interpretations of Marx’s concepts and of the accounts, but argues that the accounts support their interpretation of the labor process and its importance in understanding late Roman history because, like the Heroninos estate accounts (AD 249-68), the Apion accounts (AD c. 556–590) are consistent with effective slavery.

The Estate

An elite class of imperial civil servants and military commanders arose during the fourth century, grounded in imperial patronage, opening opportunities

for enrichment, and during the fifth century members of this elite rose “through the imperial ranks and [were] accumulating increasing amounts of land” (Hickey 2012, 2). The *Flavii Apiones* were among the “most successful members of this new landed aristocracy” until the seventh-century Persian invasion of Egypt (Hickey 2012, 2). The Apion family had estates run by ‘managers’ with offices in Constantinople, Alexandria, and at their estate at Oxyrhynchus, and a system of accounting control. Surviving Oxyrhynchus estate accounts show an “articulated bipartite division of land” (Sarris 2006, 32). The estate had wholly owned landholdings around small settlements called *ktemata* or *epoikia*, properties and holdings located in or around larger villages or *komai*, both worked by largely landless peasants, *coloni*, and it had land held and cultivated ‘in-hand,’ called the *autourgia*. The Apion household levied money and wheat payments from the inhabitants of the *ktemata* and collected taxes, some of which it used to hire labor and purchase items required for the in-hand estate, land “directly cultivated and managed, drawing for its needs upon both the human and economic resources of the *epoikion* settlements” (Sarris 2006, 32–33). At the heart of the *ktemata* was a building complex, often a “barrack block” (Rathbone 1991, 31–32), in which the workers and their families lived (Banaji 2001, 182). To control its estate the Apions had an elaborate hierarchy (see figure 5.1).

At the top was the landowner, the *geouchos*. In command of the estate, the *antigeouchos*, the ‘head steward’ or ‘landowner’s agent,’ had beneath him a layer of estate managers, the *chartouliarios kai dioiketes*. The *oinocheistes*,

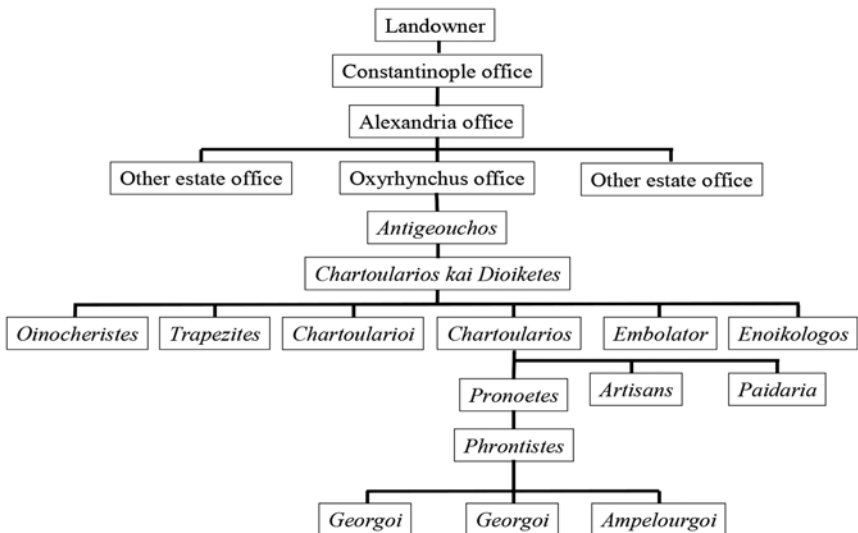


Figure 5.1 The Administrative Structure of the Apion Household. Source: Created by the author based on Sarris (2006, Figure 5, 79).

trapezites, *embolator*, and *enoikologos* were, respectively, the estate's wine steward, banker, tax steward, and accountant. The *chartouarios* managed the artisans and the *paidaria*, unfree workers and their families who worked on the *autourgia*, the landowner's in-hand estate (Sarris 2006, 40), who received food allowances (Banaji 2001, 183). The *chartouarios* also supervised a number of *pronoetes*, the 'stewards' or 'overseers' of the *epoikia*, 'hamlets' or 'labor settlements,' who with the assistance of the headman or *phrontistes* and his taskmasters, supervised the *georgoi* and *ampelourgoi* (vineyard specialists), who were 'registered land-laborers' who also worked for 'wages' on the *autourgia*. The *georgoi* were "largely landless and attracted to the estate by the prospect of stable long-term employment" (Banaji 2001, 188), who had the legal status of *colonus adscripticus*, which meant that they and their families had to remain permanently on the *ktema*. A *georgoi*, granted only an annually renewable contractual right of occupation, was required to bring "with him his own agricultural implements and cattle over which the Apion family acquired contractual control," and was obliged to make money and wheat payments, pay taxes, and work on the *autourgia* (Sarris 2006, 61–65).

The *pronoetes* oversaw *epoikia* and properties in *komai*, organized into districts called *prostasiai*, comprising five to seven *epoikia*, which were "grouped into *dioikeseis* . . . overseen by *dioiketai* . . . [possibly] as many of five of these in larger districts" (Sarris 2006, 30; Hickey 2012, 26). *Dioiketai* styled themselves 'counts' in a seventh-century account of payments in kind to groups they supervised (Banaji 2001, 145). The *pronoetes*, who were also employed on one year contracts, received a schedule of demands from the *chartularioi* or 'secretaries' of the household, were required to issue receipts for revenues received, and were personally liable for any shortfalls, and were required to keep accounts (Sarris 2006, 51, 52–53, 55). The question is the underlying calculative mentality and social relations that, according to the accounting interpretation, their phenomenal forms reveal, whether their aim was production, rent or profit.

Calculative Mentality and Accounts

Each *pronoetes* was responsible for collecting "revenue in wheat and coin," overseeing various expenditures, and compiling accounts (Sarris 2006, 51). They produced what they called "accounts of receipts and of items of expenditure," part of "general estate accounts" (Sarris 2006, 29) in the Egyptian "tradition of such accounting" (Wickham 2005, 247). These accounts, several of which survive, what follows argues, are consistent with effective slavery, with a focus on production, not 'profit' or 'rent' from 'tenants' as we will see historians suppose. Historians have published four relatively complete sets (*P.Oxy.* LV 3804 (565/6), XVI 1911 (565/6), XVIII 2195 (c. 586) and XIX 2243(a)), but accounts in "various states of preservation are extant for ten . . . districts" (Hickey 2012, 26). The four

published accounts conform “to the same overall accounting framework,” to “a strikingly uniform pattern” (Sarris 2006, 29, 34–35). Table 5.2 outlines the structure of these accounts and gives the (approximate) summary figures of the categories found within them for *P. Oxy* LV 3804 (565/6).²

P. Oxy LV 3804 is the account of a steward called Theodorus whose district consisted of seven hamlets. His receipts were payments for using land and other assets and taxes in gold coin (*solidi*), and wheat measured in *artaba*, from each area, organized in columns for each hamlet, and totaled (Rea 1988, 115–18). Cash payments versus wheat payments varied by area, and in *P. Oxy* LV 3804 accounted for a higher proportion than it did in other *pronoetai* accounts (Hickey 2012, 27). Generally, those growing fodder, engaging in viticulture (and orchards), and growing flax, paid cash, and those growing wheat paid in wheat (Hickey 2012, 27). It is, as Rea says, “very striking that they [the receipts in *P. Oxy* 3804 of 565/6] are the same as those given in [*P. Oxy* XVI] 1911 207–8” (1988, 142), which dates from 556/7 (Sarris 2006, 29). This, we will see, is consistent with them being, as Hickey (2012, 27) suggests, production quotas or targets, the “anticipated . . . inflows,” rather than ‘rent’ in Marx’s sense, ‘primeval profit,’ revenues minus expenses. The

Table 5.2 Annual Account of a Steward on the Apion Estate c.565/6

	<i>Artaba</i>	<i>Solidi</i>
Receipts of the 14th indiction:		
Money receipts & taxes		647
Wheat receipts	1,535	
Expenditures of the 14th indiction:		
Churches/monastery of Abba Andrew	-1,206	-10
Pronoetes	-24	-2
Taskmasters (4)		-5
Concessions	-230	-31
Wages for <i>autourgia</i> cultivation		-35
Landlord’s expenses	-75	-80
Additional expenditure not entered in the 13th indiction		-4

‘Remainder in money’		480
Payment—Tybi 25		-307
Payment—Mesore 30th		-173

‘The account is balanced’		-
		=====

‘Wheat is balanced’	-	
	=====	

Source: Created by the author based on Rea (1988, 115–123).

account described most cash receipts as ‘From [a named person or persons] from [a named holding],’ only a few adding “for fixed rent of lands,” “rent of date palms,” “rent of an oil factory,” “rent of sheep,” “rent of a dovecote” (Rea 1988, 115–17). These might be calculated or notional ‘rents’ from a few high-status tenants, which took only the ‘profit,’ or allowed the tenant to keep some or all of it, but Theodorus’ account did not attempt to calculate ‘profit.’

The *pronoetes* was accountable for collecting coin and wheat from *georgoi* from a particular *ktema* (a division of land within the *epoikion*) and spending a significant part for “items of expenditure.” These were of five main types: for religious purposes, for the salaries of estate officials (the *pronoetes* and four taskmasters), for ‘concessions,’ for ‘wages’ on the landlord’s *autourgia*, and for the landlord’s purposes. The religious expenditures, mostly of wheat, were for charitable gifts to churches in each of the hamlets, and a large contribution to the monastery of Abba Andrew (Rea 1988, 118–19). Then follow a series of “concessions,” for “rent” of land or date palms “according to custom,” or to compensate for changing land use (vineyards to grass), or damage caused by the landlord’s irrigation system. For example, “Conceded tenant farmers of . . . Cotyleeiu sown previously . . . for land carried away by the river as a result of the breach of the dyke sol. 3 1/6” (Rea 1988, 118–20).

Then follows a section detailing expenditures for employing ‘tenants,’ ‘persons,’ and ‘partners,’ as workers on the *autourgia*, and other expenditures for the landlord’s purposes (Rea 1988, 120–22), that is, acquiring required material and labor inputs for the in-hand estate’s from the ‘tenants’ and so on, and meeting other of the landlord’s expenditures. As Sarris’ says, in *P.Oxy* 3804, “many of the costs associated with production on the *autourgia* are recorded in the expenditure section of the document. These costs were met from the revenues derived from the *epoikia*” (2006, 32). Other evidence suggests this pattern elsewhere. Another account, *P.Oxy* XVI 1913, also “contains many entries for the . . . autourgic *Exo tes pyles* . . . concerned with the settlements [of] Iboitos and Kathegetou” (Hickey 2012, fn.36, 27). As Sarris concludes, “On the basis of the estate accounts, therefore, the Apion properties the vicinity of Oxyrhynchus emerge as having constituted estates” (2004, 287). That is, they show, “the in-hand . . . worked both by a servile workforce apparently resident on the *autourgia*, and by workers, typically as *georgoi* or ‘land labourers,’ resident in estate settlements *epoikia* who, in addition to the labour they provided on the *autourgia*, also paid rents [sic] in coin and kind” (Sarris 2004, 287).

The accounts in *P.Oxy* 3804 (column ix) have a heading “And in *autourgia* of right of the holding of Tarusebt, as follows,” under which it lists payments of coin to named individuals for work on “land taken for direct cultivation . . . [which] is credited to the *pronoetes*” (Hickey 2012, fn.36, 27). The entries (see table 5.3) are of the form, “Ground of Pappar in the name of Phoebammon son of Peter through Pecysius son of Psaeias ar. 1/2 1/4 1/32 sol. 1/4”; “Ground of

Schora cultivated through the persons from the hamlet of Luciu of right of Tarusebt ar. . . . sol. 1.2” (Rea 1988, 120). Other entries simply describe the payment as given the “in the name of” a person for a named “ground,” giving the area in *aroura* (ar.). The total expenditure in cultivating the *autourgia* in Tarusebt was sol. 12 1/8 1/48. Similar entries follow for the “*auturgia* of right of the holding of Luciu,” which total “ar. 30 sol. 21 2/3 1/8 1/96” (Rea 1988, 120).

Paying *georgoi* workers for cultivating these areas of *autourgia* absorbed some 20 percent of Theodorus’ total expenditures [in actual

Table 5.3 Labor Expenditures on the *Autourgia*

	<i>Solidi</i>
And in <i>auturgia</i> of right of the holding of Tarusebt, as follows:	
Ground of Papar in the name of Phoebammon son of Peter through Pecysius son of Psaeias ar. 1/2 1/4 1/32	1/4
Ground of Schorda cultivated through the persons from the hamlet of Luciu of right of Tarusebt ar. . . .	1/2
Ground of Pheltanbel cultivated on behalf of Phileas son of Psaeias from Luciu of right of Tarusebt from ar. 7 1/2, ar. 4 1/2	3 1/2 1/4
Ground of Concon cultivated previously on behalf of Colluthus in the name of Peter, son of Phoebammon from Tarusebt from ar. 7 1/2, ar. 3	1 1/2
Ground of Ptychon in the names of Serenus and Paul from Tarusebt ar. 1 1/4	1 1/8 1/48
Ground (called?) Northern right of Diogenes in the names of Paul and a second Paul ar. 6	5
Total	12 1/8 1/48
And in <i>auturgia</i> of right of the holding of Luciu, as follows:	
In the names of Anuthius, son of Aciar, and Pecysius, son of Paul, ground of Sarapodorous, from ar. 12, ar. 6	4
In the names of Isaac, son of Ammonius, and partners and of right of irrigators of ground of Seuthes ar. 9 1/4	6 1/2 1/3 1/12 1/48
In the names of Surus, son of Phoebammon, and partners, of right of the Large Estate ar. 3	2 1/4
In the name of Hatres, son of Phoebammon, ground of Pagenes ar. 2	1 1/2
In the name of Pecysius, son of Paul, ground of Came ar. 2	1 1/2
And in respect of the right of the irrigators of ground of Thatres to the south of the holding of Cotyleeiu ar. 2 1/2	1 1/2 1/3 1/24
In the name of Jacob, son of Ammonius, ground of martyrism of Acacius ar. 1 1/2 1/4	1 1/12 1/96
In the name of Phoebammon, son of Jacob through Horsentius, deacon, and partners, ground of Crescentius ar. 3 1/4	2 1/2 1/8 1/48
Total	21 2/3 1/8 1/96

Source: Created by the author based on Rea (1988, 120).

solidi = 33.95/167.43]. The account then records a series of expenditures on labor, materials, and livestock, all of them apparently for the ‘landlord,’ some of them explicitly identifying the *autourgia*. Table 5.4 lists these expenditures (in approximate *solidi*) giving the key parts of the accounting entries.

Adding together all landlord expenditures explicitly mentioning the *autourgia*, or that can be associated with it (e.g., Hickey 2012, fn.70, 31),

Table 5.4 Expenditures for the Landlord

	<i>Solidi</i>
To the brickmakers making bricks in the holdings for wages and the wages of a builder	3.63034943
To the tenant farmers Cotyleeu for five aruras planted with vines and for crops	1.51567089
To the rivermen who dug out a new cistern and the community of tenant farmers for the water supply and crops on account of wages	2.72276207
In respect of the price of 1,100 wine jars	0.90758736
To Apanacius rivermen working on the vault of the cistern at Trigyu on account of wages	0.90758736
To Apollon riverman on account of wages for embanking one arura of vines destroyed and for wine production	3.63034943
For the price of 1 beast for use in the riding stable	4.08414311
For the price of green fodder for feeding the beasts of the riding stable	0.90758736
For nails and oils for repairing the landlord’s tender and for John the <i>notarius</i> overseer of the work	10.2557371
For the price of scales of cladding for tender	0.90758736
For the price of Cypress timbers for repair of the same tender of the landlord	10.8910483
To the sawyers who sawed the cypress timbers	0.90758736
For the price of straps for camels	1.81517472
To the three camel drivers on account of salary	4.08414311
For the price of papyrus for use on records and accounts	2.72276207
To the field guards on account of wages for guarding the <i>autourgia</i> ’s hay	1.36138104
For the price of hayseed/sowing on <i>autourgia</i>	4.08414311
For the price of hayseed/sowing on <i>autourgia</i>	2.72276207
For the price of a discharge trough bought and fitted	0.15156709
For the price of aracus art.32 bought for sowing on landlord’s aruras which were irrigated/flooded for a second time	3.02226590
To John the <i>notarius</i> and overseer of the work on the landlord’s tender	0.60808353
For the price of scales of cladding for tender	0.90758736
To the carpenters and shipwrights on account of wages	5.89931783
For the price of millstone cutter’s stones and Samuel oil-worker and partners for crops	0.90758736
For the price of two oxen, two bulls, and two heifers for watering the landlord’s <i>autourgia</i>	10.8910483
Total	80.4458206

Source: Created by the author based on Rea (1988, 115–23).

Theodorus spent some 32 percent of his total expenditures on it, and possibly some or all of the expenditures for ‘concessions,’ and others for the landlord, were also related to the *autourgia*. The ‘tender’ (a ship) was the landlord’s as a “frequent theme of the *Oxyrhyncus papyri* is the shipment of goods along the Nile, which made access to the whole of Egypt so easy that it reduced transportation costs in the region virtually to zero” (Wickham 2005, 247). The Apion estate would have had every opportunity to sell commodities because an estimated third of the population lived in cities and “this fact alone would have ensured that exchange . . . must have been unusually active” (Wickham 2005, 248).

As Sarris says, the information the estate accounts “furnished most readily . . . was whether the *pronoetes* had collected the expected sums and whether he had incurred unusual (or suspicious) levels of expenditure” (2006, 47). Their aim, he argues, was to “identify the honesty and reliability of the estate overseer or *pronoetes* as the crucial factor determining the fortunes of the estate,” which he claims was “a common feature of ‘charge-discharge’ accounting techniques, of which . . . the Apion estate managers operated a variant” (Sarris 2006, 47). However, first, unlike ‘charge and discharge’ accounts, the Apion accounts were not ‘feudal’ because they did not calculate the difference between money receipts and the expenditures required to produce and/or collect them, what accountants today call the ‘expenses,’ did not calculate labor rent in money form, Marx’s ‘primeval profit,’ but the balance after expenditures for other purposes. Second, the *pronoetai* were accountable, not simply for ‘collecting’ the expected money and wheat, and honestly incurring specified expenditures, but for the ‘efficiency’ of the production that underlay the receipts and justified their expenditures. The entries in tables 5.3 and 5.4 identified the person(s) accountable for *required work or production*, which is consistent with effective slavery, a conclusion that, we will see later, evidence of the *pronoetes*’ coercive supervisory work supports.

In *P. Oxy* LV 3804, the receipts of wheat exactly balanced the expenditures, which was broadly typical (see table 5.5). The coin expenditures for salaries, wages, and purchases, paid for from the receipts (and some poll taxes), left a balance that the account called “the remainder in money” (Rea 1988, 123), what Sarris (2006) calls “net revenue,” for Theodorus to pay to the *trapezites*, the estate’s banker (Hickey 2012, 67). The account closed with the entry, “Wheat is balanced, and the remainder in money is sol. 480 1/2 1/96,” detailing the payments Theodorus made that cleared his debt (Rea 1988, 123). The ‘remainder’ or ‘net revenue’ in money was not the ‘profit’ for the year, but what remained after Theodorus had made required expenditures for other purposes.

Showing no concern with calculating the annual ‘profit,’ there was a “surplus of the accounts of the 13th indiction,” the notes to the account explain, four *solidi* unpaid, which the account simply added to the expenditures for

the 14th indiction (Rea 1988, 122). Similarly, the account included expenditure for irrigating land that was “not entered for the 13th [indiction]” of some three solidi (Rea 1988, 122). Furthermore, the notes explained that the accounts excluded eight solidi owed to “Apollos and Isaiah and partners” for the 13th and 14th indictions, who had left the holding “after the completion of the account,” which was “carried over in respect of the surplus of the accounts” (Rea 1988, 123). The accounts also charged several large expenditures—which capitalists would classify as ‘fixed capital,’ and spread over their lifetime (Bryer 2017, chapter 6), and sophisticated feudal lords would distinguish as nonrecurring (see chapter 6)—in the year acquired. Hickey therefore misunderstands when he concludes, criticizing other historians’ interpretations (discussed below), “An attempt to use the *pronoetes*’ account to determine the profitability of the *prostasia* seems improbable,” but not because “the waters were already muddied with fiscal charges” (2012, fn.44, 69). These accounts do not measure ‘profitability,’ which is consistent with effective slavery because it implies that the payments received were not ‘rents’ in Marx’s sense, based on the calculation of ‘primeval profit,’ but are likely to have been quotas or targets, as we will see.

The *pronoetes*’ accounts, Rathbone concluded, were “apparently no more than unintegrated records of rents [sic] or taxes received or due and of expenditures made” (1991, 402; see also Mickwitz 1937, 583). However, as Sarris points out, there is no “reason to accept the notion of a decline in the ‘rationality’ of accounting technique between the third century and the sixth posited by Rathbone” (2006, 146). Sarris is clearly right, “the estate accounts of the Apion *pronoetai*, as well as bearing testimony to the high level of monetisation on the estates, provide evidence for a carefully structured accounting framework that sought to achieve the same outcome as those preserved from the Heroninos archive” (2006, 146), but he thinks that both sought “profitability”:

Their primary aim was to ensure that levels of income were being maintained and costs of production were being kept down. . . . [T]he estate accounts identify the honesty and reliability of the estate overseer as the crucial factor determining the fortunes of the estate. This was a logical response to the practicalities of ancient agriculture. . . . In such conditions, *controlling the costs of production and minimising losses caused by fraud or deception were the key to ensuring the viability and profitability of an estate*. This was as evident to the administrators of the Apion estates in the sixth century as it had been to those employed by Apianus in the third. (Sarris 2006, 146–47, emphasis added)

Sarris concludes, “the underlying rationale of the estate accounts suggests . . . [that] the efficient and profitable exploitation of the Apion family’s landholdings depended to a very great extent upon the honesty and

accountability of the *pronoetes*" (2006, 51). The *pronoetes*' role was, as he says, vital because "In so far as the agricultural labourers of the *epoikia* were concerned, the *pronoetes* represented the most immediate and public face of the Apion household" (Sarris 2006, 51). However, because Sarris equates "efficient" with "profitable" he overlooks what it was that overseers were required to be "efficient," "honest," and "accountable" about, what the laborers saw in the "most immediate and public face of the Apion household" represented by the *pronoetes*' accounts, which their structure and other evidence suggests, we will see, was coercive accountability for production.

Banaji also argues, against "the prevailing minimalist views of the ancient economy, it is clear that enterprises were run only if they were profitable [*sic*]" (2001, 218). From the fourth century, he argues, many "sectors . . . saw substantial investment of private capital [*sic*] based on the individual pursuit of profit" (Banaji 2001, 219). However, his evidence undermines his qualification that this is a form of "proto capitalism," that he accepts "not . . . all owners or businesslike entities strove to expand profitability from year to year in the way modern capitalists do" (Banaji 2001, 218). He quotes advice to late Roman landowners that "by extracting an *output* from the acquired property, you will multiply its value and repay your debt," and refers to the authority of Varro that planting fruit and olive trees will make the farm "more saleable" (Banaji 2001, fn.27, 219, emphasis added) because more productive, both consistent with the slave owner's mentality.

Banaji (2001, 220) ignores Marx's distinctions, referring instead to Sombart's (1899) "more general category of 'business economy,'" what he calls the "broader sense" in which he and Sombart claim, "it made no difference to businesses . . . whether they exploited slaves, serfs, or hired workers." Banaji argues, "large sums of money went into . . . the acquisition of large properties that could be exploited on a commercial basis," in the same way that "commercial capitalism" existed in the "great commercial centres" (2001, 220–21). The issue for him, however, is not whether commercial capitalism was intensifying exploitation in production, as it was for Marx, but "how far the aristocracy's involvement in the monetary economy assumed a capitalist character in displaying the features that contemporaries associated with the purely capitalist [*sic*] behaviour of moneylenders" (Banaji 2001, 221). He criticizes minimalist historians for focusing on the fact that "modern capitalism would transform . . . [market] relations in ways that were unimaginable to antiquity," because this has "misled them into supposing that capitalism was not something the ancient world could ever have known in any fundamental sense" (Banaji 2001, 221). However, according to the *pronoetes*' accounts, the landlord did not have a money-lender, money capitalist mentality, show any concern for 'capital' and 'interest.' Even assuming that his managers ran the *autourgia* as a 'commercial enterprise'—and there is, we will see, no

evidence that they did—the landlord was at best semi-capitalist, a merchant capitalist founded on slavery, the ‘unfree’ *paidaria*, and, we will see, the effective slavery of the *georgoi*.

Hickey (2012) disagrees with Banaji (2001) et al. In his view Rathbone (1991) showed “diligent managers striving to control costs [*sic*] and achieve economies of scale and its high level of market integration,” but agrees with him that Apion was different, that it shows “owners and managers who, although possessing the means . . . to reproduce Appianic ‘rationalism,’ pursued different objectives” (Hickey 2012, 5). Hickey could, we have seen, rightly complain that Banaji (2001), Wickham (2005), and Sarris (2006) do not show that the aim was ‘income’ or ‘profitability’ from controlling the ‘costs of production,’ that “the Apion estate was at least in part oriented towards profit” (Wickham 2005, 247). Instead, Hickey (2012, 64) complains, “the historical-materialism that has recently dominated the scholarship on the Apion estate, with its teleological imperatives, lacks the necessary suppleness” to deal with the “complexity and diversity” of the evidence, and instead merely “slot[s] the Egyptian texts into one of Marx’s constructs.” However, first, according to the accounting interpretation, the historical materialism supported by these historians is not Marx’s, and second Hickey does not prove “that ‘old’ Roman aristocratic values still prevailed, that the Apiones were satisfied with a ‘sufficient’ and stable supply of Egyptian gold” (2012, 159), but slots the evidence into the minimalist paradigm.

In Search of the Commercial *Autourgia*

No accounts have survived for the *autourgia* as an entity. However, if the Apion estate’s accounts were as ‘sophisticated’ as the Heroninos accounts from 249–68, and Rathbone (1991, 402; 1994, 56) thought they were less, Apion’s managers might have calculated the ‘profitability’ of the *autourgia*, but there is no evidence they did. Hickey (2012, 8) argues, against Sarris’ (2006, 33–34) view that the *autourgia* was large and profitable, that three surviving accounts of the estate’s wine steward, the *oinocheiristai*, show that the estate produced and sold only a “marginal” “marketable surplus in wine” for “income.”³ While if true this would be evidence of an interest in ‘profitability,’ Hickey overlooks that these are ‘income and outgo’ stores accounts, what he rightly calls accounts of “inflows” and “outflows” of wine (2012, 98, 99), not revenue and expense accounts, and therefore can tell us nothing about production for ‘profit,’ which was not their aim. As he says, “The structure of the annual accounts of the *oinocheiristai* is rather simple. The two ‘unabridged’ examples . . . primarily document distributions, which were set against the steward’s *hypodochē*, a quantity of wine (comparable in function to the total *lemmata* in the pronetic accounts) that the steward obtained for

the most part from rents and *any* autourgic production” (Hickey 2012, 98, last emphasis added).

It is probably true, as Hickey concludes, “We can be confident that the *oinocheiristai* were responsible for the vast majority (if not all) of the wine received and expended by the Apiones’ Oxyrhynchite *oikos*” (2012, 152), but this need not equal the total wine produced and sold. Extant data show sales of wine is generally “quite limited” and “often indeterminate,” so Hickey is not surprised that the three wine steward accounts report no sales (2012, 8, 141). The “outflows” are the “Apiones’ expenditure in wine” (Hickey 2012, 99). These so-called ‘expenditures’ were gifts to “pious and charitable causes,” payments “to members of the civil administration and military forces, for internal expenses [*sic*] like salaries, and in connection with festivals and spectacles” (Hickey 2012, 8). They are not calculations of a money surplus from producing and selling wine, but “distributions” as Hickey says. Consistent with this, in one of the accounts the “wine expenditures of the estate come rather close to balancing with the *hypodochē*, with the sum total of wine available to the *oikos* . . . and this may also have been the case in another In the third . . . there is the potential for a marketable surplus, but caution is in order because purchases of wine appear in the text” (Hickey 2012, 146–47).

The existence of the wine distribution accounts does not preclude the possibility that the estate produced separate accounts for wine production on the *autourgia* as a responsible accounting entity. The relative smallness of the *pronoetes*’ ‘net revenue’ against the Apion wealth, Sarris argues, means there must have been a “surplus furnished by the in-hand [that] was marketed” (2006, 32). From *P.Oxy* LV 3804, he concludes, “the net cash revenue derived from the *epoikia*, once the assigned costs were deducted, was extremely modest,” and the revenue in kind collected matched expenditure, which “would suggest that the *autourgia* and not the *ktēma* represented the main source of surplus production on the Apion estates” (Sarris 2006, 33–34). The *pronoetes*’ account “makes no mention of the produce or revenues derived from the *autourgia*,” so Sarris concludes these “were presumably detailed in a separate document” (2006, 32, 49). To him, therefore, “the general impression given by the sources is that it was extensive, and it is likely to have furnished a much higher proportion of Apion family income than the sums derived from the *epoikia*” (Sarris 2006, 33).

The data from the surviving general estate accounts and from *P.Oxy* XVIII 2196 verso, which records the estate’s total cash receipts for c. 586, at 18,512 *solidi*, suggests that the *ktēma* was not the sole source of the Apion estate’s income. Banaji calls this sum “the annual revenue in *solidi*, which the Apions extracted from their Oxyrhynchite estates,” its “cash receipts” (2001, 138,

Table 5.5 Total Cash Receipts and the Equivalent Number of Prostrasiai

	Wheat (artaba)			Cash (solidi)		
	Receipts	Expenditure	Balance	Receipts	Expenditure	Balance
P Oxy XVI 1911 (556/7)	1,535	1,515	20	647	140	507
P Oxy LV 3804 (566)	1,535	1,535	0	647	167	480
P Oxy XVI 1914 (557)	1,342	1,331	11	285	47	238
P Oxy XVIII 2195 (c.576/7)	4,286	4,087	199	314	88	226
Average	2,175	2,117	58	473	110	363
Total receipts: P Oxy XVIII 2196v (c.586)				18,512		
Equivalent pronotal = 18,512/473				39		

Note: All numbers rounded.

Source: Created by the author based on Banaji (2001, table 2, 223).

table 2, 223). Hickey says, “The *lemmata dia pro*() in *P.Oxy.* 18.2196.v are the sum total of the target receipts that one encounters in the accounts of the Apiones’ *pronoetai* and in their *apaitesimon* or rent roll. There is no reason to believe that they represent a net sum, that is, that local expenses, which were largely the responsibility of the *pronoetai*, have already been deducted from them” (Hickey 2008, 89–90). If the surviving stewards’ accounts are representative (Banaji 2001, table 2, 223), the *ktema* was unlikely to have been the sole source of the estate’s cash income because to derive it solely from money ‘rents’ the estate would have needed receipts from the equivalent of some 39 *pronoetai* (see table 5.5). By contrast, a text from 541 suggests there were 16 *prostasiai* (districts), and while “there could have been more” (Hickey 2012, 26), there is no evidence that there was, which leaves the possibility that there was a large *autourgia*.

We cannot “exclude the possibility that the estate’s non-agricultural activities were significant,” or the fact that “there is deafening silence concerning agricultural units beyond the Oxyrhynchite,” or any involvement in the “staggering sums” involved in the luxury trade (Hickey 2012, fn.115, 37). Similarly, we cannot exclude the possibility that the family’s tax farming significantly augmented its wealth, or that commercial in-hand agricultural activities were significant. Sarris (2006) suggests that the “evidence for the estate *qua* economic powerhouse has been lost” (Hickey 2012, 149). Hickey disagrees, arguing, “On its face, this is dubious, for if the *autourgia* was well integrated with the *ktemata*—and the accounts reveal that it was, at least economically—it would seem more appropriate to assume that the texts’ silence is indicative” (2012, 149) of the fact that the estate’s *autourgia* was relatively insignificant.

However, first, as Hickey highlights, most the surviving “evidence derives from ‘wastepaper,’ from documents that were *deliberately* discarded in the rubbish heaps outside the city of Oxyrhyncus, presumably by staff of the central bureau of the estate” (2012, 18, emphasis added). As he says, this means, “we possess a mere fraction of the original material that was discarded,” and more importantly, although Hickey does not explain why, “an even smaller portion of the total holdings of the estate bureaus” (Hickey 2012, 18). The reason is, second, *prima facie*, that if the Apiones ran a lucrative in-hand estate we should not expect the estate’s management to throw away accounts revealing that fact on public rubbish mounds (discussed below). To support his case that the *autourgia* was relatively insignificant, Hickey refers to a “central account,” *P.Oxy.* XVI 2032, listing arrears in payments of coin entitled “list of arrears of gold,” “that suggests that the *autourgia* was responsible for only about 15 percent of *oikos*-wide delinquencies [arrears],” which however he accepts, “is open to various interpretations” (2012, 149–50), including the interpretation that, by definition, the ‘in-hand’ was rarely

leased. Alternatively, these arrears could be of lodging charges. As Sarris says, “The entries listed under this subheading include sums owed by groups from Apion *epoikia* described as those ‘from Ision Panga,’ ‘from Apele,’ and ‘from Trigyu.’ Once again, these may represent sums owed by labourers with respect to payment for lodgings on the *autourgia*” (Sarris 2006, 42).

The evidence from the *pronoetes*’ accounts showing that “the best-attested produce on autourgic land is fodder,” Hickey (2012, 150) argues, also suggests the *autourgia* was insignificant, but this does not prove that it was the only or main product, or that the estate did not sell it. Hickey accepts “the reasonable proposition that an area of intensively cultivated orchards and gardens was present in the vicinity of the estate house,” but asks, “Where is the evidence” for a large in-hand (2012, 150)? Sarris’ evidence for his view that “the surplus produced by the in-hand seems to have been marketed” is that the estate did so “presumably via the various estate-owned shops and warehouses attested in the sources” (2006, 197). Hickey rejects Jones’ (1964) calculations of Apion’s expected or planned grain tax receipts in *P.Oxy* 18 2196 as a measure of its size, because “an accounting distinction was made in the document between the grain from the villages and that from the estate’s *pronoetai*” (Hickey, 2008, 89), showing that part of the tax receipts are from villages outside the estate. However, this does not show that the Oxyrhynchus estate was ‘small.’⁴ One indication that it was not is that “a considerable estate bureaucracy” (Banaji 2001, 148) necessarily ran a “considerable” estate producing the surpluses necessary to support it.

Finding accounts for the *autourgia* would have settled the matter. Some estate level accounts survive. We have “accounts relating to the collection and disbursement of a single product, such as wine produced on the family estates,” and a “number of fiscal documents . . . [that] survive . . . from the late fifth to the late sixth century,” which simply add up the collections of coins and commodities for tax payments (Sarris 2006, 29, 83). Many separate accounts exist for money payments, expenditures, wine issues, use of bricks and axles for irrigation machinery, provisioning horses, and so on (Sarris 2006, 29), but no accounts for the in-hand estate. However, finding evidence consistent with the existence of such accounts, but not finding any, is consistent with the hypothesis that, typical of the wealthy throughout history, the information they contained was a closely guarded secret. As the estate assiduously held employees, tenants, and workers to account through a system of accounting for defined entities by responsible individuals, it is highly unlikely that its managers would not require the production of accounts for its *autourgia*. There is some indirect evidence consistent with the existence of such accounts, that these are the ‘landowner’s account’ or *geouchikos logos* referred to in contracts with *pronoetes* discussed in the following section. If these accounts followed the same “rigid system of

accounting” (Rea 1988, Preface) that the *pronoetai* used, they would also have calculated the ‘net revenue’ or the ‘remainder in money.’ That is, these accounts would have reported the physical outputs and money revenues from the *autourgia*’s sales, the money measure of its production, less any additional money and non-money expenditures. The more successful it was at this, the greater the incentive to keep the information private, and the lower the probability of its disposal in public rubbish heaps.

Sarris surmises that the Oxyrhyncus office “reworked” the *pronoetai*’s “formal, fair copies of the account” in producing other accounts and calculations, which explains why they were “often reused as scrap” (2006, 31). On the back of P.Oxy LV 3804, for example, there are “various jottings . . . detailing financial transactions . . . totally unrelated to the contents of the accounts themselves” (Sarris 2006, 31–32). Sarris’ surmise, however, is “On the assumption that the managers . . . would have wished to preserve details of estate income and expenditure over time,” that is, for example, assuming they were capitalists seeking maximum profits, from which we could infer “that the extant estate accounts were reworked and rewritten once [they arrived] in Oxyrhyncus” (2006, 31). Sarris does not explain what this “reworking” might have been. Alternatively, having held the *pronoetai* accountable for commodity and money payments, taxes, expenditures, and ‘net revenue,’ using them for scrap and then dumping them is consistent with them having no further value in controlling an effective slave labor process. Finding the general estate accounts in rubbish mounds around the city of Oxyrhyncus is consistent with them having no further value for the managers. Similarly, not finding any in-hand accounts in rubbish mounds is consistent with them having continuing value, which is why the officials kept them in the city, and why, by the time the British explorers arrived, they had already been looted (Sarris 2006, 25). This could also explain why, consistent with Sarris’ view that in-hand wine production for sale was important, “not a single vineyard lease from the estate is extant” (Hickey 2012, 64), because their importance meant it held them centrally, which exposed them to looting. No accounts therefore survive, but we know the *autourgia* employed ‘unfree’ workers and employed ‘tenants’ who were accountable for their production, which leaves the much debated question, what according to the surviving evidence of the labor process were the *georgoi*, were they ‘tenants’ paying ‘rents’ or ‘wageworkers,’ as different historians argue, or were they effective slaves coercively accountable for production?

What Were the *Georgoi*?

Banaji argues the *georgoi* were a “form of wage labour subject to intense landlord controls” (2001, 209), which comes close to the effective slave

interpretation, but Banaji dismisses Marx's concepts, and leaves his concept unclear. Late antiquity, the period of transition from the 'classical' to 'medieval' world, Banaji argues, "throws up a social formation combining aristocratic dominance with free labour on a model that conforms to none of the historical stereotypes distinguishing the classical from the medieval and modern worlds" (2001, 217). He means Marx's "stereotypes" of "aristocrats + slaves, aristocrats + serfs, capitalists + wage labour," which he criticizes as "extremely general formulations that seek to sum up the economic structure of different historical periods in terms of an essential or uniquely pervasive set of relations" (Banaji 2001, 217), ignoring Marx's definition of the dominant mode of production. Marx, Banaji (2001, 1) argues, "left the intellectuals of the later nineteenth century with the general problem of knowing . . . the world before the full flowering of capitalism," which accepts the Giddens critique. It is true, as he says, that "hired labourers were used on an extensive scale by the English estates of the thirteenth century; slaves were used by agrarian capitalists down to the late nineteenth century; and serfs, like slaves, could be employed in industrial production" (Banaji 2001, 217). However, in none of these cases was the dominant mode of production, respectively, capitalist, slave, or feudal.

Banaji dismisses as "simplistic [the] idea that the dynamic which drives an economic system is given primarily in terms of the organization of labour [*sic*], i.e., that the 'forms of exploitation' of labour determine the 'relations of production'" (2001, 217–18). According to Marx, however, the 'form' (method) of exploitation, which Banaji does not discuss, determines the social relations of production that determine the method of controlling the extraction of surplus labor, which Banaji overlooks, not the "organization of labor," which is a force of production. Instead of the employer's control of "the day-to-day *performance* of jobs," Banaji emphasizes, "the forms in which employers *recruited* labour," "the *colonus*' legal subordination to an employer" (2001, 197, 209). This, he argues, "makes perfect sense of Justinian's question, 'Is there any perceptible difference between slaves and *adscripticii* . . .?,'" that there was none, except that the latter were "not ordinary tenants," but "a form of wage labour":

It was their common subjection to the landowner's *potestas* that made *coloni* 'like' slaves. However, such subjection was grounded, in their case, not in slavery but in wage labour, and compatible with a legal and ideological tradition that had always assimilated wage labourers to slaves. This also implies, of course, that the *coloni* were simply not ordinary tenants in the classical law sense, since, in law at least, the tenant was 'not subject to the landlord's control.' Thus the whole argument requires a much more nuanced idea of labour relationship on the large aristocratic estates which controlled the bulk of this labour. Neither slaves nor tenants, then, but a form of wage labour subject to intense landlord controls. (Banaji 2001, 209–10)

Sarris agrees, “Rather than being tenant farmers pure and simple, the working inhabitants of the *epoikia* emerge, on the basis of the expenditure section of P.Oxy. LV 3804, as labourers primarily employed for the purpose of cultivating the *autourgia*” (2006, 38). Following Faith (1997, 69), he concludes, “In return for this labour they were granted rental access [*sic*] to the land and amenities associated with their *ktema*—what may be termed a ‘wage in land.’ They would also appear to have received a wage reckoned in coin” (Sarris 2006, 38). Therefore, Banaji concludes, because we “can speak of a ‘labour market’ whenever labour was recruited through contracts,” all the forms in which “the sale of labour power could be ‘mediated’” (2001, 198–99)—wage payments, ‘leases’ of operations or work, consumption ‘loans,’ advance sales, and sharecropping—were all forms of ‘wage labor.’ From Marx’s perspective, by contrast, the common link is that these ‘contracts’ were all forms of effective slavery, means to hold workers coercively accountable for production, which, we will see, the evidence supports.

Hickey (2012, 7) finds “the evidence . . . to be lacking” for Banaji (2001) and Sarris’ (2006) claimed “primacy of wage labor.” Focusing on viticulture, Hickey argues, “reveals tenants paying money rents, share tenants, and tenants delivering fixed-rate rents in kind,” but he accepts that some “wage workers” existed—“I suggest that wage workers figured most prominently in irrigation” (2012, 7), a precondition for many crops, particularly viticulture (Banaji 2001; Hickey 2012, 40–41). Share cropping (‘share tenants’), common in Egypt (Banaji 2001, 200), makes him “cautious not to draw too sharp a line between certain types of tenancy and wage labor” (Hickey 2012, 7). He has reservations about how many and how unfree the ‘adscript colonate’ (see below) were, who Banaji and Sarris argue were a substantial portion of the estate’s workforce, and how unfree the *paidaria* were. Hickey’s qualifications and reservations show that, in effect, he agrees that at least some of his ‘tenants’ were not simple peasants who ‘possessed’ the land. However, rather than ‘tenants,’ or the “tied proto-serf labor force” of the “feudal model” (Hickey 2012, 23), consistent with them being controlled as effective slaves, as Sarris says, “*Production on the ktemata and village landholdings was overseen by the figure of the pronoetes. To some extent, this may also have been true on the autourgia*” (2006, 51, first emphasis added).

Hickey claims the “*pronoetai* were responsible only for the collection of gold and grain” (2012, 27, 68), but contradictorily suggests, “perhaps *autourgic* land fell under the jurisdiction of the local *pronoetes*” (2012, 27), “that the *autourgia* may have been part of the *ktemata* (i.e., administered by *pronoetai* in *prostasai*)” (2012, fn.23, 149), who therefore also did supervisory work. The *prostasiai* “themselves were grouped into *dioikesis*, which were overseen by *dioiketai*” (Hickey 2012, 26), that is, were supervised. He observes, “some supervision of wine production seems to have been performed by

estate *chartularii*” (Hickey 2012, fn.42, 68). He accepts, “Falling outside of this administrative structure *may* have been the *autourgia*, land the estate exploited directly, though at least some of its expenses were charged to *pronoetai*” (Hickey 2012, 26–27, first emphasis added). ‘Tenants’ were subject to labor services, for example, the “obligation of several workers (*ergatai*), residents of other *epoikia*, to sow *chortos* [clover for horse fodder] at Path Tampemou,” which was “also autourgic” (Hickey 2012, 30). Seriously undermining any simple ‘tenant’ interpretation, as Banaji says, *georgoi* were “paid a regular monthly wage,” “regularly engaged in wage labour,” grape picking, brick making, and on irrigation work, and so on (2001, 190–1).

P.Oxy 3804 shows that Theodorus not only paid the brickmakers, the workers who cultivated the *autourgia*, and the “rivermen who dug out a new cistern,” the “Community of tenant farmers . . . for the water supply and crops . . . for wages . . . and on account of expenditure” (Rea 1988, 120), and so on, but was accountable for what they did. Theodorus similarly did not simply pay for the cost of repairing the “tender of the landlord,” “for guarding the hay for the landlord’s *auturgia*,” and “For the price of hayseed bought . . . for use on the landlord’s *auturgia*” (Rea 1988, 121), but with his ‘taskmasters’ and other ‘overseers’ was accountable for ensuring that this work was ‘honestly’ and ‘efficiently’ completed. As Hickey says of *P.Oxy* XVI 1913, which “contains many entries for the . . . autourgic *Exo tes pyles* . . . concerned with the settlements [of] Iboitos and Kathegetou,” it is because “The former of these had its own *pronoetes*” that “perhaps autourgic land fell under the jurisdiction of the local *pronoetes*” (Hickey 2012, fn.36, 27), who would supervise such work, probably coercively. Banaji accepts that “much of this labour worked under conditions which, although contractual, involved considerable harshness on the part of employers” (2001, 98). However, he thinks “landowners ‘overworking’ their *georgoi* and treating them worse than *animals*,” or “deliberately withholding . . . wages to force workers to return,” starving them, in short using physical coercion to hold them accountable for production, is “true of labour markets throughout the world” (Banaji 2001, 198, emphasis added). As he says, in the accounts we see poorer households engaging in collective ‘leases,’ but can observe that “their essential function was deployment in centralized estate *production* . . . [which is] discernible in *P. Oxy* XVI 1896 (577), where a group of employees had failed to give the *output* which the Apions evidently required” (Banaji 2001, 99, emphases added).

Hickey criticizes Sarris’ argument that *P.Oxy* XVI 1859, a letter from a *chartularius* requesting retention of certain workers “until they complete their landlordly yield [of wine],” is evidence of direct exploitation in estate viticulture, because they are “villagers, not *epoikiotai*—could certainly be tenants,” and the ‘landlordly yield’ “could well be rent in kind” (Hickey 2012,

62–63). The fact that the tenants “were being supervised is not determinative,” Hickey argues, because “the estate would have been equally interested in ensuring that it received the rents that it was due” (2012, 63). However, supervision shows that the workers were not simple ‘tenants,’ but like the *epoikiotai* who lived in the estate owned *epoikia*, and were more likely to receive wages, were directly accountable for producing the ‘landlordly yield.’ Even where we “seem to . . . [have] a fixed-rate [amount] payment” on the lease of an Apion vineyard, however, the seven men concerned had “the *phrontistes* . . . as their overseer” (Hickey 2012, 65). The fact “that *ampelourgoi* and *georgoi* paid their wine directly to the wine steward . . . [who] seems not to have reported the yield to the relevant *pronoetai*—at least there is no evidence for this” (Hickey 2012, 69) is not surprising because the *pronoetai* were not accountable for wine rents. The *chartularius* supervised production of wine payments.

Consistent with their duties extending beyond the passive receipt of payments, Hickey suggests that, because they “seem rarely (if ever) to have changed, they might be considered quotas or targets” (2012, 67). He was more assertive in an earlier paper, “The *lemmata* of the *pronoetai* seem to have been fixed (or even fossilized) and thus are to be considered targets” (Hickey 2008, fn.12, 90). If the so-called rents (Hickey 2012, 7) were high quotas or targets, this would give the *pronoetai* a supervisory role. High production targets would mean arrears were frequent, which could explain why the estate had a central arrears account, why the peasants were generally in a wretched condition, and coercive punishments would explain why they had a tendency to flee, the harsh punishments for this, and the role played by the *buccellarii* and the estate’s prison. There was only “a handful of well-to-do households, village leaders,” whose payments might be ‘rents’ in Marx’s sense, “distinguished from a conspicuously larger mass of landless tenants and labourers” (Banaji 2001, 215) whose payments appear to be targets.

Wine was often sharecropped, which made the “*geouchos*,” who received the “landlord’s share” or “quota” (Hickey 2012, fn.42, 27, 44), accountable for its production, just as, therefore, was the contractor. “There is a fine line between cropping and wage labor,” as Hickey says, just as there is between ‘wage labor’ and effective slavery, for example, the earlier “leases of work” which relied “on negative reinforcement (i.e., monitoring) to check labor opportunism [*sic*]” (2012, 77, 79–81). Neither of the two surviving contracts for estate *pronoetai* spell out “responsibilities connected with wine or other commodities,” but it is questionable whether “not even oversight . . . is intimated” (Hickey 2012, 68). *P.Oxy* I 136 is a contract with a *pronoetes* from AD 583, which anticipates him engaging in the activities of an “overseer,” “management” of the land-laborers “so as to collect and pay . . . all that is

due,” who promised “stewardship both of receipts and expenditure,” and to collect the opening arrears, but anticipated “shortfall” over which there was some discretion:

I, Serenus, deacon, principal party to the contract, of my own free will and deliberate choice, agree that I have made a contract with your magnificence through your representatives for one year reckoned from the arrears of the money payments of the present first indiction, and that of the crops and money payments and revenues, God willing, of the second indiction; in which contract I undertake to fill the post of your overseer or receiver . . . in the management of the holding . . . of Matreus and the <possessions> in the villages . . . of Episemus and Adaeus and their *exotikoi topoi* . . . belonging to your magnificence. . . . I undertake to conduct my dealings with the land-labourers . . . responsible, both of the *ktema* and the villages and the *exotikoi topoi* in accordance with the schedule of demands . . . notified to me by the worshipful secretaries . . . of your honoured house, so as to collect and pay to your magnificence or your representatives all that is due . . . And if any shortfall should occur on the aforesaid *ktemata*, I am to make it good to your magnificence and it shall be credited thereto in my accounts But I will receive and exact and transfer to the aforesaid landowner’s account . . . everything in full from the *exotikoi topoi*. . . . I will render accounts of all my stewardship both of receipt and expenditure and I will make up deficiencies when the accounts are balanced if the comparison of my receipts and cheques as aforesaid shows me to be in arrears. (Sarris 2006, 52; Grenfell and Hunt 1898, 216)

The contract permitted the *pronoetes* to fall into arrears on the *ktemata* so long as he eventually recovered them by the time he submitted his accounts to the Apion bureau in Oxyrhynchus (Sarris 2006, 53). However, “No such flexibility . . . is countenanced with respect to the *exotikoi topoi*—the dues expected from these holdings were to be collected ‘in full.’ . . . The contract may also be read to imply that the revenues derived from the *exotikoi topoi* were to be recorded in a separate document—the ‘landowner’s account’ or *geouchikos logos* . . . possibly alluded to in the text” (Sarris 2006, 53). Sarris argues that *ktemata* and *exotikoi topoi* are different types of landholding, so that rather than the traditional meaning of *exotikoi topoi* as ‘outlying places,’ he interprets it as referring to the *autourgia* of the estate.⁵ In the other surviving contract, again, the overseer “Phoebammon was to be permitted no delay in the collection and transmission of whatever was due from the *exotikoi topoi*, which he was ‘to bring forward to the landowner’s account.’ In relation to the *ktemata*, however, Phoebammon, like Serenus, was granted greater room for manoeuvre: arrears, if incurred, could be made up at a later date” (Sarris 2006, 55). Whether, and if so how, this provision was enforced is unclear, but with a contract for only one year the overseer would be under

pressure to collect “all that was due,” pressure he would transmit to the land-laborers, or as Sarris puts it, “This insecurity of tenure was presumably meant to encourage honesty and efficiency [*sic*]” (2006, 52). The *pronoetes* would also come under pressure from his guarantor who bound himself personally liable for any shortfall (Grenfell and Hunt 1898, 216).

As Banaji says, “landowners clearly sought to minimize agency problems by retaining their crucial managers on short-term contracts” (2001, 189), but high targets meant that arrears and flight were inevitably important issues for the estate’s central management. The central Apion bureau in Oxyrhynchus produced accounts “detailing arrears in contributions from estate landholdings,” that “clearly either drew upon information furnished by the *pronoetes* who drafted the estate accounts or were meant to be brought to his attention” (Sarris 2006, 42).⁶ One was *P.Oxy XVI 2032*, which lists arrears in payments of coin (Sarris 2006, 42). For lessees, arrears could mean dismissal from their tenancy, and maybe worse. Sarris quotes a possible case: “Quite why Praous was dismissed from his tenancy is not clear. Perhaps he had fallen into arrears with his rent. Certainly, the petitions record that indebtedness could carry dire consequences. *P.Oxy. I 130*, for example, preserves a petition addressed to Flavius Apion III from Anoup, who describes himself as Flavius Apion’s ‘miserable slave’ . . . from the *ktema* of Phakra” (Sarris 2006, 72).

Burdensome payments by the *enapogahoi georgoi* or *colonus adscripticii*, the “hall mark of the Apion estate” (Hickey 2-12, 81), and a ‘wage’ of “some food and some pocket money” (Sirks 1993, 363), left them vulnerable to adversity. In return for shelter and a small parcel of land peasants agreed not to leave the estate without permission (Hickey 2012, 86), but mounting arrears could prompt flight, and the estate kept accounts of this, for example, *P.Oxy XVI 2055*, an account of land-laborers who fled from the *ktema* of Thaesius to an imperial estate (Sarris 2006, 43). Many land parcels “would have been insufficient for subsistence,” even assuming the estate “subsidized” their rents, despite the fact that the “context of limited incomes . . . [makes] the attractions of fiscal guarantees, of adscript status . . . , and the protections of the circumscribed world of the *epoikion* . . . clearer” (Hickey 2012, fn.142, 86–87). Despite the attractions, “Flight was evidently a problem” (Sirks 2008, 137), even though it was difficult. Egypt, which “is nothing other than a thin, winding strip of the [Nile] valley,” surrounded by “desert . . . so inhospitable that very few people can live there,” made the whole country a natural slave camp with a “cheap and secure means of transport,” which was why “this region was so straightforward to control” (Wickham 2005, 23). Peasants, nevertheless, “had always used this recourse in Egypt, despite the difficulties involved” (Wickham 2005, 142).

To sum up: the Apion estate's 'tenant-wageworkers' were effectively slaves accountable for their production, who were legally tied to the land in "labour settlements," many of whom were "highly insecure" *adscriptive coloni*, yet compelled to work, who the Apion estate sought to keep under a "tight rein," but who often fled (Sarris 2006, 42–43, 49, 63, 128–29). By these means, the estate created a "pool of permanent labour whilst also disciplining its workforce by the precariousness of its tenure" (Sarris 2006, 65). The accounting evidence supports Sarris' conclusion, contrary to Wickham and Haldon, that late Roman relations of production were not 'feudal,' yet contrary to Banaji, the workers were "peasants": "Although granted access to certain allotments, the very fact that the peasants, *pace* Banaji [2001], also received a cash wage would suggest that these landholdings were not 'subsistence-producing.' On this model, late antiquity was characterised by a mode of production which simply cannot be described as 'feudal' in the accepted historical-materialist sense of the word" (Sarris 2005, 218). Whatever the relations, Sarris (2005, 218) is clear, they contradict Marx's theory of history: "They [the Roman sources] also alert one to the extent to which modes of production do not necessarily follow quite the sort of linear progression that some of us, at least, once thought they did." The Oxyrhynchus accounting evidence, however, previous sections have argued, is consistent with Marx's concept of slavery.

Beyond Oxyrhynchus

Accounting evidence beyond Oxyrhynchus shows that large bipartite estates became more common throughout the east from the fifth century, and probably also in the late Roman west, "a considerable expansion of *epoikion*-type estates from the fifth century onwards" (Banaji 2001, 188). In Egypt, surviving documentary papyri from Heracleopolis, Hermopolis, Arsinoe, and Antinoopolis show that the Apion estates' features "were replicated on the estates of other Egyptian landowners in the fifth, sixth, and seventh centuries" (Sarris 2006, 95). The fourth-century *Kellis agricultural account book* [KAB] from a relatively small Egyptian estate (Bagnall 1997), whose "accounts record income, primarily from tenants [*sic*] and expenditures" (Kehoe 1999, 745) has a strong resemblance to the Apion accounts, which suggests its social relations and form of accounts were normal, applying indifferently to large and small estates. Like Apion, "many of the commodities that the tenants contributed in rent . . . were distributed out by the writer of KAB to cover expenses associated with the management of the estate," that probably employed "salaried workers" to produce olive oil and wine for sale (Kehoe 1999, 748). The accounts of Ammonios of Antaiopolis from the second quarter of the sixth century, "are quite as complex as those of the Apions,

and probably for the same reasons” (Wickham 2005, 249). These accounts and other sources, Sarris argues, “enable us to piece together what might be termed the ‘ideal type’ of the great estate of early Byzantine Egypt . . . [as] bipartite in character, and both labour and, by implication, production on it were highly commodified [*sic*],” suggesting that this “landed elite’s dominance of local society seems to have been intensifying” (2006, 95). By the sixth century, “great estates—many of them bipartite on the model of those of the Apion family—were . . . throughout the Eastern Empire, especially on the most productive and fertile of land. In Asia Minor, many of these bipartite estates were to survive well into the Byzantine Middle Ages” (Sarris 2006, 129–30).

The “most elaborate” accounts are Egyptian, but as Wickham says, other evidence of “simpler” accounts (2005, 247) implies that accounting was common elsewhere. Gregory the Great, pope from AD 590 to 604, “certainly regarded accounting as normal on his Sicilian estates” (Wickham 2005, 247). The Nessana papyri preserve some accounts for sixth- and seventh-century “Palestine . . . [and] finds of ostraka (potsherds with writing) with receipts . . . in . . . Numidia . . . [, and] [f]our from the 480s-490s . . . list the measures of barley a certain *Massiesa* got out of his *pars dominica*” (Wickham 2005, 266–267). These simpler accounts “at least show that receipts were systematically recorded, some way from the most important African production areas in what is now Tunisia, and they are presumably a guide to accounting practices in the latter too” (Wickham 2005, 267). Whether these receipts were of production quotas is unclear. The *Tablettes Albertini*, contemporary with the ostraka and found in the same region, from the reign of the vandal king Gunthamund (AD 484–496), written on wood, includes one ‘page’ of accounts, but is not agrarian (Wickham 2005, fn.10, 267). Most *Tablettes* record sales of land, but one records the sale of a slave (Grierson 1959).

In the west, Wickham judges the collection of seventh-century slates from Diego Álvaro and nearby in central Spain, from AD c. 560 to 700, “The source which makes the best case for our assuming that Romans in general usually kept updated records of receipts and outgoings . . . whose *notitiae* list cheese and grain rents, gifts of sheep and other goods” (2005, 266–267). The Diego Álvaro slates, “essentially estate management documents,” he argues, show “The estate economy was clearly built up out of rents, which were catalogued separately by type” (Wickham 2005, 224), which may not be “rent in kind” (Ward-Perkins 2005, 165), but like Oxyrhynchus could be production targets, and typical of slave accounting they kept lists of ‘people’ and animals:

Grain is the most common item in our lists, followed by animals and animal products—one list is of fifty-plus cows and horses, and may be a register of

animals the estate actually held. One text lists just people and their children: dependants of the estate of some kind. Others list outgoing, like the goods given to *Simplicius*, which could go through the *erarium* (the villa's strong-room), as another text said. There is no money mentioned in the rentals: this was a kind-based economic system, although carefully controlled. But coins were used as well: sales, and even debt agreements, in money survive in the slate set. (Wickham 2005, 224)

Wickham sees the above and other accounts as “simpler,” “less articulated” accounts of “receipts and outgoing” because he thinks the Apion’s accounts were “in part oriented toward profit” (2005, 247), but they may not be. Eighth-century Egyptian accounts include Kahle [1954], *Bala’izah* nn. 291, 303B, 309–12; CPR XIV 4c; APEL VI 378; CO . . . , n.452 (Wickham 2005, fn.12, 267). According to Wickham (2005, 252), “Bala’izah was a much simpler and smaller estate than anything on the Apion level, and its attachment to lists recalls Diego Álvaro; its management seems to have focused on moving goods around and checking on its transport-workers rather than on organizing agrarian production,” presumably goods those it collected from its ‘tenants.’ Wickham concludes, “it represents well enough the way a medium-level landowner saw management in the eighth century, and its concern with accounting had certainly carried over from the sixth century and earlier” (2005, 252). By contrast, the concern for ‘profit’ seems to explain why, for him, “The level of organization of the Apion estate is very striking” (Wickham 2005, 247). For him, “the estate-management collections that do exist elsewhere, from places like Nessana and Diego Álvaro, are very much less complex than this; nor do Gregory the Great’s letters or, later, the polyptychs of the ninth century suggest much more by way of documentation than rent rolls” (Wickham 2005, 247).

Wickham is probably wrong that ninth-century polyptychs suggest only rent rolls, as we will see in the following chapter, but he is right that the above survivals of accounts from several locations, particularly from relatively arid (hence preserving) and unproductive regions, is evidence consistent with widespread estate accounting. For example, regarding Diego Álvaro, “if in one of the poorest areas in the northern Meseta the seventh century this sort of estate recording was going on, then it is likely it was common elsewhere as well” (Wickham 2005, 267). These non-Oxyrhynchus accounts are also significant from Marx’s perspective because there is no sign in them that landowners anywhere calculated ‘profit,’ and it is therefore more likely that their aim was, like the Oxyrhynchus accounts, accountability for production. Finley’s objection to Marx’s view that “the slave mode of production [was] the hallmark of the ancient economy,” because “large sectors (in both time and space) of the Graeco-Roman world never employed productive slave

labour on any scale” (Finley 1999, 179), which Wickham shares, while true legally, is not therefore decisive. Many apparent ‘tenants’ may have been effective slaves, workers accountable as ‘laboring machines.’

For example, Palladius in his *Opus Agriculturae*, a fifth-century estate manual from Italy, “gives no sign that he had any agricultural workers who were not tenants (whether free or unfree),” but expected them to be “constantly watched, to ensure they cultivated correctly [*sic*]” (Wickham 2005, 268). Palladius relied heavily on Columella, but explained that he did not reprise his “sections dealing with slave management” because of the “great diversity of lands” his book covered (Wickham 2005, 268). Columella had recommended slaves for vineyards, we saw in chapter 4, and even there he recommended a mix of slaves and ‘tenants,’ and for grain only if the master could supervise them. Wickham (2005, 268, 269) argues, “had the slave mode still been an important part of Palladius’ experience, he could not have avoided discussing it,” but Palladius did warn “against using slaves favourites as estate managers”! Other historians disagree with Wickham’s interpretation (2005, fn.14, 269). For example, as Whittaker and Garnsey (1997, 296) say, “This could mean that Palladius’ vagueness about what type of labour to employ was deliberate . . . [because] the weight of the evidence in Italy, at least, points to a general shift from the old slave-villa economies of domanial farming to small tenant plots, whether held by *coloni* or by slaves.” Another example could be the ‘tenants’ who owed labor services to an Italian estate in Padua AD c. 560, apparently owned by the church of Ravenna, that “used tenants (*coloni*), who anyway cultivated the *coloniae* of the area, as direct labourers,” for which Wickham provides no evidence that it was managed “directly for profit” (2005, 279).

Heavily exploited ‘tenants’ were arguably more productive than chattel slaves, and may have been effective slaves: “Slaves, who would be fed, clothed and housed regardless of how hard they worked, might not have the same levels of motivation as tenants, sharecroppers or other contracted labourers who work for survival” (Foxhall 1990, 102). Very possibly, as Foxhall suggests, “the ‘whip of hunger’ on the backs of tenants and sharecroppers” (1990, 102) made them work harder than slaves under real whips. Drawing on reserves of labor from tenants and day workers had always been an integral part of large-scale slave production because “the management difficulties, especially security and supervision, of using slaves to cultivate very large units of land might sometimes have proven insurmountable for absentee Roman proprietors” (Foxhall 1990, 102). As Foxhall says, “The large, slave-run estates well documented in the ancient Roman literary sources (and referring almost exclusively to Italy) used both slave and non-slave labour” (Foxhall 1990, 102) that could have been effective slaves.

Richer tenants could use slaves: “Mention of tenants using agricultural slaves appears in Pliny’s letters and the Digest, as well as in other sources” (Foxhall 1990, 109). Conventional Roman lease law envisaged that the landowner would provide presses and other major pieces of equipment, but the tenant would provide other equipment, animals, and slaves (Kehoe 2006, 305; Frier 1979). Poorer ‘tenants,’ those with no reserves, might well therefore depend on the landowner for the equipment and resources necessary to earn a livelihood. “Clearly such an impetus might have been important in the Roman world. Traction animals, pressing equipment or use of it, loans of cash and commodities, even slaves in some cases might have been supplied by a landlord to a smaller-scale tenant farmer” (Foxhall 1990, 112). Such ‘tenants’ often became indebted to landowners and, therefore, “Tenancy relationships must often have overlapped with relationships of debt-bondage and patronage” (Foxhall 1990, 113), and with effective slavery.

During the later Roman Empire leasing to large tenants could be to a slave, which “gave the *servus quasi colonus* an incentive to manage the property well, since he could keep a share of the profits and use this to purchase his freedom. At the same time, the landowner exercised greater control over a slave-tenant than would be possible with a tenant of free status” (Kehoe 2006, 305). However, the opportunity for “profits” often meant the exploitation of the ‘tenants’ who became subject to his patronage, “and the agents reaped the profits of such dependence” (Foxhall 1990, 103). Most ‘tenants’ were small family farms, “the universal basis of peasant agriculture” (Faith 1997, 129), but “large and small cultivators were bound into a single system” in which “the relationships of exploitation were complex, multi-stranded and varied” (Foxhall 1990, 101). Short-term leases for less land than provided subsistence gave large landowners power to coerce small ‘tenants’ and their families to work as ‘laborers’ (Foxhall 1990, 101–2, 104–5). Many of these workers could have been effective slaves.

CONCLUDING COMMENTS

Historians know that ‘tenants’ varied in the late Roman Empire, “from wealthy members of the elite who took over the task of managing large estates to small-scale tenants, with few resources of their own, who were in effect laborers” (Kehoe 2006, 306), but have few details of their stratification, or how this changed over time. For example, they do not know if estates in Gaul, during the Empire, used slaves, tenants, or day laborers (Kehoe 2006, 303). Nor can they clearly separate ‘tenants’ from other laborers, whether debt bondsmen, slaves, serfs, wage laborers, and “even ‘independent’

peasants may also have been entangled in some kind of tenancy relationship” (Foxhall 1990, 97–98). Apion and other accounting evidence, the chapter has argued, help to cut through this fog by supporting the hypothesis that the slave mode remained dominant in the late Roman Empire, which is therefore a plausible framework within which to seek to interpret the historical evidence that is available.

Slavery continued to dominate in the east in the eighth and ninth centuries, the following chapter argues, but retreated in the west following the collapse of the Roman Empire. Written accounts survive from Egypt from the eighth and ninth centuries, but disappear in the west from the fifth century (Wickham 2005, 267). Landowner power had revived in the west by AD c. 800, and there is evidence of a revival in written estate accounts, possibly beginning in the late seventh century, this time consistent with feudal relations. This accounting evidence, we will see, complements Wickham’s (2005) comparative analysis of the decline in aristocratic power following the collapse of the Roman Empire, which he grounded in evidence of differential accounting for tax, which chapter 6 reinterprets. Wickham suggests it is “likely that the main stimulus and model for private accounting was always the record-keeping that taxation depended upon” (2005, 268). This could be true, but it overlooks the fact that the state represented the ruling class, and therefore overlooks what private and state accounts had in common, which according to the accounting interpretation is the mentality, social relations, and phenomenal forms of the dominant mode within which the accountants produced them. Wickham, in short, chapter 6 argues, overlooks that Marxists can use the form of surplus that is subject to taxation, the basis of assessment, and calculated in private estate accounts, to infer the ruling-class mentality.

NOTES

1. The Roman Republic existed from 509 BC to 27 BC. The ‘Principate’ was the Imperial government instituted by Augustus (27 BC–AD 14) (de Ste. Croix 1981, 372), which became progressively more autocratic.

2. The accounts express solidi in whole numbers and up to three fractions, and deduct carets and *denarii*. For example, “Total: sol. 39 1/2 1/24 1/48 less car. 18 and den. Myr. 1,200” (Rea 1988, 121). To simplify the currency calculations, the numbers in table 5.2 include whole numbers of solidi and/or only the first fraction of solidi of each entry, deduct the carat adjustments (in equivalent solidi: see Rea 1988, 122) pro-rata from each expense, and then round the totals to the nearest whole number.

3. These accounts are *P.Oxy* XXVII 2480 (580/581), *P.Oxy* LVIII 3960 (621), and *PSI* VII 953 (567/568).

4. In Egypt, landowners typically paid the land tax, collected through ‘rents,’ keeping part “as their return” (Hickey 2012, fn.63, 50). The following chapter discusses the landowners’ role in tax collecting and its consequences.

5. Sarris’ interpretation is “problematic,” Benaissa (2007, 81) argues, but it cannot be dismissed. Benaissa concludes, “‘in full’ need not indicate, as Sarris holds, that they were of greater economic value to the estate than *ktemata*. Rather, because *exotikoi topoi* were relatively small, scattered landholdings, the central management of the estate probably did not foresee problems in the full exaction of their revenues and expected the overseer to be able to make up automatically for any shortfalls” (2007, 85), but this also is a speculation.

6. The others were documents “ordering the payment to estate workers of wages and other perquisites, or detailing estate requirements” (Sarris 2006, 42).

Chapter 6

Transition to Feudalism in Western Europe

Historians have suggested many reasons as to why the Roman Empire collapsed (Ward-Perkins 2005, figure 3.1) and long debated the consequences. The accounting evidence is consistent with the hypothesis that it collapsed, in part, because the state and wealthy landowners intensified the slave mode of production, and it allows us to explore why the consequences varied. The evidence supports the hypothesis that whereas in the eastern Empire rulers retained slavery as the dominant mode, following its retreat in the west in the 'confusion' after the collapse of Roman rule and the growth of peasant power, when landowners rebuilt their power, rather than re-impose slavery they built it on feudal relations and pursued 'primeval profit' in the form of rent.

In the *Origin of the Family* (1884) Engels explained the transition to feudalism as "the obsolescence and unprofitability of slavery, the tyranny of the late Roman state, the supersession of the ancient slave-based economy by more vital Germanic barbarism, moving quickly to the feudal mode of production" (1990a, quoted by Wickham 1984, 2). This explanation was "brilliant for its time," Wickham accepts, but concludes, it "has been a strait-jacket since, even for the best historians," because of its "reductionism" (1984, fn.2, 3). However, Wickham's history and the accounting evidence, the chapter argues, are consistent with Engels' explanation, and with Marx's model of the transition in the west from the slave to the feudal mode, that the "class struggle took place . . . between the free rich and the free poor." That is, consistent with the Roman state and free rich 'tyrannizing' the free peasants with effective slavery and high land taxes, generating class conflict, the collapse of Roman rule, the appearance of the peasant mode and, through now revolutionary class conflict, its replacement by more 'vital,' more 'appropriate,' feudal relations, which wealthy landowners imposed precisely because it was more 'profitable.' In short, the chapter argues, the transitions

in the west were, consistent with Marx's model, slave mode → peasant mode → feudal mode. How 'quickly' the shift to dominant feudal relations took is a question of accounting evidence.

The chapter first explains the importance of taxation in Wickham's (2005) Marxist framework. Second, it gives an accounting interpretation of his history of the different consequences of the collapse of the Empire, which revolves around post-Roman states' differential persistence in collecting the Roman land tax. Third, it reviews the estate accounting evidence from Francia and England, which it argues supports the hypothesis of a transition to the feudal mode of production by AD c. 800 in Western Europe, which wealthy landowners chose to increase their extraction of surplus labor from the higher-level forces of production at hand.

TAXATION IN WICKHAM'S FRAMEWORK

Slavery, Wickham argued in his early work, ended by the end of the third century, but that while the growth of tenants meant increasing feudal relations on the land, an exploitative, class-based, "ancient mode of production" dependent on tax dominated: "The dominant source of surplus extraction in the late empire was not rent, but tax" (1984, 9). According to the accounting interpretation, Wickham's "ancient mode," Finley (1999, fn.19, 246) is right, is "incomprehensible" from Marx's perspective, "an eccentric concept of the mode of production." Wickham (1984) borrowed it from Hindess and Hirst's *Pre-capitalist Modes of Production* (1975), which argued that an 'ancient mode' existed distinct from the 'slave mode.' Its basis, Hindess and Hirst (1975) suggested, was the political right of all citizens to appropriate surplus labor from public land, which Wickham applied to Rome. This started from an egalitarian foundation, he argued, but degenerated into inequality, first through slavery, and then by taxation that became increasingly important as the Empire expanded, creating the "ancient tax mode" (Wickham 1984, 6).

The accounting evidence, chapter 5 argued, supports the hypothesis that effective slavery was the dominant mode of production in the late Roman Empire. Wickham's view "that the slave mode can be left out of our arguments; there is no reason to regard it as having been greatly prominent in the late empire at all" (1984, 5) is questionable. So therefore is his current claim that the feudal mode was the "normal economic system of the ancient and medieval periods" (2005, 535; see Banaji 2011, 116). The absence of slaves, Wickham (1984, 5) argued, raised a problem for Marx's theory, because "If feudal social relationships already existed by A.D. 300, then what was the late Roman state? If the latter was not feudal, as it does not seem to have

been, then what filled the gap, and how?" Wickham's (1984) answer was the ancient mode, which he "intended to replace the concept of an asiatic mode of production" (Haldon 1989, 9). However, following criticism by Bertkay (1987) and Haldon (1989), Wickham (2005) abandoned the distinction between an ancient tax mode, a distinct public or state method of surplus extraction, and the feudal mode.

Tax and rent, Bertkay (1987) and Haldon (1989) argued, were two types of the same *feudal* mode of surplus appropriation, feudal rent, so "the feudal mode can be seen as the dominant mode throughout much of the pre-capitalist world" (Haldon 1989, 10). This view, according to Haldon (1989, 10), "finds support in . . . the writings of Marx and Engels themselves (although, as is well known, neither developed an explicit theory of either modes of production or the process of transition from one mode to another within specific social formations)," which chapters 2 and 3 rejected. Bertkay (1987, 302) takes issue with Wickham's use of Marx's "criterion of forms of surplus extraction" to distinguish rent and tax modes, which "is acceptable only in so far as it is a shorthand." Bertkay (1987, 302) does not analyze Marx's forms of surplus extraction, but rightly points out that in using this criterion "wherever it is divorced from an understanding of the relationship of the direct producers to the primary and secondary means of production . . . there is a danger of confusing economic types with legal forms." Because, however, Bertkay (1989, 312) agrees with Wickham that slavery was rare, he necessarily concludes that the feudal mode was the otherwise universal form of surplus extraction, and that Wickham's distinction between rent and tax modes is therefore unsustainable.

Haldon agrees: "the slave mode of production . . . is now generally recognised to have had a relatively limited chronological and geographical dominance in the ancient world" (1989, 12). Haldon (1993, 77) therefore also concludes, "both sides of the couplet tax/rent are, in fact, expressions of the political-judicial forms that surplus appropriation takes, not distinctions between different modes," and, following Amin (1976), calls both the "tributary mode." Wickham now agrees, "both [tax and rent] are sub-types of the same mode of production, in that both are based on agrarian surplus extracted by force if necessary, from the peasant majority" (2005, 60), and, as slavery had disappeared, the basis of both sub-types of extraction was the feudal mode. Taxation now becomes central to Wickham's (2005, 56, 147–48) comparative history therefore because, rather than social evolution, which he rejects as "teleological," he makes accounting for tax the motor of history by distinguishing three "different sorts of polities" or states depending on their resources and stability, which for him depends on the "hard work" of accounting.

DIFFERENTIAL CONSEQUENCES OF THE COLLAPSE OF THE ROMAN EMPIRE

Wickham's "strong states" are "the Roman empire and its Byzantine and Arab successors, based on taxation and a paid army as an independent resource for political power" (2005, 56). The "weak" states were "above all the major Romano-Germanic kingdoms such as Frankish Gaul, Lombard Italy, and Visigothic Spain, with a landed army," and there were also "the pre-state systems of the northern world . . . in . . . the kingdoms of England . . . [etc], where royal centrality was for a long time much more ad hoc" (Wickham 2005, 56).

States were strong, Wickham argues, because they organized and collected taxes from "the whole population," whereas they were weak when "the bulk of the wealth of a ruler is derived . . . only from rent-paying inhabitants on the land he . . . directly controls" (2005, 58). His explanation of "when and why taxation did decay" is "that a successful taxation system depends on information, and on a substantial amount of hard work" in accounting for tax, pointing to Egypt as the exemplar (Wickham 2005, 147). Partly it was coercion, "Mostly, however, it is the compilation of registers of those liable to pay, of how much they should pay, and of whether they have paid it; and the continual updating of those registers, as taxpayers die, or sell land, or expand their taxable activities" (Wickham 2005, 147). Egypt, a region with "unusual fiscal stability," "spent a lot of time and papyrus dealing with the fiscal system at all its levels, and that system had to be notably complex and—to an extent—ordered to be able to cope at all" (Wickham 2005, 147). Complexity, Wickham concludes, "above all the constant need for updating, is the main reason why states have abandoned taxation when it was not structurally necessary" (2005, 148), that is, when armies settled on the land.

If the slave mode continued in the late Roman Empire, however, the causality more plausibly runs the other way around, which, the following sections argue, is more consistent with Wickham's and others' (e.g., Ward-Perkins 2005) differential histories of its collapse. That is, following the collapse of the Empire, in the 'strong' states in the east taxation continued because the slave mode continued. By contrast, the transition to feudalism occurred in the west because peasant power had undermined the slave mode, and therefore the state's ability to collect tax, which made them 'weak.' This explanation is consistent with Ward-Perkins's view that in the west "political and military difficulties destroyed regional economies," that multiple Germanic invasions and continuing disruption led to rapid and significant economic decline, whereas in the peaceful and stable east the economy expanded (2005, 128–29). In short, that the different "political and military histories of the

East and West played a decisive role in their divergent economic fortunes” (Ward-Perkins 2005, 129).

According to Marx’s theory, they did because, the final section argues, the slave mode’s stabilizing infrastructure gave a ‘civilization dividend,’ added to the forces of production, which gave the Roman economy its “complexity and prosperity” (Ward-Perkins 2005, 122), which the disappearance of civilization in the west destroyed. The later Roman Empire’s complexity and prosperity, its “elaborate productive patterns and large-scale bulk exchanges,” which allowed “peasantries and the urban poor” to benefit from cheap high-quality pottery, and so on, Wickham argues, “are above all signs of exploitation” because they existed primarily to supply the exploiting wealthy (2005, 706, 707). According to Ward-Perkins (2005, 146, 211), however, because the Roman economy increased the “standard of living of the population at large,” enriched not “only the elite,” exploitation was not its economic foundation, and he therefore dismisses Marxists like Wickham who “are by nature suspicious of commerce, and of empires,” but the accounting evidence supports them. Wickham, however, forgets that the foundation of exploitation is control when he argues, “Taxation requires work; but it also brings control” (2005, 148), whereas, the following sections argue, control of exploitation brings taxation. In short, it was not the collapse or neglect of accounting systems that caused the decay of taxation and the weak state, but the collapse of the slave mode in the west caused by its military and political difficulties that made the collection of tax infeasible.

Because the predominant Roman tax, the land tax, was a tax on production, which therefore implemented the slave master’s calculative mentality, which presupposed the social relations of slavery, requiring accounting to operationalize, what follows argues, we can use Wickham’s differential tax histories as accounting evidence of the dominant mode of production. For three of his regions—Byzantium, Gaul/Francia, and England—we can add evidence of landowners’ estate accounting to illustrate the slave and feudal modes and, in the historical contexts, use them to explain the transition.

The Roman Land Tax

The Roman Empire came close to collapse during the third century, suffering repeated defeats by Germanic and Persian invaders, internal civil wars, and a fiscal crisis (Ward-Perkins 2005, 13). A major reorganization of the Roman army removed senators from military rank, made emperors military strongmen or their ciphers, and turned senators into ‘business men’ (Fleming 2010, 1; Wickham 2005, 34, 81; Banaji 2011, 113). Just like the large-landed proprietors who ran it, its increasingly militarized ruling class managed the empire as though it was a slave estate, taking a large and probably increasing

share of production through taxation to maintain ever more costly ways of life, particularly wars, and by laws regulating employment and movement.

Land was critical to wealth and the political structure of the Roman Empire, to the elites that ruled it—the emperor, the imperial family, the senatorial and equestrian orders, and the curial classes in the empire’s cities. This elite “depended on the production of their estates for the revenues that maintained their social and political privileges” (Kehoe 2006, 298), and on the appropriation of tax revenue. It owned a “considerable” share of the land, which probably increased during the first three centuries AD (Kehoe 2006, 298; Duncan-Jones 1990, 121–42). The state was the largest single landowner from which it derived revenues that supplemented its much larger revenues from taxation (Kehoe 2006, 298; Wickham 1984, fn.12, 10). It was this class, according to de Ste. Croix, “the propertied, the real men of wealth, who had deliberately created this system for their own benefit, [that] drained the life-blood from their world and thus destroyed Graeco-Roman civilisation over a large part of the empire,” who were its “vampire bats” (1981, 502–3).

During the later Roman Empire, many fed on taxation: “Taxation dominated the economy and was the economic foundation for the state” that “needed all the money (or food) it took in taxes . . . for the army, first and most obviously, particularly with the beginning of the major period of Germanic invasions in the late fourth century” (Wickham 1984, 13). Taxation equipped, supplied, and paid the Empire’s 600,000 or so soldiers in the fourth century (Ward-Perkins 2005, 41), and was a major source of wealth for those who controlled it: “The state was the basis for wealth and power in the late empire” (Wickham 1984, 13). Historians debate “how oppressive the rates of taxation were, and whether the overall rate of taxation rose, especially in the later empire” (Rathbone 2002, 167), but many accept that taxation was oppressive. Rates had not increased in Egypt by the seventh century (Rathbone 2002, 167–69), but they increased in Italy and elsewhere in the west in the later Empire. Historians agree, “the political and military authority of Rome, which brought the surplus wealth of all the Mediterranean nations to the rulers of Italy,” was a system of the “essentially extortive accumulation of wealth at the centre of the empire” (Konstan 1975, 161, 162), but the question is what sort of ‘extortion.’

The “basic element” of Roman taxation, the most important and burdensome, was the land tax, “often termed *annona* or (in terms of assessment) *iugatio/capitatio*, essentially assessed on the area of land a man possessed” (Wickham 1984, 9). In the fourth century, in response to a crisis in raising taxation in money as high inflation during the third century encouraged the rich to hoard gold, which meant metallic coins became scarce (Banaji 2011, 114), the Empire introduced a new system of taxation based on collecting taxes in goods and services rather than money, but with a money value.

“Calculations were made regarding the amount of grain, cloth, oil, weapons or other goods necessary to sustain a single Roman soldier for a year. This amount was called an *annona*” (Baker 2013, 214). Other taxes were high, but provided only a relatively small proportion of the state’s total revenues compared to agriculture (Jones 1964, 464–65; Wickham 1984, 9). Wickham (1984, 2005) accepts the *annona* defined the dominant mode of production, but his conclusion that this was feudal overlooks that the basis of assessment was production, not rent, which according to the accounting interpretation means its ‘economic logic’ was the slave-owner’s mentality.

According to its principle of assessment, based on the area of land and the number of persons farming it (Haldon 1997, 28), the land tax was “construed as a tax on its produce or productive capacity” (Andon 2006, 187). The method of assessment was first, typically, “The land was surveyed and the area of pasture, arable, vineyard, and oliveyard (or the number of olive trees) reduced to *iuga* on some . . . scheme” (Jones 1957, 90), a purely notional or hypothetical number, an ordinal ranking of the form $x \text{ acres} = y \text{ iuga}$. Syria had the most elaborate system: one *iuga* was “equivalent to 20 *iugera* of the best arable or 40 *iugera* of second-class arable or 60 *iugera* of third-class arable, or to 5 *iugera* of vineyard or 220 *perticae* of old olive trees or 450 *perticae* of mountain olive trees” (Jones 1964, 62). Asia had a similar but simpler system (Jones 1964, 62). Egypt did not use *iugum*, but based the assessment on the traditional *arura* of arable and vineyard, and on olive trees (Jones 1957, 90). Second, the authorities counted all the inhabitants, the owner (if resident), his resident *coloni*, slaves and all their adult families, and the livestock, which it “reduced to *capita*” (Jones 1957, 90), the assessable units. Finally, the two numbers were added to give the “grand total of the assessment,” which the authorities used to assess the *annona* and other levies (Jones 1957, 90). The rate of assessment was translated into a general levy known as the *indictio*, announced by the emperor each year, which could vary “according to need,” that is, the Imperial government’s need (Haldon 1997, 177), not whether any surplus was produced.

The Roman state exacted labor services from peasants, but most oppressive was the land tax that in effect confiscated a large and essentially arbitrary share of production. The tax was supposedly levied evenly on all land, but there were “considerable regional variations in incidence” (Wickham 1984, 10). The system, and the value of the *iugum*, differed in different areas, and population assessments varied (Jones 1964, 62–63). Early sixth-century evidence suggests that the state took between half and two-thirds of all production extracted from peasants in Egypt, leaving landowners between a half and a third, and possibly nothing above bare subsistence for the peasant; in Italy, the state took 57 percent and landowners 43 percent (Wickham 1984, 11). Wickham guesses, “over a quarter of gross yields [i.e. production]

will have gone in tax,” “often over half the surplus (that is, after seed and subsistence), and certainly over 100 per cent in bad years” (1984, 11). By the reign of Justinian [AD 527–65], tax took “nearly a third of the gross yield of the land” (Jones 1964, 469). The increase to “these remarkable levels,” which probably began in the later fourth century to fund wars (Wickham 1984, 11), led to a rapid growth of ‘patronage,’ peasants seeking a landowner’s ‘protection’ from the state.

The state collected tax from all cultivators or from property owners if the cultivators were slaves, but to maintain its tax revenues, from the late fourth century tenants paid tax through the landowner (Wickham 1985, 10). To ensure landowners could meet these fiscal obligations, the Roman state “bound certain types of tenants, or *coloni*, to the land that they were cultivating” (Kehoe 2006, 311). In the east, we saw in chapter 4, the laws relating to *coloni adscripticii* “record the widespread existence by the early sixth century of great estates throughout the Eastern Empire, many of which were apparently bipartite in character,” a process that began in the fourth century (Sarris 2006, 131). Some laws “detail the illicit patronage or *patrocinium* engaged in by landowners and their managers. Much of this legislation is primarily concerned with tax evasion, and the related issue of estate *autopragia* or ‘self-collection’ of taxes, but amongst the other issues touched upon are the maintenance of private estate prisons, and the illegal deployment of private armed retainers or *buccellarii*” (Sarris 2006, 131).

From these laws, the post-Roman world “inherited from the massive legal edifice of the late-Roman state . . . a legacy of *oppression* . . . the increasingly repressive legislation of the late Empire, which eroded the rights of farm-workers in particular” (Banaji 2011, 113–14, 117–18). The *coloni* counted in the tax liability of their assigned estate, and therefore the “landowners concurred in *tying* workers [*coloni*] to estates,” who in law “were ‘slaves of the land to which they were born’” (Banaji 2011, 118). Wickham doubted their effectiveness, and similar laws restricting artisans to their current professions, suggesting there was “widespread evasion,” but not their intent: “there is no doubt about the seriousness of the attempt made by the state, at least at its height, to exercise control over the most subject peasant strata” (1984, 12). The state, in short, sought to control peasants as though they were slaves, and landowners agreed, effectively enslaving them.

Increasing land tax intensified class conflict between the landed rich and the free poor, and increased intra-class conflict between the state and individual wealthy landowners. The state’s demands for increased tax revenues exacerbated a conflict of interest within the ruling class because it was in large landowners’ interests to evade it, which weakened the Empire’s fiscal, military, and ideological viability. The larger their estates the larger their tax liability and the more their “private interests as landowners were . . .

in contradiction with their interests as rulers and clients of the state,” and the more likely their “private interests outweighed their public ones” (Wickham 1984, 15). In the east from the fifth century landowners entered into “private arrangements, many of which elicited the hostility of the state,” but “it was the state that was obliged to accommodate the ambitions of landowners rather than vice versa. On each and every occasion the great landowners benefited” (Sarris 2006, 175). Regional cities of the Empire collected its taxes (Wickham 2005, 149), and were subject to influence by regionally powerful landowners, meaning higher taxes led to increased evasion.

Large-scale evasion of the land tax from the fourth century, historians often argue, promoted the collapse of the empire in the fifth (Wickham 1984, 9). The legislation of Valentinian III from 440, “much of which was about tax shortfalls” (Wickham 2005, 88) suggests that the western empire became “seriously short of resources” as the rich “began systematically to evade taxation” (Wickham 1984, 15). Peasants sought ‘patronage’ to avoid tax, which became a serious problem for the late Roman state from the 360s in Egypt and Syria, and in the 440s in Gaul, as peasants became “clienteles of rich neighbours in order to avoid having to pay the ever-increasing taxes” (Wickham 1984, 17; see also de Ste. Croix 1981, 364ff; Banaji 2011, 114). Salvian, writing a religious tract in the 440s in Gaul, complained that taxation “forces the poor to give their property to the rich in exchange for *patrocinium*, protection against tax-paying, and receive it back as tenants” (Wickham 1984, 17). Tenancy became “a dominant form of agricultural exploitation in many parts of the Roman world by the late Empire” (Foxhall 1990, 100), significantly increasing as peasants sought protection. Small peasants were “prepared to become tenants rather than pay taxes” (Wickham 1984, 17) despite the obvious disadvantages of small plots and labor obligations, probably because they had “little alternative for survival” (Foxhall 1990, 111; Faith 1997, 223).

In the west, taxation and its avoidance by big landowners undermined commitment to the later Roman Empire, and its military strength, and further increased large-scale landed property, which further increased tax evasion: “A vicious circle ensued, a fatal involution of the state” (Wickham 1984, 18). In the east, the empire “might have been getting wealthier,” but again “the imperial authorities were finding that wealth ever harder to tap,” which increasingly flowed to “the class of great landowners” (Sarris 2006, 199). The state’s attempts to “harness and curtail aristocratic influence at a provincial level, be it through the *adscript colonate*, *autopragia*, or the development of the office of *pagarch* or *vindex*, had only intensified it,” and as it did “the direct authority of the emperor receded ever further from sight” (Sarris 2006, 199). Large provincial landowners engaging in “fiscal embezzlement and fraud” added to the “poison of class animosity [that] threatened to insinuate

itself into relations between emperor and subject” (Sarris 2006, 199). From the late 550s, the eastern imperial authorities found funding wars increasingly difficult, and the standard of living of many was falling, “a situation that was, arguably, to cost the empire dear” (Sarris 2006, 220, 227).

Tax evasion by the rich in Wickham’s early work meant the “structures of the feudal mode were . . . more solid than the rival structures of the ancient mode, for those with the chance to *choose* between them” (1984, 15, emphasis added). It was, in other words, an intra-ruling-class conflict, between the ‘feudal’ and the ‘ancient mode,’ because having ‘tenants’ and evading tax produced larger surpluses for wealthy landowners. Revolutionary class conflict, Wickham (1984) recognized, was an essential part of Marx’s theory, that “Marxists, whatever their standpoints, never doubt that major changes in the economic structure of society are mediated through class struggle, between the classes dependent on the old structure and those dependent on the new” (1984, 16). When Wickham later abandoned the ‘ancient mode,’ presumed the unimportance of slavery, and accepted the universality of feudalism, he therefore also abandoned any idea of a transition driven by class struggle. However, consistent with Marx’s theory, we could see the history of Roman tax evasion as the beginning of potentially revolutionary class conflict between those who benefited from the state founded on the slave mode and wealthy landed individuals, which could have led to a transition to the feudal mode, but the state’s collapse curtailed it, producing different post-Roman histories.

Post-Roman Histories

Roman rule collapsed in Britain, Gaul, Spain, and North Africa in the fifth century; part of Italy and the Balkans in the sixth; Egypt, Syria, and Palestine in the seventh (de Ste. Croix 1981, 5, 6). Wickham (2005) highlights the links between the different post-Roman histories of east and west and their effectiveness at tax collection, which, what follows argues, is consistent with the hypothesis that effective slavery continued in the east and collapsed in the west. Table 6.1 outlines Wickham’s state classifications, his tax and aristocratic histories for six of his regions, and the accounting evidence, for the period AD c. 400—800 for Egypt, North Africa, Spain, Lombardy, and Francia, that extends to AD 1300 for England, and the dominant mode of production according to Marx’s pre-capitalist categories.

Using Egypt as his base line for continuity, and Britain for discontinuity, Wickham compares “strong” and “weak” states largely in terms of their tax collection histories, but allows for exceptional geographical and historical differences (Spain was exceptionally regionalized and difficult to govern; Lombardy was particularly devastated by wars; Francia was very large).

Table 6.1 Roman Land Tax and Estate Accounting (AD c. 400–1300)

	State	Land tax	Aristocratic low point	Accounts	Mode of production 800 (1300)
Egypt (Byzantine/Arab)	Strong	Continued	None	Apion, etc.	Slave
North Africa (Vandal/Byzantine/Arab)	Strong	Gradual lapse Revived by Justinian	None	Numidian ostraka Tablettes Albertini	Slave
Spain (Visigoth/Arab)	Weak	Continued to 680 Arabs tax from 711	eighth to ninth centuries	Diego Alvaro slates	Slave
Italy (Ostrogoth/Byzantine/Lombard)	Weak	Stopped in 600	sixth to eighth centuries	Polyptych of S. Tommaso di Reggio	Feudal
France (Gaul/Francia)	Weak	Stopped in seventh century	fifth to seventh centuries	Tours Polyptychs Capitulare de villis	Feudal
England (to 1300)	Kingdoms	Anglo Saxon Tribute	fifth to ninth centuries	Charge and discharge accounts	Feudal

Source: Created by the author based on Wickham (2005).

Except for Britain, where there was “a nearly immediate systematic collapse” when the Romans left in c. 410, the so-called collapse of Roman structures was a “pretty slow process” in most regions (Wickham 2005, 47, 520). It took from 200 to 300 years in North Africa, North and Central Italy for Roman “complexity and prosperity” to disappear, whereas following a “series of devastating blows” from numerous invaders, it disappeared in Britain within 50 years (Ward-Perkins 2005, figure 6.11, 122, 129, 130; Fleming 2010, 22). When the violence ended, Roman social structures, administration, and culture generally “re-emerged and flourished” (Ward-Perkins 2005, 63). Post-Roman successor state rulers particularly “wanted to maintain the fiscal system of the empire as long as they could, and in the case of the Arabs managed to do so with conspicuous success” (Wickham 2005, 520), so the tax system did not usually immediately cease functioning. It continued in the east, but in the Romano-Germanic kingdoms, Wickham argues, “fiscal structures . . . eventually disappeared altogether as a result of armies settling on the land,” which removed the “structural need” for tax (2005, 827). In other words, we will see, western aristocrats chose to not to tax despite ‘wanting’ to, Wickham in effect argues, because they did not ‘need’ the additional wealth, whereas eastern aristocrats decided that they did!

Seen as a problem of accountability, however, the causality more plausibly runs the other way round. Rather than neglect, the western tax system’s breakdown more likely reflected the increase in peasant power in the “confusion” caused by the transition from Roman rule (Wickham 2005, 84), produced by the “troublemakers” who inadvertently reduced economic prosperity (Ward-Perkins 2005, 129, 130) and the state’s ability to collect tax. The switch to a landed army, Wickham admits, was not “abrupt,” not simply the result of a conscious policy, but rather during the fifth and sixth centuries in the west “the balance between money and land shifted . . . to an army that was *basically* landed” (2005, 60). This pattern is consistent with peasant resistance in worsening economic conditions thwarting the aristocratic demand for tax, with tax funding the army to the extent that was politically possible, which declined. Settling armies on the land was, in short, the consequence rather the cause of a fall in aristocratic power and therefore in its ability to collect the tax necessary to finance it. A critical element in understanding the breakdown of the Roman political and fiscal system that Wickham himself highlights, as we will see, “is indeed crisis: the degree of confusion and of war-induced disturbance that there was in any given region of the western empire, such that it would be hard for institutions to continue to function properly” (2005, 84).

In North Africa, the Vandals, who invaded from Spain in AD 429, continued Roman taxation, which “made the Vandal Kings immensely rich” and, although “the Vandals had let record-keeping slip,” Justinian revived

it following Roman reconquest in AD 533–34 (Wickham 2005, 89, 92). Around AD 600, the eastern Empire maintained the Roman “fiscal structures” (Wickham 2005, 124). The Persians conquered Syria, Palestine, and Egypt in AD 613–14, the Romans reconquered them in AD 628–29, followed by the Arab conquests of AD 636–38 and AD 640–42 (Wickham 2005, 124–25). They left Egypt “under the control of its pre-existing local elites, which changed very little for a century . . . , and used the same mechanisms of rule, even the same tax system” (Wickham 2005, 24). Despite its losses, Byzantium “maintained a strong tax system” and survived: “taxation . . . was never interrupted in the provinces . . . [the Arabs] conquered,” who became “absurdly rich,” some “amazingly rich”; “tax pressures never slackened in Egypt,” which is “the model of continuity across the early middle ages” (Wickham 2005, 25, 129, 131, 140, 144).

In Spain the Visigoths “took tax on a systematic basis in the 680s as much as in the fifth century,” “kept the land tax right up to the end of their kingdom” (Wickham 2005, 96–97) following the Arab invasion of 711. Wickham classifies the Visigoth’s state as “weak” because, given the geographical obstacles to its domination, it instantly collapsed, but until then “their state did not get weaker over time, but stronger” (Wickham 2005, 93). The “written sources for landowning, taken as a whole, show a remarkably Roman Spain”; the surviving evidence of estate accounting shows that “the domain of Roman cultural and economic structures stretched to an unprepossessing place like Diego Álvaro”; and “The Arabs taxed from the start” (Wickham 2005, 225, 231, 101). Evidence of the continuing vitality of the Roman land tax is consistent with a continuingly dominant slave mode in these regions, consistent with the “persistence of a slave economy . . . [as] one of the chief features of Visigothic Spain” (Bonnassie 1991, 71), which for Egypt, Wickham’s base line of continuity, the accounting evidence supports. For the other regions, we at least know that private estate accounting existed, and that there is no sign of production for ‘profit.’ The tax and accounting histories of Lombardy and Francia were very different.

The Lombard kingdom emerged in a history starting with the Vandal invasions in North Africa that caused a “breakdown in Mediterranean unity, which seriously weakened the richest levels of the senatorial elite” in Italy, then the Gothic wars of AD 635–54, and then the Lombard invasion of AD 568–69 (Wickham 2005, 203–4). Lombardy “did not . . . tax after 600 or so at the latest,” and is “the first clear example of a fully post-tax state in the West” that emerged following “the upheaval of the period after 574” (Wickham 2005, 115, 117). Almost no accounting evidence survives for Lombardy, except a tenth-century polyptych of S. Tommaso di Reggio (Wickham 2005, fn.12, 267), an accounting document which, the following section argues, is consistent with feudalism.

The Franks, a collection of “apparently unconnected war-bands and tribal communities” were the “least Romanized” (Wickham 2005, 44). Around AD 510 the “earliest Frankish law code, focuses on the sorts of disputes that are most important in a peasant, not an aristocratic-dominated, society . . . and it gives little or no sign of any firm status-differences at all apart from that between free and unfree” (Wickham 2005, 179). There was a powerful landed aristocracy, particularly in the Paris basin, but they “co-existed with relatively independent peasantries,” and therefore while “sixth-century Merovingians taxed their Roman population (Franks remained immune) . . . taxation was increasingly unpopular, and in the seventh century any taxation at all was generally seen as an abuse of power. Indeed, . . . taxation was by now not normally exacted” (Wickham 2005, 183, 193, 186, 105–6). The reasons were “first, because the Merovingian heartland had seen such confusion and political division in the fifth century; second, because the frequent partitions of the kingdom would have made any renewed integration impossible” (Wickham 2005, 107). The breakdown of its tax system means that Wickham classifies Francia as a weak state. However, the scale of its lands and the geopolitical historical situation meant that although peasant power increased, aristocrats in Francia remained “wealthy and geographically wide-ranging in their land tenure,” retained an exceptionally powerful landowning military aristocracy that nevertheless could not dominate society (Wickham 2005, 168–203, 255, 331).

In Lombardy and Francia, Wickham argues, ‘confusion’ caused by war and intra-class conflict weakened the aristocracy and strengthened the peasantry, which arguably also undermined the slave mode’s dominance and, with it the state’s ability to collect tax, and landowners’ power to hold peasants accountable for their output. When the state ceased taxing peasants, “they paid less to outsiders . . . and . . . the frameworks for . . . local level political power, become simpler” (Wickham 2005, 529). In the west, poorer landowners faced wealthier peasants who naturally “tend[ed] to revolt when they . . . [saw] weaknesses in the structures of domination around them, in the context of lost wars, for example” (Wickham 2005, 529). Landowners could lose control of their peasants when there was “political disturbance,” which there was in the sixth and seventh centuries, “periods of greater aristocratic difficulty in different parts of the post-Roman world” (Wickham 2005, 256). As aristocrats lost the power of the Roman state they sought to substitute their own, which explains “a tendency to the militarization of aristocratic identity and values . . . [which] was indeed a key element of the changes in the form of the state” (Wickham 2005, 257). In the east, “a tax-based military elite” continued, whereas in the west armies settled on the land, became a land-based military elite in which, as in Francia, Wickham’s model for this, at the top “royal officials were all military leaders before anything else” (2005, 144, 203, 196).

Taxation manifested the structure of ruling-class domination, the “whole system of political power, which surrounded and restricted peasants” that made its collection possible (Wickham 2005, 529). It was therefore arguably the breakdown of this political power, the class power to organize and extract surplus labor by holding peasants accountable for production, which led to the breakdown of Roman tax systems. This loss of control and its consequence for class conflict could also explain the disappearance of written estate accounts in the west, and retention of control in the east to their continuation. By the eighth and ninth centuries, “written accounts only survive from Egypt” (Wickham 2005, 267). In most of the west, Wickham argues, this means that “registration of payment was largely oral, or organized by means of tallies and other non-written recording methods, as would be common into the thirteenth century, when accounts began again” (2005, 267). However, Wickham accepts, “it is far from impossible that annual accounting persisted or was reinvented here and there in the Carolingian and post-Carolingian period” (2005, 267), which the following section argues considerably understates their likely production. Nevertheless, because he thinks it is unlikely “that [accounting] was common in the West between 700 and 1200,” he concludes, “without such record-keeping, an important element of potential landlordly control over agriculture was lost” (Wickham 2005, 267–68). Similarly, he argues, “the infrastructure of tax-assessment and taxpaying was so complex and all-pervasive that *it generated*, not just the exaction of large amounts of surplus from peasants, but *a whole system of political power*, which surrounded and restricted peasants as much as the actual extraction of tax did” (2005, 529, emphases added). This system of political power was not simply a question of state organization, Wickham points out, but he argues that to collect tax, to secure “fiscal responsibility . . . entailed a careful accounting system for it to be *possible* at all” (Wickham 2005, 136, emphasis added).

Alternatively, a state was strong because it *could* tax and could use the existing power structures of the dominant slave mode, and therefore “even the weakest tax-raising state [Byzantium] . . . was more coherent than the most organized post-tax system [Lombardy]” (Wickham 2005, 129). It was therefore not assiduous accounting, “tax-raising . . . with [the] commitment” to manage the “complexity” of continually updating the tax system (Wickham 2005, 144, 147), that gave aristocrats control, but their coercive and ideological power, which according to Marx’s theory depended on the history of class conflict and the social relations of production the victors chose given the forces at hand.

The importance of “peasant resistance,” which significantly increased in the west following the collapse of Roman power, was that “overall . . . post-Roman aristocracies were poorer” and the peasants were richer (Wickham 2005, 529, 534). In the east, by contrast, while in Egypt there were “tax

revolts” and a “general uprising in 831–2” (Wickham 2005, 25), peasants never significantly increased their power. Therefore, post-Roman states “not based on tax, such as the Lombard state in Italy and the Carolingian state in Francia, were totally different, essentially based on landowning rather than tax-raising, with crucially different relationships with their aristocracies and peasantries” (Wickham 1984, 27). Aristocracy now depended not on status in the state hierarchy, which had been destroyed, and access to tax-based wealth which had gone, but landed property alone (Wickham 1984, 23–24; Faith 1997, 126–27). This difference reflected the substantial weakening of aristocratic power in the west, consistent with a substantial retreat of slavery and its eventual eclipse as, what follows argues, in a process of revolutionary class conflict with free peasants, powerful wealthy landowners chose feudal relations to increase their surpluses from the higher-level forces at hand.

The rise in peasant power in the west marked a “systemic shift for peasant society, which we can associate with the end of the empire” (Wickham 2005, 520), and according to Marx’s theory, it marked the starting point for the eventual transition to the feudal mode of production. We can observe it, the following section argues, in Francia and England’s closely related accounting histories. Francia’s “political model . . . had a substantial effect on England” (Wickham 2005, 377), became its model for ‘state building’ based on aristocratic dominance of the free peasantry, from AD c. 800, including, probably, the model for its estate accounting. There are many links between Francia and England, as Wickham says, that “can be fruitfully developed” (2005, 826), not least between their accounting histories. Comparing Francian/English ‘charge and discharge’ accounts with Egyptian ‘net revenue’ accounts then shows that a qualitative transition from the slave mode, via the peasant mode, to the feudal mode, had occurred in the west.

THE TRANSITION TO FEUDALISM IN THE WEST

Across the Roman Empire, in Britain (excluding Scotland), Italy, Gaul, and North Africa, “the fourth century saw the widespread construction of elite properties in the countryside characterized by the splendour of their design and the opulence of their estates” (Sarris 2004, 303). Everywhere, according to Banaji, with the decline in chattel slavery came a worsening of the position of the free poor, such that a “uniformly servile tenantry [had] evolved by the early part of the sixth century” (2011, 118). Everywhere, “A substantial part of the rural labour-force of the sixth to eighth, or even ninth, centuries comprised groups who, . . . [as] worker-tenants, were *more proletarian than peasant-like*, and often unmarried” (Banaji 2011, 126), Marx’s “day laborers.” Banaji (2011, 109, 127) argues, however, contrary to Wickham, “slavery

was widespread and entrenched in the post-Roman West,” was “widespread in late antiquity and continued to be so in the kingdoms that followed the Empire,” which if true means the option of returning to the slave mode was a possibility; that dominant feudal relations were a ‘new beginning.’

In Anglo-Saxon England, “slavery did not simply fade away but had a longer life than was previously supposed” (Faith 1997, 60). Consistent with effective slavery, “The freed slave was a worker who in return for selling his labour as a commodity received a ‘wage in land’ from the lord, who was his employer and sole purchaser of that labour. The lord, in his capacity as employer, was essential to him” (Faith 1997, 69). From around AD 400 to 700, the typical Merovingian estate was “directly cultivated by slaves, who had no holding and lived on or near the centre of the estate” (Verhulst 2002, 34–35). Seventh-century Merovingian charters provided allotments that, like the land allocated to slaves or freedmen in the ‘inlands’ of Anglo Saxon England, “were of a size well calculated to prevent them becoming self-sufficient” (Faith 1997, 70). “In the will of Aridius (late sixth century) [where] these allotments are called *peculiararia* (from *pecūlium*, the assets managed by a slave) and what is interesting is that these small plots of land cannot be sold or gifted away by their occupants” (Banaji 2011, 128). From the seventh century, the bishop of Worcester and his sub-tenants “found it more convenient to grant a smallholding to their permanent labour force rather than to feed and clothe them directly” (Dyer 1980, 97), that is, they calculated that this would increase their surpluses. In ninth-century Francia, resident slaves were more likely on estates with very large demesnes where the “rather onerous services of the tenants were no longer sufficient,” on expanding estates, and on smaller manors (Verhulst 2002, 43). According to Bonnassie, in the ninth and tenth centuries Catalan society “was still a slave society” (1991, 108). Anglo-Saxon estates used slave and non-slave labor in the ninth century (Faith 1997, 77, 113–14). The basis of Norman England’s *villeinage* was the Roman law of slavery (Faith 1997, 248). Nevertheless, England did not adopt the slave mode.

Wickham argues, “most estates were run simply by peasants” (2005, 281). His response to Faith and Banaji’s suggestion that peasants on small plots received a ‘wage in land’ was that they “supported themselves from it,” which may have often been only partially true. Wickham (2011, 224) complains, “The phrase ‘wage in land’ instead hints, in my view unhelpfully, at some form of salaried (or slave-) labour. There is to me, as Banaji recognizes, a clear divide between peasants, who support themselves, and slaves or proletarians, who are fed by or have to buy food from others, and this re-naming does not to me lessen that divide.” The accounting evidence does not support Wickham’s concept of slavery, but he persuasively argues that the problem with relying on literary evidence to identify slavery or feudalism is that “any

form of bipartite pattern in our Merovingian documentary evidence is never anything other than ambiguous, before the eighth century codes” (2005, 284). Furthermore, Merovingian charters “assume . . . that dependants are largely unfree; but there are no indications of any pattern of exploitation of *mancipia* other than putting them into tenures” (Wickham 2005, 282). Banaji accepts that of “Wickham’s most insistent leitmotifs . . . the triumph of the realities of tenure over legal distinctions . . . can be accepted,” but insists, “it certainly does not rule out other models of greater *complexity*, such as Faith has constructed for the ‘inland’ labour-organisation of Anglo-Saxon England” (Banaji 2011, 117).

The important question, as Sarris (2005, 217) says, is whether the bipartite estates that appeared in the eighth and ninth centuries in the west, particularly in Gaul or Francia, were a “survival” from Rome, or represented a “novel creation of late Merovingian or early Carolingian social conditions,” or were merely something landowners always created when powerful. The Gaulish/Francian documentary polyptych evidence of the eighth century, examined below, Sarris suggests, “may reflect not so much the emergence of a new agrarian order, as the more widespread use after c. 700 of highly durable parchment, in western conditions, rather than the more ephemeral medium of papyrus on which to record an already existing social reality” (2004, 303). Using parchment would explain the increased survival of polyptychs in the west. However, comparing their accounting role in the west with the aim of eastern accounts written on papyrus, as we will see, suggests that the western polyptychs probably do reflect a “new agrarian order,” the feudal mode of production.

Slave plantations “had never been . . . a feature of Gaulish agricultural management” (Wickham 2005, 282), and the estates from the eighth century were therefore not ‘survivals.’ Wickham marshals the evidence for believing that “in the earliest middle ages in the West . . . aristocracies were at their weakest, and peasantries at their most autonomous,” but from around the beginning of the ninth century western aristocrats significantly reversed the decline in their power, “took back control over peasantries in both economic and social terms around [800]” (2005, 519). As a result, he argues, “By 1000, and often much earlier, the peasant mode was only vestigial,” and in “its place, aristocratic power, with its feudal economic logic, was supreme,” but we have seen that the accounting evidence contradicts his claim that this was “as it had always been in the eastern Mediterranean” (Wickham 2005, 570). The accounting evidence supports Wickham’s view that in the west peasants came to face a new form, the newness of which he does not recognize. This was the ‘novel creation’ of feudal rent-seeking ‘primeval profit’ logic, which became the dominant mentality and social relation, the dominant mode of production, revealed by landowners’ accounting calculations.

Linking Francia's history with England's the accounting evidence here supports, but allows us to reinterpret, Wickham's claim that "we can see the gradual extension of demesne structures (perhaps on the model of vineyard exploitation) as signs of renewed [*sic*] intensification for profit [*sic*]" (2005, 302, 299). Because in Francia there is "no evidence of late Roman labour services," the *corvées* of the eighth century are almost certainly not Roman survivals (Wickham 2005, 299; Verhulst 2002, 35). Linking Francia's with English accounting history, we will see, supports the hypothesis that they were new feudal impositions. In the west, Northern Francia "was the first region where demesne agriculture became a focus for intensification" from around AD 800 (Wickham 2005, 302). After AD c. 800, at different speeds, aristocrats in northern Italy, central-southern Germany, Spain, and England, also intensified their agriculture using demesne farming (Wickham 2005, 302; 2008, 14). Given their shared weakness as states, and the close links between Francia and England, the extensive thirteenth-century English estate accounting evidence, we will see, supports the hypothesis that all these regions were making the transition from the peasant to the feudal mode.

Francia's Polyptychs

The earliest accounting documents surviving from the late seventh century, from the abbey of St Martin of Tours, are 28 "leaves of Merovingian parchment, which bear in total about 1,000 personal names as well as 137 place names and many indications on crop quantities to be delivered by those whose names are listed in the parchment" (Sato 2000, 144, 160). The lists are payments due to the monks, probably working documents extracted from a polyptych, a survey of possessions and revenues due, "lists of payments of *agrarium* . . . peasant by peasant from properties (*villae, colonicae*) across the Touraine and Poitou" (Wickham 2005, 109). Before starting the collection, the monks would likely need to prepare working documents to carry with them on collection rounds, probably by extracting the names from the abbey's polyptych, the types and amounts of crops due, adding any outstanding arrears from previous years. Based on such a process, and details found in these documents, Sato argues, they "can thus be plausibly associated with the existence and use of a polyptych in the abbey" (2000, 152, 153) (see figure 6.1).

These documents, Sato suggests, are evidence of "the administration of peasant tribute accounting" (2000, 160), but the question is whether an 'attenuated' form in Marx's sense had solidified into rent. To Wickham, although the payments, mostly in grain, some of wood, are "probably best seen as tax" because "in Tours there are hints that the *fiscus* still expected at least some taxation," and evidence of earlier immunity from tax, he concludes

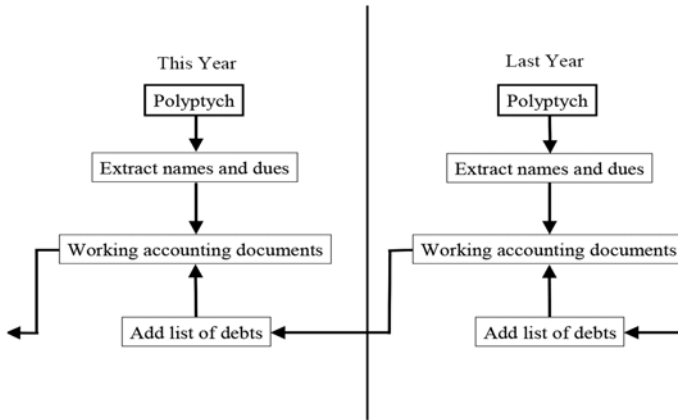


Figure 6.1 Using a Polyptych. *Source:* Created by the author based on Sato (2000, Figure 2, 154).

they were effectively rents because the monks “most likely” kept them (2005, 109). The key question, however, is not who kept the payments, but their basis, that is, how the monks accounted for them. It is possible that St Martin’s monks collected their ‘rents’ and other income and calculated the ‘profit’ they had made after their collection expenses. Later evidence suggests that a polyptych usually went with ‘charge and discharge’ accounting (Oldroyd and Dobie 2009, 99–100), with the calculation of ‘primeval profit’ as receipts minus expenses. This provides a framework to understand the evidence from Tours, the other polyptychs that survive, and the evidence of late eighth-century estate management in the *Capitulare de Villis* and *Brevium exempla*, the “only surviving administrative documents from the time of Charlemagne that discuss estate management and revenue collection in extensive detail” (Campbell 2010, 243). The *Capitulare de Villis* “contains no date and makes no reference to any historical event: its date, authorship and purpose have consequently been matters for considerable debate” (Loyn and Percival 1875, 64). They have “all but preoccupied scholars of the early Middle Ages for over a century,” but despite “prodigious efforts at interpretation . . . no consensus has yet emerged about the documents’ exact origins” (Campbell 2010, 243), particularly their purpose.

Most agree, however, it “was not to establish a new system, but rather to improve an existing one” (Loyn and Percival 1975, 65). A *Capitulare* was a document containing orders or instructions, in this case about the management of royal estates, and the *Brevium exempla*, found with the *Capitulare de villis*, contained model ‘inventories’ of royal estates. Whereas polyptychs kept detailed information on the “rents, deliveries and services to which the different categories of inhabitants of the estate, whose names are often given,

were obliged,” inventories were “a summing up of the number of *mansi*, of inhabitants, cattle, stock, etc.” (Verhulst 2002, 127), a stock taking that often recorded grain or wine yields. Some thirty polyptychs survive from Carolingian Europe, most dating from the ninth century, which scholars have also studied intensively (Verhulst 2002). They were usually ecclesiastical estates’ registers, which generally recorded “each estate of an abbey, giving the details of its location, names and households, as well as the legal status of each dependent peasant attached to it and the amount of rent in money, kind or labour owed by the peasants” (Sato 2000, 145; Verhulst 2002, 38).

Historians often conclude, “the world of the polyptych began with Charlemagne’s noted interest in maximizing the income from estates” (Sato 2000, 160). The evidence is consistent with Charlemagne taking a close interest in ‘income,’ in ‘primeval profit,’ we will see below, and therefore the discovery at St Martin of Tours suggests that this interest possibly began earlier. To Verhulst (2002, 60), by contrast, polyptychs raise the “general problem of the destination of the surplus of manorial production,” which makes their interpretation problematic. Verhulst (2002, 60) asks, “Did the big abbeys organise their production deliberately to obtain a surplus and eventually to sell it? Was it out of necessity to have money to buy goods which they did not or could not produce, which was the only tolerated ‘*negocium*’?” It is true, as he says, “These are questions to which a possible answer can only be given in a more general evaluation of the aims and results of Carolingian economy” (Verhulst 2002, 60), but it depends how we do this.

According to Verhulst, “commerce appears to have been practised in many cases by churches, not out of profit, but ‘out of necessity’” (2002, 95), to obtain items they desired that they could not produce, but this is questionable. The *Capitulare de Villis*, prima facie a series of written instructions for managing the estates of the Carolingian Emperor Charlemagne, which among other duties demanded accounts and auditing, is consistent with church and state aiming for ‘profit,’ that its aim was to hold Charlemagne’s stewards (*iudices*) accountable for producing ‘primeval profit.’ Verhulst himself notes several aristocratic activities that he says pursued ‘income’ or ‘profit,’ for example, for lords from ‘piecework,’ from building and running water mills, and for kings from minting coinage and market tolls (2002, 39, 46, 52, 129, 130). He agrees with the consensus that “churches, with their potential of capital [*sic*], power and privileges for their own commercial activity . . . strongly contributed to the commercial character of the town next to them” (Verhulst 2002, 91). Nevertheless, Verhulst (2002, 128) argues, the aim of the *Capitulare*, which he judges “a very unsystematic collection of practical instructions,” was merely intended to ensure provision for Charlemagne’s army in the context of a recent famine.

An accounting interpretation, however, supports Campbell's (2010, 248) conclusion that *Capitulare de villis*' aim was to control the production and distribution of surpluses, of 'income,' of 'profit' calculated as receipts minus expenses, from Charlemagne's estates to his court at Aachen, for which it "lays the administrative groundwork." To Wickham it "is normative not descriptive" because the ninth- and tenth-century survivals are estate surveys, not written accounts (2005, 267), but accounts were much less likely to survive (Oldroyd 1997). As Dobie and Oldroyd (2019, 9) say, "whilst the *Capitulare de Villis* was undoubtedly normative, the document would have been pointless as a normative set of instructions unless the method of production it described were real, which was not the leasing out of all activities," as Wickham assumes. Its aim what follows argues was a practical system that accounted for the production of surplus understood as 'primeval profit.' As Campbell puts it, the *Capitulare de villis* "primarily defined the role of the *iudex* [steward], whose main duties were to keep estates functioning properly, and to guarantee the flow of *revenue* to the court," and for this, "Of utmost importance was maintaining the property itself, both its land and its buildings" (2010, 248, 245, emphasis added). It delegated responsibility to the steward, and gave the queen and butler, in addition to the king, authority over royal estates and over the stewards, who it required to periodically visit the palace, and demanded that they "account for themselves and for the properties entrusted to their oversight through a constant stream of written reports to the court" (Campbell 2010, 248). The question is what sort of accounts? Table 6.2 reproduces the key paragraphs from the *Capitulare de villis* referring to accounts.

According to Oldroyd and Dobie (2009), the *Capitulare* required two types of accounts. The first is "a kind of charge and discharge accounting, whereby the steward was held accountable for the difference between the income of his district and his payments in goods or money (clauses 63, 20, 30–31, 44, 55). These accounts were subject to audit (clause 20)" (2009, 99). The second, they argue, "is evident in the requirement of the steward to submit an account at Christmas-time of the estates produce for the year, classified by type (clause 62) [which] is more in the nature of a survey, known as a *polyptyque*, of possessions and revenues" (Oldroyd and Dobie 2009, 99). However, to understand their charge and discharge logic, what follows argues, it is more helpful to consider all the clauses together, including the listing of "all our income" in clause 62 (that does not mention 'possessions').

Clause 63 gives the steward royal authority and clause 20 requires three or four audits ('visitations') a year. The most important of the steward's duties was "to ensure the timely transportation and accurate inventorying of estates' revenues—food, money and craft goods—to the Carolingian court," and the *Capitulare de villis* spelled out the detailed requirements for each in an

Table 6.2 Extracts from *Capitulare de Villis*

20. Every steward is to see that the produce is brought to the court in plentiful supply throughout the year; also, let them make their visitations for this purpose at least three or four times.

30. It is our wish that from all the revenue they shall set aside what is needed for our purposes; and in the same way they are to set aside the produce with which they load the carts that are needed for the army, both those of the householders and those of the shepherds, and they shall keep a record of how much they are sending for this purpose.

31. That in the same way each year they shall set aside what is necessary for the household workers and for the women's workshops; and at the appropriate time they are to supply it in full measure, and must be in a position to tell us how they have disposed of it and where it came from.

44. Two-thirds of the Lenten food shall be sent each year for our use—that is, of the vegetables, fish, cheese, butter, honey, mustard, vinegar, millet, panic, dry or green herbs, radishes, turnips, and wax or soap, and other small items; and as we have said earlier, they are to inform us by letter of what is left over, and shall under no circumstances omit to do this, as they have done in the past, because it is through those two-thirds that we wish to know about the one-third that remains.

55. It is our wish that the stewards should record, in one document, any goods or services they have provided, or anything they have appropriated for our use, and, in another document, what payments they have made; and they shall notify us by letter of anything that is left over.

62. That each steward shall make an annual statement of all our income, from the oxen which our ploughmen keep, from the holdings which owe plowing services, from the pigs, from rents, judgment-fees and fines, from the fines for taking game in our forests without our permission and from the various other payments; from the mills, forests, fields, bridges, and ships; from the free men and the hundreds which are attached to our fisc; from the markets; from the vineyards, and those who pay their dues in wine; from hay, firewood, and torches, from planks and other timber; from waste land; from vegetables, millet and panic; from wool, linen, and hemp; from the fruits of trees; from larger and smaller nuts; from the graftings of various trees; from gardens, turnips, fishponds; from hides, skins and horns; from honey and wax; from oil, tallow and soap; from mulberry wine, boiled wine, mead and vinegar; from beer and from new and old wine; from new and old grain; from chickens and eggs and geese; from the fishermen, smiths, shield-makers and cobblers; from kneading troughs, bins or boxes; from the turners and saddlers; from forges and from mines, that is, from iron- or lead-workings and from workings of any other kind; from people paying tribute; and from colts and fillies. All these things they shall set out in order under separate headings, and shall send the information to us at Christmas time, so that we may know the character and amount of our income from the various sources.

63. With regard to all the things mentioned so far, our stewards should not think it hard of us to make these demands, since it is our wish that they likewise should be able to make demands of their subordinates without giving offence. And all the things that a man ought to have in his house or on his estates, our stewards shall have on our estates.

(Continued)

Table 6.2 Extracts from *Capitulare de Villis*—Continued

65. That the fish from our fishponds shall be sold, and others put in their place, so that there is always a supply of fish; however, when we do not visit the estates they are to be sold, and our stewards are to get a profit from them for our benefit.

66. They are to give an account to us of the male and female goats, and of their horns and skins; and each year they are to bring to us the newly salted meat of the fattened goats.

Source: Loyn and Percival (1975, 64–72).

individual chapter (Campbell 2010, 245). To control these flows, it required stewards to keep detailed records and to send reports and make payments to the court on 1 September, the feast of St Martin (11 November), St Andrew’s Day (30 November), Christmas, the beginning of Lent, during Lent, and Palm Sunday (Campbell 2010, 263). It “instructs them to inventory all their income in writing (c. 55) [*sic*] and, within these reports, to separate their income under a prescribed set of headings (c. 62)” (Campbell 2010, 246). There are no surviving stewards’ accounts. However, the information required by the accounting clauses, including clause 55 which requires a list of all payments in goods and money (not ‘income’) and the balance, and clause 62 which requires a list of all incomes (not possessions), seen as a whole, fits together in the charge and discharge, receipts minus expenses, format shown in table 6.3. ‘Payments’ to the court plus the ‘balance’ equals ‘primeval profit.’

Clause 65 required stewards to sell surplus fish, having maintained the stock, after “others put in their place” and other necessary expenses, “so there is always a supply,” for “profit,” the *Capitulare de villis*’ only use of the word. However, there is no reason to limit it to fish and, in light of table 6.3, every reason to apply it generally. This framing supports Campbell’s conclusion that the *Capitulare* and *Brevium* “were both essential and complementary parts of an effort to squeeze as much *income* as possible out of Carolingian royal properties,” the difference between receipts and expenses, after “maintaining the property itself, both its land and its buildings” (2010, 259,

Table 6.3 *Capitulare de Villis* in Charge and Discharge Format

Charge:	
Receipts	Clauses 30, 62, 65, 66
Discharge:	
Expenses	Clauses 30, 31
Payments	Clauses 44, 55
Balance	Clauses 44, 55

Source: Created by the author.

248, emphasis added). The *Brevium exempla*, which appears immediately after the *Capitulare de villis* in the manuscript in which they (only partially) survive, includes surveys of five Carolingian royal estates (*fisci dominici*), which “seem to follow the instructions contained in several of the chapters in *de villis* quite closely” (Campbell 2010, 251), but are much less detailed. Whereas the *Capitulare* provided the information necessary to calculate ‘profit,’ Campbell argues that the *Brevium* “establishes a model format for inventories of royal and ecclesiastical properties . . . that include the same general topics (buildings, tools, grain yields and livestock) in the same order” (2010, 255). For each estate, the *Brevium* gave stylized examples of what to count, how to count it, and the records required. Table 6.4 summarizes what the auditors found, which shows that “the *Brevium exempla* provides a model for the form of inventories, but not for the contents of estates themselves” (Campbell 2010, 258–59).

Campbell dates the *Capitulare* and *Brevium* by using their aim of increasing and controlling the flow of ‘income’ from the royal estates: “then it seems that they would make the most sense in the context of the last decade of the eighth century” (Campbell 2010, 259). First, because at this time, “As a letter from Einhard to one of his deputies at Fritzlar suggests, absentee landholders had a hard time getting revenue from their estates. Even the Carolingians had problems” (Campbell 2010, 259). Second, because Charlemagne established a permanent court at Aachen in AD 794, from when it needed accounts, not just to increase its revenues, but also to control this increase from a distance. Before then, because “the court travelled . . . [it] could therefore

Table 6.4 The Royal Estates in the *Brevium Exempla*

<i>Estate</i>	<i>Buildings</i> ^{a)}	<i>Grain yields</i> ^{b)}	<i>Horses</i> ^{c)}	<i>Livestock</i> ^{d)}	<i>Poultry</i>
Annappes	32	119 <i>corbes</i> + 3,978 <i>modii</i>	91	1,027	241
Estate 2	20	170 <i>corbes</i> + 700 <i>modii</i>	154	558	146
Estate 3	18	40 <i>corbes</i> + 810 <i>modii</i>	90	594	10
Estate 4	12	30 <i>corbes</i> + 800 <i>modii</i>	38	at least 842	24
Treola	11	none ^{e)}	0	0	0

^{a)}The inventories list all the buildings on the estate, the gardens and orchards, and the household linen and equipment, including iron and wooden tools.

^{b)}The inventories report *corbes* (baskets) of spelt and *modii* of other grain such as barley, rye, and oats, and other pulses and beans, and bacon and cheese.

^{c)}The inventories distinguished horses by sex and age.

^{d)}The inventories distinguished oxen, cows, calves, bullocks, pigs, sheep, and goats.

^{e)}Treola produced 730 *modii* of wine and 500 *modii* from dues income, no grain, and two ‘pounds of hemp’ (*cannabis libras*).

Source: Created by the author based on Campbell 2010, table 1, 253, 254.

count on face-to-face contact”; after AD 794 because it traveled “less and less . . . it used the written word more and more” (Campbell 2010, 259). Campbell (2010, 262, 264) argues, “once permanently in residence, it would have needed to secure the flow of income more than ever. The *Capitulare de villis* responded directly to such needs,” which means, “they were most likely issued close to 794, in order to support Charlemagne’s permanent royal operation at Aachen.” To minimize transport costs, the *Capitulare* “paid special attention to the collection of . . . cash, easily transported from various sources . . . [and] labour-intensive items . . . such as wax, soap, animal skins, beer, wine, and food that could survive long periods in transit or storage (salted meats, vinegar, cheese, honey, etc.)” (Campbell 2010, 262). To control ‘profit’ from a distance, money and rents in kind, the *Capitulare* “demands the use of written inventories and advised *iudices* to keep accounts for their own use throughout the year” (Campbell 2010, 263). Reinforcing this demand, as Campbell says, “the *Brevium exempla* systematized the format of these accounts, just when the court was itself relying more and more on written documents” (2010, 263), and its inventories provided necessary details to audit the income. What accounts Charlemagne’s stewards kept is unknown, but the aim of the *Capitulare*, its underlying charge and discharge accounting logic, is clear.

Oldroyd and Dobie suggest a “continuity between Roman and Carolingian bookkeeping practice is a possibility” (2009, 100), that both the Romans and Carolingians’ used charge and discharge accounting, but while the accounting requirements in the *Capitulare* suggests that Carolingians did (Oldroyd 1997, 22) the Romans did not. They kept receipts and disbursement accounts, just as the Roman Catholic Church did for centuries after the end of empire (Oldroyd 1997, 13). There is a case for seeing some continuity between Roman slave accounting up to (say) the fourth or fifth centuries and post-Roman seventh- and eighth-century accounting in Western Europe, first, because “The *direct management* of the early middle ages was certainly a Roman legacy. The contrary view, viz. that Roman landowners gave up direct management when they abandoned the slave-mode . . . has little documentary base” (Banaji 2011, 129), and the accounting evidence suggests that widespread effective slavery continued. Second, there was continuity, as Oldroyd suggests, with the “underlying Roman idea” of personal accountability, probably revived and spread from copying Columella and other Roman texts (Oldroyd 1997, 21), but not with Columella’s implicit ‘charge and discharge’ accounting, for which there is no evidence. According to Oldroyd, “Columella made various references to the estate steward submitting charge and discharge accounts to the master (I, viii, 4, 13; XI, i, 24; XIII [?], iii, 7), but did not deal with the subject explicitly. The assumption seems to have been that such accounting was taken for granted” (1997, 20–1, emphases added). He emphasizes, “It

is not suggested that the detailed arrangements in the *Capitulare de Villis* were drawn verbatim from *Columella*, but that *the underlying Roman idea of stewardship coupled to accountability, might well have been*" (1997, 21).

Columella did not refer to charge and discharge accounts, but as Oldroyd and Dobie put it, "The practice of stewards rendering accounts to their masters for the discharge of their obligations is alluded to" (2009, 90), which does not necessarily mean using charge and discharge accounting. This charged the steward "with the sums for which he was responsible (opening balance, plus receipts), and discharged . . . his legitimate payments; the end balance showed what he must hand over to his lord or keep in his charge for the next period" (Baxter 1980, 69; Oldroyd and Dobie 2009, 101). The 'balance' handed over, assuming no other payments to the lord, was from Marx's perspective the surplus labor, the rent. By contrast, the slave overseer's obligation was accounting for production, not being 'charged' and 'discharged' for appropriating the surplus. The continuity between Roman estate and charge and discharge accounting was the physically coercive mode of accountability. The discontinuity was that Columella did not make the overseer accountable for the master's 'primeval profit,' for rent, and neither did the Appianus and Apion estate accounts, as we saw, but for production.

Consistent with a discontinuity AD c. 800, post-empire landowners as a class eventually benefited from the collapse of the Empire when they regained the knack of extracting surplus from the peasants. Initially, the "peasantry . . . were almost certainly better off; the mechanisms of surplus extraction were in the seventh to eighth centuries less efficient than they had been in the fourth" (Wickham 1984, 30). However, the ninth century is the "first great age in the monasteries of the Carolingian empire," the "clearest sign yet that the non-productive classes of Europe were beginning to rediscover how to extract all the surplus out of the peasantry" (Wickham 1984, 33). The ninth century is the "luxury commercial upturn," "often largely achieved at the expense of the peasantry" (Wickham 1984, 33), consistent with the rediscovery of estate management and its elaboration by a new calculative mentality in new systems of feudal accounting for 'primeval profit.' We can observe this new mentality in English accounting history.

Transition to Feudalism in England

England is Wickham's "most striking example anywhere of a province of the empire whose Roman socio-economic structures and identity broke down, quickly and almost totally, apparently for internal reasons" (2005, 303). All Northern societies, he argues, "were in large part, or entirely, peasant mode societies in c. 600, although by 800 most of them were moving in a feudal direction . . . particularly England" (Wickham 2005, 305). From AD c. 400,

England reverted to relatively egalitarian forms of tribalism, “people whose landlords had fallen or disappeared” (Fleming 2010, 59) whose leaders, visible in written sources that reappear from AD c. 600, began the process of state building by progressively subduing, controlling, and exploiting the free peasants (Wickham 2005, 306–26). Evidence consistent with the peasant mode is that “there is no sign that the difference between ‘rent’ and ‘tribute’ was systematically marked in seventh- to ninth-century texts in England, and it may not have been fully understood yet” (Wickham 2005, 322). During the sixth and seventh centuries elites created a “landscape of obligation” whereby all peasants came to owe ‘dues’ to at least one lord, but they were tributes of “particular kinds of goods and services at specific moments of the year” (Fleming 2010, 106). They were not yet rents based on individual claims of ownership, “the exclusive ownership of Roman land tenure; they just marked obligation, and hierarchy, among people who could all have seen themselves as in some sense landholders . . . at least if they were legally free” (Wickham 2005, 322).

Evidence of “high-status” people from the sixth and seventh centuries shows the beginning of growing inequality in early ‘Anglo-Saxon’ society that had developed from largely peaceful ‘invasions’ by a variety of peasant immigrants, and from indigenous Britons (Fleming 2010, 59–61, 68–71). Aristocrats acquired their wealth “through ad hoc tributes from the free; it will also, however, have been based on the rather greater dependence of the unfree” (Wickham 2005, 323). These ‘unfree’ peasants, who Wickham sees as ‘tenants’ paying ‘rent,’ but who worked for the lord, who others see as ‘slaves’ (e.g., Fleming 2010, 105), and could be effective slaves, are the nucleus of aristocratic exploitation on ‘inland’ (Faith 1997). However, lords eventually imposed ‘inland’ type obligations on the free peasants living in the “wider areas of ‘outland’ or ‘warland,’ of extensive lordship, where more autonomous inhabitants paid more political, and lower, tributes . . . ‘Inland’ must have been a minority of tenure in 700, but it was destined to grow at the expense of ‘outland’ across the next centuries” (Wickham 2005, 323), but it was not the imposition of slavery. Charlemagne’s estates had “slaves”: chapter 67 of the *Capitulare de villis* required, “With regard to vacant manses and newly acquired slaves, if they have any surplus which they cannot dispose of, they are to let us know,” but he derived the bulk of his income from rents, services, and renders. In Francia during the ninth century the “exploitation of the demesne by means of services by tenants . . . seems to have been a system that was mainly developed on large estates, usually owned by a king or donated by him,” those that expanded from a core of resident slaves (Verhulst 2002, 43) to encompass free peasants. In Gaul, “an unusually powerful landowning military aristocracy” had survived the crisis following the collapse of Roman rule, and therefore in Francia “Roman traditions of landowning were by no

means given up” (Wickham 2005, 331), by which Wickham means ‘feudalism,’ and this time the accounting evidence supports him.

England’s high rents and labour services “crystallized only slowly inside land-units, extending first to the unfree, then to the weaker sections of the free” (Wickham 2005, 350). Nevertheless, from AD c. 600 to 800, “both political power and elite wealth were increasing in England,” and during the ninth century “exclusively owned estates” appear, possibly first in East Anglia where there is evidence of markets in the eighth century, which “became generalized across England in the late ninth” (Wickham 2005, 342, 348, 349; Fleming 2010, 204–12). Marx argued in *Grundrisse*, “the feudalism introduced into England was more perfect in form than which arose spontaneously in France” (1973, 490). By the tenth century English kings had “copied Carolingian models so well that they could keep England united when Francia itself was collapsing” (Wickham 2005, 346), and English aristocrats copied Carolingian estate management systems, almost certainly including their accounting systems (Oldroyd 1997). An estate description from Hurstborne Priors in Hampshire in AD 900 shows “*ceorlas* owing substantial rents, and also labour service,” which is “the first unequivocal evidence we have from England of a ‘manorial’ demesne paralleling those in Francia and Italy” (Wickham 2005, 349), but no accounts survive. By the late tenth century England’s agriculture was more productive, driven by a landed elite “hungry for markets, cash and consumer goods,” but the question is whether they thought of their “surpluses” as ‘profit’ (Fleming 2010, 252, 263, 277, 283), and for this we need their written accounts, which survive in England only from the thirteenth century (Harvey 1994, 91).

Evidence of sophisticated written administration in later Anglo-Saxon England (Campbell 1986, 171–89) undermines historians’ traditional view that widespread illiteracy meant that elite landowners did not keep written accounts (Oldroyd 1997, 9). There is evidence consistent with account keeping, and historians offer plausible reasons on why no Anglo-Saxon estate accounts have survived, including their destruction in Viking raids and political turmoil, and relatively illiterate Norman officials discarding them because they could not read English (Oldroyd 1997, 11–13, 15, 21). However, the clear affinity between thirteenth-century English charge and discharge accounting and ninth-century Francian accounting evidence, the following section argues, and their close historical links, means that we can use the later English evidence to interpret earlier suggestive developments.

Consistent with deepening feudal relations, around AD 1000 across Europe lords “began to impose a ‘new servitude’ on their tenants. What were known all over Europe as ‘new customs’ or ‘bad customs’ began to be demanded from the peasantry in addition to rent in cash, kind or labour” (Faith 1997, 252), including England. To expand the labor supply for their

demesnes, around the Norman Conquest (1066), English lords engaged in the “widespread granting of [small] tenancies” with high labor rents to previously independent peasants, some “exceptionally heavy,” which led eventually to their serfdom, and the imposition of additional ‘customs’ by the late twelfth century (Faith 1997, 74, 214, 260, 265). By the eve of the Conquest, “many holders of large ‘franchises’ . . . administered the law of the land in their own court” (Faith 1997, 120). With private courts, “which the lord held explicitly for his own tenants, in his own hall, and to which they had no appeal, and to which they had to bring all landlord and tenant business,” by AD 1100 the legal framework of feudal control was complete (Faith 1997, 121).

By AD 1200 the “hide and its fraction,” which initially was an allotment of land, but which came to measure the tax-tribute obligations of ‘warland,’ and gave evidence of free status in Anglo-Saxon England, “had become simply units for assessing area and rent” (Faith 1997, 115). An Anglo Saxon ‘hide’ was an “*assessment of value*,” a “way of estimating resources” of the people, wealth, and the lands of the warland (Faith 1997, 91, 95, 128), and the basis of tributes to kings. However, over time these payments tended “to be diverted to the lords of the greater estates who were also lords of franchises. They came to look like rent, but they were not in origin rents but the commutation of public obligations” (Faith 1997, 101). The king’s *feorm* also became privatized, “which ultimately made *feorm* into a kind of rent,” as were other obligations that also became elements of rent, so hides “that had been the basis for assessing tax now came to be used as the basis for setting rent” (Faith 1997, 104, 106, 111–12, 218).

New obligations, the growth of private courts, and transforming ‘tax-tribute’ into ‘rent,’ are all consistent with intensifying feudal relations from AD c. 1000 to 1200. However, from the late twelfth century many large English estates began to come under direct management (Harvey 1973, 5), and during the thirteenth century generally kept written ‘charge and discharge’ accounts, many of which survive, which required accountability for ‘primeval profit,’ which confirms the feudal mode in England. As it did not begin in the thirteenth century, this evidence, alongside the evidence of seventh-, eighth-, and ninth-century Francian accounting, and other evidence, is consistent with feudalism’s development in England from AD c. 800.

English Manorial Accounts

By AD c. 1220, direct management was the norm on large English estates (Harvey 1973, 5), that from AD c. 1250 typically produced written, detailed, and largely standardized ‘charge and discharge’ accounts (Harvey and Thomas 1983, 10). The typical English manor kept accounts for cash, corn, livestock, labor services, and implements (Harvey 1984, figure 2, 27). Each account

was 'charged' with the opening balance due to the lord plus all other cash or commodities harvested, received and receivable, and 'discharged' with all necessary cash and commodity outflows incurred in running the manor and the cash payments to the lord. Typically, the front of the account was devoted to cash transactions, the money account. First, receipts of assessed or customary rents, receipts from the sales of produce and livestock, money from commutation of labor services, aids, fines, tolls, and so on. Against total receipts were set necessary expenses and allowances: rent allowance for the lord's official (the bailiff or reeve) and *famuli*, allowance for vacant holdings, costs of hiring labor, repairing buildings, the purchase of livestock, corn, equipment, and finally the lord's or his official's expenses and any cash payments to the lord, 'money liveries,' the *Liberatio* (literally, the free money). The auditors struck the net balance, the *Et Sic Debet*, after the *Liberatio*, cash payment to the lord, showing the remaining sum owed by or to the lord for the period. On the back were detailed stock accounts for corn, wool, and so on, in physical units, and typically an account of all the labor services due on the manor and those performed (Page 1935, xi; Denholm-Young 1937, 126). Table 6.5 shows the typical structure and Latinized headings of an English manorial cash account in the thirteenth century:

The *Liberatio* plus or minus any opening and closing balances was the 'profit' or 'loss' for the year.¹ If there was *et sic debet*, more money was received (charged) than expended (discharged), and the steward had a cash obligation to the lord. Alternatively, if there was *et sic excedit* or *excessus/superplusagium*, more money was expended (discharged) than received (charged), which meant that the lord had a cash obligation to the steward. In addition to the cash account, by the end of the thirteenth century typical English manorial accounts had charge and discharge sections for the production of corn and stock (animals), showing the opening balances and acquisitions as charges, and sales, losses and disposals as discharges, and the balances remaining. Finally, they could include a section for labor services, listing the winter and autumn plow works, harvest works, carrying services, miscellaneous winter and summer works required, and sections for the available land and its use, and the implements available at the year-end (Harvey and Thomas 1983, tables 2 and 3, 11–12).

Calculating cash 'profit' was not the purpose of charge and discharge accounting, historians often argue, because it was not the 'balance,' the 'bottom line.' Harvey, for example: "To show what profits the manor had brought the lord in the course of the year was no part of the account's ostensible purpose . . . [because] it brackets together in the cash discharge both the running costs of the manor and the money that was handed over to the lord" (1984, 95). However, while to the steward the *Liberatio* was an 'expense,' to the lord it was an element of his 'profit.' Harvey accepts, "the account unquestionably

Table 6.5 Example English Manorial Cash Account**CHARGE—RECEIPTS** (*Recepta*)*Arreagia*: (arrears from the balance of the previous year)*Redditus assise* (customary assessed rents)*Vendicio bladi* (sales of grain);*Exitus manerii* (sales of small items)*Perquisita* (fines from the manorial court)*Vendiciones super comptum* (additional charges by the auditors)*Summa totalis/tocius recepti* (Total receipts)**DISCHARGE—EXPENSES** (*Expense*)*Superplusagium* (advances from the balance of the previous year: *superplusagium* and *arreagia* are mutually exclusive)*Allocaciones* (allowances of rent to the reeve and *famuli*, the permanent estate labourers, the plowmen, ox herd, and so on, who performed most skilled work on the demesne)*Custus carucarum* (cost of plows and plowing)*Custus carectarum* (cost of carts and carting)*Custus domorum* (costs of maintaining buildings)*Custus sarclacionis* (cost of weeding and hoeing)*Custus herciature* (cost of harrowing)*Custus falcacionis* (cost of haymaking and mowing)*Custus autumpni* (cost of harvest)*Custus trituracionis et ventilacionis* (cost of threshing and winnowing)*Stipendia famulorum* (wages of the *famuli*—permanent estate labourers)*Expense minute et necessarie* (small outgoings)*Expense forinsece* (disbursements unrelated to the running of the manor)*Expense senescalli* (cost of the steward's visit)*Liberatio denariorum* (delivery of cash to the lord)*Summa totalis/tocius expense* (Total expenses)**BALANCE**

Source: Created by the author based on Sample Manorial Account: Deverill, Wiltshire (David Postles, Leicester University), *Medieval Source Material on the Internet: Manorial Records*, <http://www.medievalgenealogy.org.uk/sources/manorial.shtml>.

gives enough information for the manor's profitability to be worked out, and it is clear that manorial accounts were used for this purpose from a very early date" (1984, 95). Dyer agrees, "Medieval administrators understood very well *the notion of profit*, and this could be calculated from the account," but his claim that "as it was not the primary purpose of the document, the 'profit' or '*valor*' total was often added as an afterthought" (1989, 34) does not mean, as he implies, that maximum 'profit' was not the aim.

First, lords or administrators could have made mental or separate written calculations that have not survived. Second, the cash *Liberatio* was an

element of the ‘profit’ paid over to the lord because the ‘balances’ were either the remaining ‘profit’ due or the ‘profit’ in effect paid in advance. Therefore, not explicitly adding or subtracting the balances does not mean lords did not seek cash ‘profit,’ or that their accounts did not in effect calculate it, because the balances in arrears or in advance showed whether they were consuming more or less than their ‘profit.’ Charge and discharge accounts allowed lords and administrators to calculate the ‘profit,’ but their fundamental purpose was accountability for it, for its production and distribution, which explains why the *Liberatio* and the balances are integral to their structure. “The whole system depended,” as Harvey and Thomas say, on “knowing exactly what money and produce had been received and what had been spent, sold or otherwise disposed of . . . so that the official could hand over the right amount to the lord as his profit” (1983, 9), that is, taking any balances into account.

On large complex estates, and including renders in kind, administrators’ ‘profit’ calculations could be more complex, but the aim was the same. Based on the accounts of Christ Church Canterbury, Norwich cathedral priory (Stone 1962), Bolton priory (Kershaw 1973), and other manors (Postles 1986), the accepted concept of ‘profit’ was the cash and commodities available from the manor for consumption by the lord and his household. Stone (1962) gives a detailed description of the calculation of the total ‘profit’ of a manor at Canterbury, called its *profectus*, meaning ‘progress,’ ‘increase,’ ‘growth,’ or ‘profit,’ based on payments (‘liveries’) in money and in kind, adding the balances of cash owed and stocks remaining, and deducting receipts from other manors and stock losses:

Profectus = liveries in money and kind to Canterbury *plus* other contributions to the household *plus* liveries to other manors *plus* any other contributions to purposes extraneous to the manor *plus* expenditure on improvements (as on new buildings or acquisition of land) *plus* any sum owed to the lord at the conclusion of the account *plus* certain items of stock in hand *minus* receipts from other manors and from Canterbury and certain deficiencies of stock. (Stone 1962, 28)

The *profectus*, in short, calculated the total consumable surplus produced by the manor for the lord and his household. Adding back improvements, one-off expenditures on land and buildings, and so on, that is, distinguishing between recurrent and nonrecurrent expenditures is consistent with calculating ‘profit’ from production. However, there is no evidence of depreciation accounting, that feudal lords had any concept of fixed capital (Bryer 1994). The *profectus* was the answer, as Stone put it, to the “question: ‘How well is our property paying?’” (1962, 25), not ‘what is its ROI.’

The lords’ aim in turning to demesne farming in the thirteenth century, particularly the Episcopal lords (Postan 1966, 578), was “simple, to

maximise revenues for an increased cash income” (Bolton 1980, 89), as it had been from around the end of the ninth century (Fleming 2010, 278, 283). Lords demanded maximum cash incomes to finance lavish and growing expenditures on wars, luxury imports, construction of cathedrals, castles, mansions, and monasteries, and to pay increasing taxes (Postan 1967, 581; Miller and Hatcher 1978, 229–31). Consumption by the aristocratic class was the *raison d’être* of feudal society (Dyer 1989, 7). Manorial accounts therefore did “not *attempt* to give certain figures—valuation of stocks is the most important—without which profits or losses cannot be computed,” that is, capitalist ‘profits’ or ‘losses,’ and therefore in this sense whether the manor was “paying its way,” was “profitable” was something that “did not worry the medieval landowner” (Drew 1947, 25, emphasis added). Instead, the lord “demanded from a manorial *comptus* . . . that it should show him the exact financial position as between himself and the official who rendered the account, and the document [was] so framed as to make this information readily available” (Drew 1947, 25). By ‘financial position,’ Drew means more than the final balance because he observes that the balances owing to or from the lord from “the reckoning” was *after* the *Liberatio* (1947, 26), which together determined the lord’s ‘profit.’

By holding stewards accountable for surplus labor in the form of rents or cash ‘profit’ from the in-hand estate, English manorial accounts were from Marx’s perspective an historic advance whose appearance confirms the transition from the slave to the feudal mode of production. As Macve (1994, 64, 80–83) points out, arguing against de Ste. Croix, Finley, Mickwitz, and others, evidence that DEB was not necessary to allow the ancients to calculate ‘profit’ if they had wanted to is that English aristocrats did this without DEB. Medieval estate accounts “recorded receipts and issues of cash and produce in essentially the same way as estate accounts, like those of Zenon or Appianus, in Graeco-Roman times . . . [b]ut [for example] the [thirteenth and fourteenth century] Norwich accounts show concern with the profitability of the estate” (Macve 1994, 64, 80–83). There are many such examples, but “we have nothing similar from antiquity” (Macve 1994, 65). Macve cautioned, “it is not safe to argue from silence” from antiquity because “such calculations, by their nature, are generally less likely to have survived than the formal records of actual transactions for which people were held accountable” (1994, 65). However, it follows that profitability calculations in antiquity would have survived if people had been accountable for ‘profit,’ and their absence is evidence that such accountability did not exist. Finding one example would falsify the hypothesis that feudal accountability did not exist in antiquity, but not finding any does not support the hypothesis that they ‘might’ exist.

Because from Marx’s perspective feudal lords directly coerced surplus from the peasants, the growth of demesne farming and manorial accounting

reflected changing landowners' power. This would explain landowners focus on leasing in the mid-twelfth century as a consequence of "the temporary disorganisation of the feudal class during the civil wars of King Stephen's reign [which] was accompanied by the significant peasant gains" (Brenner 1985, 257), particularly from commuting labor services and paying stable money rents. Similarly, we can explain the thirteenth-century change toward demesne farming and manorial accounting as a reflection of the "restrengthening of the monarchy during the latter part of the 12th century [which] seems to have been reflected in the reconstruction of lordly power over peasants from about the same time" (Brenner 1985, 257). Accompanying the emergence of demesne farming and manorial accounting was the imposition, redefinition, and increase in labor services (Hilton 1965, 13).

English landowners could demand labor or money rent 'at the lord's choice' (Postan 1966, 606). Many English lords used the ambiguity of their rights to labor services to increase their money rents by demanding high labor services when they were not required, and then choosing to commute them to money rent (Postan 1966, 607; Britnell 1993, 112). Sometimes they routinely collected labor services as money rents and repaid them for any work required (Hilton 1966, 139–40). By the end of the thirteenth century, labor services provided around one-third of the labor for demesne farming in England (Harvey 1973, 21). This was despite the fact that "in the late thirteenth century landlords clearly found it difficult exact efficient labour services, and they were used only for the most unskilled work of the manorial demesne: the threshing, the ditching, the muck-carting, rather than the ploughing, the sowing or the keeping of animals. Money rents, on the other hand, were easy to collect and difficult to evade" (Harvey 1973, 20). Although many labor services were commuted to money rents, the obligation (supposedly voluntary) to provide 'boon' works for ditching, dyking, building, carting, plowing, and harvesting, all those tasks requiring relatively large amounts of labor, were usually retained for demesne farming (Postan 1966, 607; Hilton 1966, 135). Villeins were also liable to make a wide range of other payments, all of which significantly increased during the thirteenth century (Postan 1966, 552–53; Miller and Hatcher 1978, 48, 129; Britnell 1993, 111).

Whether landowners appropriated surplus labor from commodity rents, money rents, the sale of commodities produced on the in-hand using labor rents, or 'wage labor' from 'tenants,' unlike slave owners the aim was 'profit,' not production. The dominant mode of production, the way the ruling class extracted surplus labor, had changed, as Marx had put it, to 'rent' as the general form of surplus, and the numbers of slaves dwindled. Slaves were around 12 percent of the recorded population in the Domesday book (1086) (Faith 1997, 60). They probably remained the minority if we add

members of the families of the many more ‘bordars,’ ‘cottars,’ ‘gebur,’ tenants of the ‘inland,’ who paid labor rents (Faith 1997, 70–85), some of whom might have been effective slaves. There was widespread employment of ‘wage laborers,’ almost a third of the rural population, particularly from the mid-thirteenth century (Postan 1966, 568), but they were not ‘free’: “The 13th century agricultural labourer was often not a free man, or if he was free the distinction between him and the unfree was not great He was burdened with dues of a feudal character; he usually rendered some small labour services” (Kosminsky 1956, 306). ‘Wages’ were predominantly paid in food, the amounts of which often decreased as prices increased (Postan 1954, 29–30; Miller and Hatcher 1978, 51–52), and were often costless to the lord, merely commuted labor services reacquired, often at a profit (Brenner 1985, 234–35). English lords used peasants and ‘wageworkers’ on their demesnes, but their money rents, court fees, and aids continued to provide the most substantial part of their total revenues (Postan 1966, 579). Even in the Benedictine abbeys, the major source of money was rents and other payments from tenants (Postan 1966, 577). For most of the thirteenth century, these increased in line with the increase in prices (Miller and Hatcher 1978, 237).

Following the Black Death (1349) and a resurgence of peasant power (Brenner 1985, 272), by AD 1400 English lords largely lived on money rents. Rents fell or remained low until at least the middle of the fifteenth century, but when population and prices increased and real wages fell, particularly from the middle of the sixteenth century, English lords did not return to demesne farming (Harvey 1973, 5). Instead, they continued leasing, putting upward pressure on rents (Davis 1968, 228), and in the late fifteenth, mid-sixteenth, and early seventeenth centuries, with acquiescence in, help with, or the promotion of, enclosures and engrossing to create larger-scale, capital-intensive farming employing ‘free’ wage labor producing commodities for the market (Coleman 1977). Underlying this agricultural revolution, Marx argued, was the emergence and ultimate generalization of capitalist relations, the employment of ‘free’ wage labor for “the production of the product as a mere commodity and a mere means of appropriating surplus value” (1981, 935), a new system of surplus extraction that at first only gradually becomes generalized. “This entry of capital into agriculture as an independent and leading power does not take place everywhere all at once, but rather gradually and in particular branches of production” (Marx 1981, 937), becoming general only from the last third of the seventeenth century, a claim supported by accounting evidence (Bryer 2004, 2006c). For Marx, the advance made by the transition from feudalism to capitalism “consisted in a change in the form of . . . servitude, in the transformation of feudal exploitation into capitalist exploitation” (1976a, 875), and with it a transformation in the nature of ‘profit,’ which feudalism had pursued only in a ‘primitive’ form.

WAS FEUDALISM AN EVOLUTIONARY PROGRESSION?

Did growth in the forces of production within the ancient world underlie the transition from the peasant to feudal mode? Did increasingly powerful aristocrats choose feudal rather than slave relations because it increased their surpluses from the higher forces available? Marx's view that the contradiction between the forces and relations drove the ancient world "on to a 'higher and newer form' of social organisation," Giddens accepts, could be "justified if . . . the dissolution of the Roman Empire, together with the German clan community, formed a sort of symbiosis propelling 'history' forward" (1995, 78). However, Giddens denies any link between any such transition and growth in the level of the forces of production within the ancient economy. Konstan agrees: "According to the five stages, then, the change from slavery to feudalism ought to have corresponded to a general rise in the level of the forces of production. But there is no reliable evidence for such a development in the third or fifth centuries AD" (1975, 149). However, first, this criticism presumes the end of slavery in the third to fifth centuries. Second, there is reliable evidence that the forces of production grew to a higher level during the Roman Empire, and that the most fundamental forces survived its collapse. Third, the evidence shows that the new feudal relations propelled history forward by increasing the forces, becoming a means of their development.

With the collapse of the Roman Empire, there was a decline of markets, in the division of labor, in manufacturing and probably agricultural output, a falling population, falling literacy, losses of scientific and technological knowledge, and so on (Ward-Perkins 2005). These and other losses were the unintended results of the Germanic invasions, launched to share in Rome's wealth, but which produced the "end of civilization" (Ward-Perkins 2005, 167). From Marx's perspective, the Germanic invaders inadvertently ended the dominance of the slave mode, which reduced the forces of production and ended economic prosperity in the west. In the *German Ideology*, Marx and Engels argued, the "conquest by the barbarians destroyed a number of productive forces; agriculture had declined, industry had decayed for want of a market, trade had died out or been violently suspended, the rural and urban population had decreased" (Marx and Engels 1976a, 34). In the military and political confusion of conquest, slave relations weakened or were lost. During the crises the Romans freed slaves seeking to bolster their army, slaves, and tax-oppressed peasants sometimes joined with the invaders (Ward-Perkins 2005, 27, 39, 43, 45–46, 48, 50), and where they could slaves presumably ran away or became less tractable. The benefits the state's infrastructure produced for the ruling class, but also for the merchants and peasants who used its roads, bridges, harbors, laws, and so on, and lived in its relative peace and security, the "ideal conditions for economic growth" it gave for

many centuries (Ward-Perkins 2005, 129, 132–33), suddenly or progressively disappeared.

With the end of Rome's rule, the dominant slave mode and its 'civilization dividend' were gone, but the accumulated agricultural forces from antiquity, particularly cleared land, the invention of the deep plow, and the water mill, remained. Marx and Engels highlighted, "In contrast to Greece and Rome, feudal development at the outset . . . extends over a much wider territory, prepared by the Roman conquests and the spread of agriculture . . . associated with it" (Marx and Engels 1976a, 34). In *Capital*, Marx added, "the Roman Empire had handed down the elementary form of all machinery in the water-wheel" (1996, 353). From this foundation, from AD c. 400 to 800 and beyond, there was a "network of changes, all of which show a development in the productive forces—there is no doubt of that" (Wickham 2008, 18). There is also no doubt, as we have seen, of a transition to feudalism, a shift from an aristocratic focus on production to a focus on 'primeval profit' AD c. 800, from when the development of the forces accelerates.

This evidence, what follows argues, is consistent with the hypothesis that from AD c. 800 aristocrats imposed feudal rather than slave relations to obtain larger surpluses from the higher-level forces handed down from antiquity, developed under the peasant mode, and with the collapse of Roman rule a potentially higher level of human forces, the untaxed, self-sufficient, free peasants themselves. In short, the collapse of Rome bequeathed cleared agricultural land, freer peasants, and the basic labor-saving technology to work it and process the output, and the feudal mode became dominant in Western Europe because it gave larger surpluses from these forces, which led to their further development.

Like all earlier civilizations, agriculture was the Roman Empire's economic foundation. Building on earlier work, land-clearance for extending agriculture, encouraged by Roman law, resulted in accelerated widespread deforestation (Williams 2010, 63–70). Population increased, creating a "Roman landscape that was densely settled and cultivated" (Ward-Perkins 2005, 138–39). After the Empire's collapse the population fell for reasons that "remain obscure," possibly bubonic plague, perhaps the "decreasing intensity of peasant subjections . . . allowed for slow reductions in local populations," but while use-intensity fell, "few if any zones saw any significant land abandonment" (Wickham 2010, 217). Agricultural land was the fundamental higher-level force of production bequeathed from antiquity by Rome, and with it the water mill and heavy plow, whose spread increased the forces from the early middle ages.

Water mills and the heavy plow were used in the later Roman Empire "on a substantial scale, but only in certain contexts (in the case of mills, for urban and perhaps army supply); it was not until after the end of the empire that they

began to extend more widely across the European countryside” (Wickham 2008, 15). From AD c. 400 to 800, water mills progressively spread across Europe from the Mediterranean, reaching Ireland by the seventh century, “becoming standard in the England of *Domesday Book*, by which time they were generalised in the European countryside as a whole” (Wickham 2008, 15). England had around 6,000 mills by AD 1085, which by 1300 had increased to between 10,000 and 15,000 (Langdon 2004, 9–11). Water mills were a “sign of agrarian economic growth” (McCormick 2001, 10). They were expensive and complex mechanical instruments, an “investment for productivity” that “represented profitable release of human or animal power from the labour of grinding grain for daily bread. We now know that they had spread much more widely in late antiquity than was believed even recently” (McCormick 2001, 10).

From the early to the later middle ages, the technical and human forces of agricultural production grew. Increasing drainage, clearing woodlands, and sometimes plowing up pastures, particularly in the tenth to thirteenth centuries, was “the central medieval agrarian expansion *par excellence*,” when the population of Western and Central Europe tripled (Wickham 2008, 16). There was intensive manuring and improving metal tools, “the dearth of . . . [which] in the early middle ages has been greatly exaggerated,” increased use of horse plowing, and introduction of the North-European three-field system (Wickham 2008, 16). Three-field systems appeared in the sixth century in Bavaria (Henning 2012, 3), but “expanded across northern Europe in the central middle ages” (Wickham 2010, 212). With the three-field system, which “put a village stamp on formerly individual choices about when to harvest and when to fallow” (Wickham 2008, 16), often under pressure from landowners (Fleming 2010, 278), came larger fields and the spread of the heavy plow, the *carruca*, requiring possibly eight oxen and peasant collaboration to form teams.

Like the water mills, the heavy plow had steadily “expanded its range in north-western Europe, in terrains suitable for its use” (Wickham 2008, 15) through the early middle ages, but with the three-field system they became widespread in the later eighth and early ninth centuries, again increasing productivity (White 1962, 69–78). The later Roman era bequeathed only “the first glimmers of . . . a new system of traction, one that would dramatically raise the value of the horse as a beast of work,” but there is evidence of progress toward its realization “well before” 1000 (Langdon 1986, 9, 19, 21). By AD 1086, horses were more than 30 percent of peasants’ stock of draught animals, which grew to over 40 percent by 1300 (Langdon 1986, figure 42, 255). The increase in horse plowing, which was at least 50 percent faster than using oxen, was risky “for horses are more expensive to feed, but certainly an intensification of production, and one initiated mostly by peasants”

(Wickham 2008, 16), probably to better meet increasing rent demands from increasingly powerful landowners.

Dismissing any role for the forces, Wickham's "reading of these processes keeps the primary cause of these developments firmly in the arena of the relations of production, with renewals in the productive forces being directly dependent on those relations" (2008, 18), ignoring Marx's argument that the social relations must 'correspond to' the forces. An alternative reading is that in a process of revolutionary class conflict with free peasants aristocrats chose feudal relations to increase their surpluses from the increased forces bequeathed from antiquity, which led to their further development. When from AD c. 800 aristocrats had the power to exploit the developing forces, the accounting evidence supports the hypothesis that they imposed feudal relations to extract surplus labor as rent from self-sufficient peasants, a more appropriate mentality and form of control calculated to increase their surpluses from the forces available, which developed them. As Wickham says, "the main motor of most productive intensification in the period after 800 was market demand, which . . . had aristocratic demand and therefore direct exploitation at its roots" (2005, 18). To meet their demands, "since the new developments in the productive forces were often clearly set in motion by aristocrats (the most egregious example being directed demesne labour-service), they were not only caused by exploitation, but they often consisted of further exploitation" (Wickham 2008, 18). Water mills, for example, became "very dense" on ninth-century large north European manorial estates, "and that density, at least, may well have been linked to the intensification of production on demesnes, as the tight network of such mills around many central medieval towns also attests" (Wickham 2008, 15). Feudal social relations were developing the forces.

By the thirteenth century, as Wickham says, there was "commercialised . . . feudalism, open to much innovation . . ., with technological change and an increasing division of labour, and capitalist-mode elements in both urban and rural industry" (2008, 10). The accounting interpretation supports his conclusion, which he does not explain, that 'commercialized' late-medieval feudalism was not "in *itself* contradictory to the peasant economy and to feudal exploitation" (Wickham 2008, 10). The feudal exploitation of peasants did not contradict commercialism because, as Marx argued, its focus on 'primeval profit' was a step toward capitalism.

CONCLUDING COMMENTS

Accounting history supports the hypothesis that in the late Roman Empire wealthy landowners imposed effective slavery and, following its collapse in the west, imposed feudal relations in a process of class conflict with free

peasants to maximize their appropriation of surplus labor given the forces at hand. Because they represent extreme responses to the Roman empire's collapse, Wickham argues, "Egypt might not be very usefully compared with Britain" (2005, 826), whereas this and the previous chapter have argued the reverse, that comparing the Apion estate's accounts with English charge and discharge accounts is critical to testing Marx's theory of the transition to feudalism. Egypt was the model slave state in the east, but England rapidly developed into the model feudal state in the west with an "effective tax system in the eleventh century and the late twelfth elsewhere" that became heavy and geographically wide-ranging in the thirteenth and fourteenth centuries (Wickham 2005, 827).

Chapters 1–6 have given an accounting interpretation and defense of Marx's theory of history and supported his argument that there was a transition from the ancient slave mode to the feudal mode with accounting evidence. Marxist historians have typically focused on the transition from feudalism to capitalism, which few dispute, although there are many arguments about the meaning of Marx's capitalist mode of production and interpreting the evidence. The accounting history of the transition from feudalism to capitalism is also consistent with Marx's history of the transition in England, outlined in *Grundrisse* and *Capital* (Bryer 1994, 2000a, 2000b, 2004, 2005, 2006a, 2006b, 2006c). It supports the hypothesis that Marx's 'capitalists' appeared among and around large landowners engaged in a process of class conflict with peasants, who changed the social relations of production to increase their surpluses from the forces at hand, this time in the form of surplus value from 'free' wageworkers, which led to the rapid development of the forces. In short, according to the accounting interpretation, Marx's theory of history, that capitalism emerged from transitions through slavery and feudalism, is a logically consistent and empirically supported explanation of evolving modes of production, the unfolding history of humanity as a producer.

Marxists by contrast often see theoretical incoherence and logical inconsistency, routinely writing off historical materialism as 'economic determinist,' 'evolutionist,' and 'functionalist' (Howard and King 1985, 5). Many have "abandoned the Marxist theory of history altogether. Both the Primacy Thesis and the Base/Superstructure Thesis are now almost universally rejected. Yet . . . Marxists continue to endorse the underlying intuition . . . that history has a determinate [*sic*] structure" (Wright et al. 1992, 89). World accounting history, chapters 4–6 have argued, answers their criticisms, which, we saw in chapter 3, overlook that Marx theorized evolving systems of social control—calculative mentalities, social relations, and systems of accounting—through a process of transcending contradictions by class conflict, and therefore miss their mark. Wickham, for example, denounces "teleological interpretations of history, which are always misleading," and dedicates his magnum opus to "combating them"

(2005, 831), whereas chapter 3 rejected this interpretation, and chapters 5 and 6 argued that his history of the early middle ages and accounting evidence support Marx's evolutionary explanation.

The failure of Marxists to 'find' Marx's theory of history is not simply a loss to Marxist historians. Historical materialism is not an optional extra to Marx's theory of value, which he used both as a conceptual benchmark to understand pre-capitalist societies, and to analyze the contradictions within capitalism that would lead to its 'inevitable' replacement by socialism. Without a theory of history that explains how, when the forces 'contradict' the relations of production, a process of class conflict selects the appropriate calculative mentality, social relations, and control system to increase social surpluses from the forces at hand, Marx's prediction would have no foundation. If Giddens and 'primitivist' historians are right that capitalism was a qualitative leap from all pre-capitalist societies, there is little reason to expect any further such leaps. However, if Marxists can explain history from Marx's materialist perspective they have reason to take seriously his relatively brief discussions of the 'inevitability' of socialism as the end of 'history,' and update and develop them as an essential part of the class struggle to determine the appropriate mentality and social relations of production for the twenty-first century's forces, and beyond.

This is the focus of the final three chapters. Socialism was 'inevitable' for Marx because, first, his theory of value had removed the major obstacle, capitalist ideology, chapter 7 shows, by using it to explain the phenomenal forms in capitalists' accounts, not seeking to explain 'ideology' in general, which means he did not leave what Marxists often see as a 'problem.' Second, chapter 8 argues, socialism was 'inevitable' because using his theory of value to explain capitalism's phenomenal forms, which appear in capitalist accounts, also revealed how to change capitalist relations of production to implement socialism. This, it concludes, shows that Marx did not advocate 'equality' or central planning, but a society of worker cooperatives accountable for value on Day 1 of socialism, but with the interim aim of 'directly' equal social value for every labor hour. In the light of Marx's theories of value, history, ideology, and socialism, chapter 9 discusses the tasks of 'critical accounting' to get to Day 1.

NOTE

1. Let R = total receipts; Ar = arrears; Ad = advances; E = total expenses; L = *Lib-eratio*; B = closing balance; P = 'profit.' Then, $R + Ar - Ad - E - L = B$, and therefore $P = R - E = B + L - Ar + Ad$.

Chapter 7

Capitalist Ideology and Accounting

Socialism was “inevitable,” Marx and Engels claimed in *The Manifesto of the Communist Party* (1848), because the development of capitalism would lead to “increasing absolute impoverishment” of the masses who would therefore overthrow the bourgeoisie, a prediction Marxists have criticized ever since (Hobsbawm 2012, 21; Mandel 1976, 80).¹ The bourgeoisie evidently “has not produced ‘above all . . . its own gravediggers’ in the form of the proletariat: ‘Its fall and the victory of the proletariat’ have not proved ‘equally inevitable’” (Hobsbawm 2012, 18). Marx continued to argue that socialism was “inevitable” in his mature work, but he had substantially changed his concept of what socialism meant. In *Capital*, he predicted “the inevitable conquest of political power by the working class” (Marx 1976a, 619), but rather than rely on increasing pauperization, turned to “science” to investigate its preconditions. Capitalism’s development of the forces of production, he argued in the *Preface*, made socialism possible: “the productive forces developing within bourgeois society create . . . the material conditions for a solution of . . . [the] antagonism” in its mode of production (Marx 1971, 21, emphasis added). From *Grundrisse*, this and the following chapter argue, Marx used his theory of capitalist accounting control (Bryer 2017) to specify the necessary social conditions that would make socialism “inevitable.”

Workers will change the social relations of production to remove the fetters of capitalist control, Marx’s theory of history predicts, to increase the social surplus by developing the forces, by abolishing capital and wage labor, replacing them with social ownership and control of the means of production. A necessary condition, Marx argued, is dispelling capitalist ideology, overthrowing its superstructure of legitimation and control, an essential element of which, *Accounting for Value* argued, is accounting. This condition has not been met, this and the subsequent chapters argue, because Marxists have not

understood that Marx's explanation of capitalist ideology as the distortions produced by the phenomenal forms, the categories of 'capital,' 'profits,' 'prices,' 'costs,' 'wages,' and so on, represented in capitalists' accounts, means that unlike previous transitions the change to socialism would depend on conscious calculations based on accounts. To overthrow capitalist ideology it is necessary to understand that its source is the empirical realities of 'cost,' 'profit,' 'wages,' and so on, which are the foundation of capitalists' calculations and control, and therefore to effectively combat it required Marx to first explain and demystify these phenomenal forms using his theory of value. Marx's theory of value, *Accounting for Value* argued, explains the phenomenal forms in capitalist accounts by the 'essential relations,' the underlying mentality and social relations of production. He thereby also explained why these forms while functional are ideological, that is, distorted representations of social reality, this chapter argues, which show that Marx did not, as many Marxists believe, leave a "problem of ideology" (Hall 1986, 26).

The chapter first outlines the centrality of accounting to implementing Marx's concept of socialism. Second, it explains the link between Marx's theory of 'ideology' and his explanation of capitalist accounting. Marx used the word 'ideology' (or 'ideological') in his early work, but only a few times in Volume 1 of *Capital* to criticize the transhistorical use of economic categories (1976a, 494, 757, 931, 990, 1084), and used 'ideological' once to describe the socially unproductive work of government, priests, soldiers, and so on (1976a, 574; see also *Theories of Surplus Value*). He does not use 'ideology' or 'ideological' in Volumes 2 and 3. Instead, his focus in *Capital* is 'commodity fetishism,' the dominant form of ideology in capitalism according to Marx's mature theory, which, we will see, links it directly with accounting. Marx criticized capitalist ideology as a distortion of social reality, a "structured discourse" (Mephram 1972) that hid the 'essential relations,' the fact that the social relations of production were exploitative, by using his theory of value to explain the categories in capitalist accounts, which the chapter argues is a key element of Marx's "positive science of society."

Third, the chapter shows that critics of Marx's theory of ideology presume his theories of value and history are fundamentally flawed. Marxists often criticize his theory for its economic reductionism, conceiving ideology as the distortion of a given 'economic reality,' a functional 'false consciousness' that distorts the 'truth' in favor of ruling-class interests (Rose 1977, 47; Armstrong 2005, 7). Marx therefore left a problem, they have often concluded, because he implied, and Engels claimed, that historical materialism explained all forms of social consciousness 'scientifically,' but failed (Mephram 1972; Rose 1977; Sayer 1979; Hall 1979). Lukacs influentially encouraged the assumption that this was his aim by arguing that Marx sought to understand

how commodity production “permeat[es] every expression of life” (1968 [1922], 83–84), and critics ask, “Is all that we dub ideology really reducible to the economic operations of capitalism,” which many, as Eagleton says, find a “trifle overweening” (1991, 87). Discarding his theories of history and value, they misunderstand Marx’s focus on specifically capitalist ideology as the site of class struggle, the chapter argues, tasking him with explaining the “social ideas” of the “masses” (Hall 1986, 29), of consciousness in general, a question he did not address, let alone claim to have solved.

Marx claimed, *Accounting for Value* argued, to have analyzed the capitalists’ mentality, the social relations of production and their phenomenal forms that, this chapter argues, he explained as distortions of the underlying reality, and saw unmasking this as the focus of the struggle for socialism. Marx’s explanation of capitalist accounts, the following two chapters argue, opens the possibility that socially objective accounts of value, the currently invisible foundation of capitalist control, could be the conscious ‘scientific’ foundation of control on Day 1 of socialism.

THE CENTRALITY OF ACCOUNTING

Contesting classes fought out the transitions to feudalism and capitalism using physical force, politics, and religion because power under slavery and feudalism was physical domination backed by ideology. These conflicts only implicitly concerned calculative mentalities and social relations of production. By contrast, because power in capitalism was for Marx predominantly economic, socialism would result from economic conflict, that is, conflict over calculations about which social relations of production will increase social surplus and most develop the forces of production, fought against capitalism’s uniquely economic ideology and calculations.

Capitalism was an evolution from slavery and feudalism, but the unique qualitative change, Marx argued, was from ‘political’ ideology and physically coercive control to ‘economic’ ideology and control by markets and accounts (Bryer 2017). The transitions from slavery to feudalism to capitalism were necessarily violent conflicts over “Morality, religion, metaphysics, and all the rest of ideology” (Marx and Engels 1976a, 36), but the change to socialism would be different. Capitalism had uniquely raised the ‘economic’ to the forefront of social consciousness, its categories and the practical realities of ‘capital,’ ‘profit,’ and so on, as the foundation of its ideological justification, the ‘meaning of life.’ Capitalism’s “industrial supremacy,” as Marx put it, “was ‘the strange God’ who perched himself side by side with the old 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” (1976a, 918).

Marx explained capitalism’s phenomenal forms and their interrelationships by his theory of value, as the historical product of its social relations of production. Capitalists, their agents, political economists, and workers do not understand them as such, he argued, because the explanation is ‘complex’ and ‘difficult,’ requiring the work of ‘science.’ Capitalism had uniquely hidden its ‘essential relations,’ the exploitative social relations that generated the phenomenal forms, created an ‘ideological’ obstacle to socialism that Marx claimed his scientific theories of value and history would remove. Whereas a slave or serf needed little convincing that their master or lord exploited them, bringing exploitation to the consciousness of wageworkers, the following sections argue, was the focus of Marx’s ideological struggle for socialism. The difference was that whereas “The Roman slave was held by fetters: the wage-labourer is bound to his owner by invisible threads,” by an ideology giving the “appearance of independence . . . kept up by means of a constant change of employers, and by the *factio juris* of a contract” (Marx 1996, 573).

Calculations had driven previous transitions, but whereas these were implicit or private calculations, only conscious and public calculations could bring the change to socialism because breaking the ideological threads that bound workers by making them visible showed they were the economic categories capitalists used to calculate and control the production of ‘profit,’ ‘rate of profit,’ ‘cost,’ and so on. Marx used his explanations of capitalist accounting to explain capitalist ideology, which we will see provides the empirical basis of his “science by criticism” (Sayer 1979, 105), and to criticize the political economists’ ‘Trinity Formula’ as ideological. Marx’s historic task was to explain capitalism’s calculative mentality, reveal its origins in the transition to capitalist social relations of free capital facing ‘free’ wageworkers, using his theory of value, and use this to criticize the falsity of the capitalists’ economic categories, their ideological justifications, and their consequences. This is the focus of Marx’s struggle for socialism, penetrating the “structured discourse” (Mephram 1972, 13) that defines the categories of wages, profit, capital, and so on, found in reality and in capitalists’ accounts. If we can explain the transitions from slavery to feudalism to capitalism as unconscious social resolutions of conflicts between the forces and relations of production, we can ‘predict’ the socialist mentality and relations as a consciously calculated resolution of the existing conflict.

Marx did not predict a necessarily violent end for capitalism. Violent revolution, in his view, was most likely in absolutist Continental Europe, but democratic England, the United States, and Holland could attain socialism peacefully (Ollman 1977, 7). Advanced capitalism would, he argued, create the necessary technical and social conditions for socialism. Capitalism

separated ownership from control, concentrated and centralized capital, developed productive technologies, and would create a working class with the knowledge and confidence to deploy it, and therefore, Marx argued, the “final crisis of capitalism is not so much a technical problem of credit or aggregate demand as it is a human and historic turning point” (Foley 1986, 155–57). Socialism “could be the product only of self-conscious proletarian activity” (Blackledge 2006, 176), of workers who understand the ‘essence’ underlying the appearances of capitalist reality, the social relations of production determined by its laws of value, and the need for social control of production and distribution to release the forces of production from their capitalist fetters. Increasingly fettered forces would ‘inevitably’ create the situation in which alternative social relations were possible and desirable, and educating workers in Marx’s theories and their use would provide the means of making the social choice through multiple accounting calculations.

When capitalism had developed the forces of production to the point where socialism became a possibility, workers would understand that “the monopoly of capital [has] become . . . a fetter upon the mode of production which has flourished alongside and under it. The centralization of the means of production and the socialization of labour reaches a point at which they become incompatible with their capitalist integument. This integument is burst asunder. The knell of capitalist property sounds. The expropriators are expropriated” (Marx 1976a, 929). For workers to see the incompatibility between the forces and relations of production they must understand them as such. Eventually they do, capitalism’s funeral bell sounds, the realization dawns in the mind of the collective worker, capitalism bursts apart at the conceptual seams, and capitalist property relations crumble at the first toll. Capitalism’s development of the forces creates, Marx argued, “the material conditions to blow [its social] foundation sky high” (1973, 706), but because socialism is the will of all workers, it happens only with the support of the “mass of the people,” unlike the transition to capitalism the revolution should be short, peaceful, and “incomparably” less “difficult”:

The transformation of scattered private property . . . into capitalist private property is naturally an incomparably more protracted, violent and difficult process than the transformation of capitalist private property, which in fact already rests on the carrying on of production by society, into forms of social property. In the former case, it was a matter of the expropriation of the mass of the people by a few usurpers; but, in this case, we have expropriation of a few usurpers by the mass of the people. (Marx 1976a, 929–30)

The centrality of accounting to the short, peaceful, and, relatively, easy implementation of Marx’s concept of socialism, elaborated throughout the

remainder of the book, is, to summarize, first that workers must understand capitalist accounts, and that they are ‘ideological’ and contain the distorted appearance of the underlying reality of value. Second, a ‘vast association of the nation,’ as Marx and Engels put it in the *Manifesto*, must use this understanding to take control of the means of production. Marx’s advice to Marxists in furthering the ideological struggle was, in short, to explain and criticize the economic categories we find in capitalists’ accounts, explain their historical origins and criticize capitalists’ explanations and justifications of them and their consequences. Criticizing enterprise and national accounts, seeking social accountability for the production of surplus value, activating the mechanism of many accounting calculations to effect the change to socialism, the final chapter argues, remains as Marx’s historic tasks of ‘critical accounting.’

MARX’S THEORY OF IDEOLOGY

Marx’s theory of ideology is an integral element of his theories of history and value, which developed with them. In the *German Ideology*, Marx and Engels distinguished between “consciousness” as a “language of real life,” and “ideology” as “mental production,” whereas from *Grundrisse* onward Marx distinguished between the calculative mentality underlying the social relations of production, the “forms of social consciousness,” and “ideological forms” as the functional superstructure, the “general process of social, political and intellectual life.” In the *German Ideology*,

The production of ideas, of conceptions, of consciousness, is at first directly interwoven with the material activity and the material intercourse of men, the language of real life. Conceiving, thinking, the mental intercourse of men, appear at this stage as the direct efflux of their material behaviour. The same applies to mental production as expressed in the language of politics, laws, morality, religion, metaphysics, etc. of a people. (Marx and Engels 1976a, 36)

The language of real life in the *German Ideology* was the language of political economy, of the merchant. From *Grundrisse* it became the language of exploitation, of the various ways of extracting surplus labor, the languages of the history of accounting. This interpretation supports Mephram’s (1972, 14) conclusion that discovering his theory of surplus value “allows Marx to make a decisive move beyond the ambiguities of his earlier remarks on ideology,” because we have seen that his theory of value clarified his theory of history. The *German Ideology* invoked the metaphor of the *camera obscura* to explain why ideology was false, because it effected an “inversion,” turned the appearance of “men and their circumstances upside-down.” Marx and

Engels wrote, "If in all ideology men and their circumstances appear upside-down as in a *camera obscura*, this phenomenon arises just as much from their historical life-process as the inversion of objects on the retina does from their physical life-process" (1976a, 36). Althusser (1970) objected, criticizing it for retaining Hegelian idealism, arguing that "since an inverted image is always the same," inverting Hegel's notion of ideology remained within his framework, belonged "to the same ideological world as the original" (Ricoeur 1986, 78, 79). However, if Marx was not stuck within idealism, but had explained capitalist ideology as an inverted representation of social reality, because an "inverted . . . [reality] is always the same [reality]" (Ricoeur 1986, 78), capitalist accounting as a legitimating distortion retains its integrative, organizing function as a language of real life. Like capitalist ideology, accounting "conceal[s] real determinations," is a distortion, but of "reality as *praxis*," of the "life-process" (Rose 1977, 28, 37; Ricoeur 1986, 5, 78).

However, leaving aside for now Marx's argument that ideology arose from the "historical life-process," as Mephram (1972, 13) says, and many agree, it is easy to read into the *camera obscura* metaphor "a thesis of crude materialism with which Marx certainly disagreed." Mephram argues, "The metaphor . . . suggests that representations are in some sense 'mere illusions' (an epistemological thesis) and 'mere epiphenomena' or 'phantoms' (an ontological thesis)," from which, "it seems to follow that they (the representations) can therefore have no element of either truth or practical effectiveness" (1972, 13). Mephram (1972, 13) leaves open the question, "Why then is Marx so fascinated with this metaphor which is very frequent throughout his work and which has lead to gross misinterpretations of his views?." Marx retained the metaphor, according to the accounting interpretation, because in his mature work he explained the categories represented in capitalists' accounts, that determined the appearance of social reality, a language of real life that distorted it (upside-down, a materialist epistemological distortion), not what it seemed to be (another reality, an idealist ontological illusion), by his theory of value. This was why for Marx, like the capitalists' accounts, which the represented the phenomenal forms, capitalist ideology retained its functionality despite being false by obscuring the social conditions of their existence. For Marx ideology was always a failure of knowledge. However, whereas in the *German Ideology* the failure was not "seeing reality as it actually is," in *Capital* it was "the need for a special discourse known as science to penetrate its phenomenal forms and lay bare its essences" (Eagleton 1991, 91), that is, we will see, using the theory of value to explain accounts.

Another widely criticized passage in the *German Ideology*, often interpreted as an 'indoctrination thesis,' shows that, while not inconsistent with Marx's later views, the claim that "ruling ideas" are the "ideal expression of the

dominant material relationships,” that distorted reality, needed further development:

The ideas of the ruling class are in every epoch the ruling ideas, i.e. the class which is the ruling material force of society, is at the same time its ruling intellectual force. The class which has the means of material production at its disposal, has control at the same time over the means of mental production, so that thereby, generally speaking, the ideas of those who lack the means of mental production are subject to it. The ruling ideas are nothing more than the ideal expression of the dominant material relationships, the dominant material relationships grasped as ideas; hence of the relationships which make the one class the ruling one, therefore, the ideas of its dominance. (Marx and Engels 1976a, 59)

This formulation is clearly “vulnerable to the . . . objection . . . that it treats the subordinate classes as passive receptacles of ideas inculcated from above” (Callinicos 2005, 159), and to the charge of economic determinism in the claim that the ideas of the ruling class were “nothing more than the ideal expression of the dominant material relationships.” The problem was specifying how these ‘material’ relationships determined the ‘ideas’ of the ruling class and the workers.

Marx and Engel’s focus was always explaining *social* consciousness, not individual consciousness (Wood 2004, 118). However, only from *Grundrisse* onward was Marx’s focus the calculative mentality of the ruling class underlying the dominant mode of production in the stages of history, and his notions of ‘life,’ ‘social intercourse,’ and ‘material production’ in the *German Ideology*, became the social relations of production and their distinctive way of extracting surplus labor. In the *Preface* he argued, “the relations of production constitute the economic structure of society, the real foundation, on which arises a legal and political superstructure and to which correspond definite forms of social consciousness” (Marx 1971, 21). The superstructure comprises “the legal, political, religious, artistic or philosophic—in short ideological forms,” the system of control determined by the method of extracting surplus labor, and when conflict arose between the forces and relations of production these were the forms “in which men become conscious of this conflict and fight it out” (Marx 1971, 21). Rather than economic determinism, according to the accounting interpretation (see figure 2.1), in Marx’s theory of history the causality runs, class conflict → calculative mentality → social relations of production → phenomenal forms → consciousness (ideology). Class conflict produced the mentality of extracting surplus labor in the form of surplus value and the social relations of free capital and ‘free’ wage labor, which produced the phenomenal forms of ‘capital,’ ‘wages,’ ‘profit,’ and so on, which is what capitalists and

workers see, to control which capitalists keep accounts, which represent their ideology, which is real and rational, but distorted.

Marx made clear in *Capital* that capitalists did not control workers' ideology from 'above,' that his earlier references to religion, and so on were merely an 'analogy.' Rather than inculcated through the mental production of the ruling class, *Capital* explained ideology as the consequence of the functioning of capitalism itself, which produced "commodity fetishism." A capitalist commodity is a 'use value,' an 'exchange value,' and the 'monetary expression of socially necessary labor time' (MELT), Marx argued, but workers and capitalists see only use values and exchange values, the "physical nature . . . and material relations," which made it "mysterious" because they did not see the "value-relation":

The mysterious character of the commodity-form consists therefore simply in the fact that the commodity reflects the social characteristics of men's own labour as objective characteristics of the products of labour themselves, as the socio-natural properties of these things. Hence it also reflects the social relation of the producers to the sum total of labour as a social relation between objects, a relation which exists apart from and outside the producers. Through this substitution, the products of labour become commodities, sensuous things which are at the same time supra-sensible or social. . . . [The commodity] is a physical relation between physical things. As against this the commodity form, and the value-relation of the products of labour within which it appears, have absolutely no connection with the physical nature of the commodity and the material [*dinglich*] relations arising out of this. It is nothing but the definite social relation between men themselves which assumes here, for them, the fantastic form of a relation between things. In order, therefore, to find an analogy we must take flight into the misty realm of religion. There the products of the human brain appear as autonomous figures endowed with a life of their own, which enter into relations both with each other and with the human race. So it is in the world of commodities with the products of men's hands. I call this the fetishism which attaches itself to the products of labour as soon as they are produced as commodities, and is therefore inseparable from the production of commodities. (Marx 1976a, 164–65)

For Marx, in short, "The fetishism peculiar to the capitalist mode of production from which it arises . . . consists in regarding *economic* categories, such as being a *commodity* or *productive* labour, as qualities inherent in the material incarnations of these formal determinations or categories" (1976a, 1046), rather than as the consequences of capitalist social relations. Marx avoids the charge of ruling-class indoctrination by arguing, as Callinicos says, it is because "under capitalism, social relationships between producers are mediated by the exchange of commodities . . . that 'the definite social relation between men themselves . . . assumes here, for them, the fantastic

form of a relation between things” (2005, 159). The functioning of capitalism provides Marx with “a material basis for bourgeois ideology: the operation of the market economy itself induces ideological beliefs in the agents of capitalist production,” the means by which “the historically specific phenomenon of capitalism is universalised, naturalized” (Callinicos 2005, 159). As Callinicos puts it, rather than “some conspiracy by the ruling class, the acceptance of ideological beliefs is spontaneously generated,” but not as he concludes “by capitalist relations of production themselves” (2005, 159), but by the phenomenal forms they produce.

For Marx, “the answer to the question: whence the fetishism of commodities?—the answer is simple and direct: ‘Clearly from the form itself,’” that is, “from the commodity form itself” (Dunayevskaya 2013, 100–1, see also 111), its phenomenal forms, which hide its value relations, not directly from the social relations. He is “not claiming,” as Eagleton puts it, that “under capitalism commodities *appear* to exercise a tyrannical sway over social relations; he is arguing that they actually do. Ideology is now less a matter of reality becoming inverted in the mind, than of the mind reflecting a real inversion. In fact it is no longer primarily a question of consciousness at all, but is anchored in the day-to-day economic operations of the capitalist system” (1991, 85). To Eagleton this means “ideology has been . . . transferred from the superstructure to the base, or at least signals some peculiarly close relations between them” (1991, 85), which he implies Marx failed to specify. “In the case of commodity fetishism, the mind reflects an inversion in reality itself; and there are thorny theoretical problems about what an ‘inversion in reality’ could possibly mean” (Eagleton 1001, 86). However, according to the accounting interpretation it is accounting control, a key element of the stabilizing superstructure controlling the “day to day economic operations,” that sustain the “peculiarly close relations” between the base and superstructure, whose representations of the phenomenal forms distort the reality of value production and distribution.

To Callinicos (2005, 159) and other Marxists, “The trouble with this theory lies in its very strength: how, given the existence of commodity fetishism, can workers ever break free?” They argue it “involves a fallacy” because “For capitalist relations themselves [*sic*] to bring about the acceptance of ideological beliefs their appearance must admit of only one interpretation, namely that they are relations between things rather than social relationships” (Callinicos 2005, 159). According to Callinicos (2005, 159–60), “But this is not so: all theories are underdetermined by the evidence for them. Even if capitalist relations do present themselves in the naturalised, fetishised manner which Marx with some reason claims they do, there is an indefinite number of different ways of interpreting these same appearances.” The market-mediated ‘appearances’ of the ‘things,’ the commodities produced by capitalist social

relations, *Accounting for Value* argued, are the phenomenal forms that appear in traditional capitalist accounts, based on GAAP, that Marx explained using his theory of value, which means there is only one interpretation, and understanding this is how workers break free.

This reading is consistent with, but extends, Mephram's (1972, 13) well-known analysis of Marx's "theory of ideology that is implicit in *Capital*," in which he identifies "three theses concerning the structure of ideology and its relation to reality." These, Mephram (1972, 13) argues, are that ideology is a "structured discourse" which is based on a "cognitive relation" and the "opacity of reality." Ideology is a structured discourse for Marx because it comprises "mutually interdependent categories," not single ideas, based on the perception of "empirical reality," a "scientific" critique of which shows that the phenomenal forms, this apparent reality, "conceal" the mechanism that produces them (Mephram 1972, 13). Wages, for example, are real to the capitalist who pays them, and to the worker who receives them, but their ideological meaning is as part of structured discourse, "an aspect of social reality, namely its phenomenal aspect . . . a conceptual category" (Mephram 1972, 14). Workers and capitalists think and talk "about social relations in these terms because these categories have the same form that reality has, because this is the form in which reality 'is presented to us'" (Mephram 1972, 14). Wages are part of the structured discourse we see in the capitalists' accounts around the rate of profit, with which they confront workers, which would explain why Marx saw in workers' focus on the "wage form" a "clear and direct connection with the problem of the dominance of bourgeois ideology in Trades Union practice" (Mephram 1972, 14). Accepting 'wages,' in other words, necessarily entailed accepting 'profits.'

Critics highlight studies showing that workers do not generally share capitalist values, that "the penetration of the dominant ideology into the subordinate classes has generally been slight," and therefore conclude that the "principal mechanisms of social control have been provided by armed coercion or what Marx called the 'silent compulsion of economic relations'" (Callinicos 2005, 161), not ideology. According to this view, "The main role of the dominant ideology has been to secure the cohesion and reproduction of the ruling class, not to integrate the masses within the existing social order," and it follows that because the "dominant ideology thesis" is false, the "epistemological notion of ideology as false consciousness" must also be false (Callinicos 2005, 161, 169). Workers may rarely endorse the capitalists' rate of return mentality, that is, agree with and support it, and in this sense, "penetration has been slight," and undoubtedly in this sense "Value consensus does not exist to any significant extent" (Callinicos 2005, 161, 166). However, agreement is not the same as acceptance. Through "education, training and habit," Marx argued, workers generally accept capitalist categories, the

phenomenal forms, as unchallengeable transhistorical facts, produced by “self-evident natural laws,” as well as the “silent compulsion of economic relations,” which “sets the seal” on capitalist domination, not that they agree with them:

The advance of capitalist production develops a working class which by education, tradition and habit looks upon the requirements of that mode of production as self evident natural laws. The organization of the capitalist process of production, once it is fully developed, breaks down all resistance. The constant generation of a relative surplus population keeps the law of the supply and demand of labour, and therefore wages, within narrow limits which correspond to capital’s valorization requirements. The silent compulsion of economic relations sets the seal on the domination of the capitalist over the worker. Direct extra-economic force is still of course used, but only in exceptional cases. In the ordinary run of things, the worker is left to the ‘natural laws of production,’ i.e. it is possible to rely on his dependence on capital, which springs from the conditions of production themselves, and is guaranteed in perpetuity by them. (Marx 1976a, 899)

Sociological studies show that for workers “capitalism is just part of an unalterable order of things” (Nichols and Armstrong 1976). A major reason, according to the accounting interpretation, is that the phenomenal forms appear as a structured totality, as they do in accounts, in integrated balance sheets and profit or loss accounts, according to a discourse of principles and practices, which confronts workers and capitalists with inverted representations of the underlying reality. Although based on the apparent ‘facts,’ for Marx capitalists’ accounts are ‘ideological’ because underlying their principles, practices, and facts, is a social system of producing surplus value from the exploitation of labor in production. Sociologists often argue, “Class consciousness never develops further than . . . conflict consciousness” because it is always undermined by “economism” (Callinicos 2005, 166). Marx’s aim was to sweep away economism, the key ‘value’ of capitalist ideology, by making their social relations, the ‘essential relations’ underlying the phenomenal forms, visible to workers by, according to the accounting interpretation, producing a world accounting history and a critical theory of capitalist accounting based on his theory of value. Capitalist ideology is ‘false’ for Marx because it presents and justifies its mentality and economic categories as transhistorical truths, denying workers any “faith or certainty . . . better societies *are* possible” (Nichols and Armstrong 1976, 47), whereas all mentalities and categories are, in fact, historically specific idealizations of particular social relations of production, different ways of extracting surplus labor. This was why Marx criticized the explanations and justifications of capitalists and political economists as ‘ideological.’ He did not propose a

general theory of ideology, but a historical theory in which capitalism had uniquely posed the problem of the change to socialism as a problem of ideological struggle through calculation, a struggle over the social meaning of capitalist accounts.

CAPITALIST IDEOLOGY AND ACCOUNTS

Capitalist ideology distorts by not recognizing the production of surplus value, but it is rational (functional) for capitalists, Marx argued, based on the phenomenal forms they face. Traditional capitalist accounts are ‘objective’ in the sense that their foundation is factual, based on measurements of use-values and exchange values, and are socially objective as measures of value, *Accounting for Value* argued, but are ‘ideological’ in Marx’s sense because neither the capitalist, the accountant, nor workers, understands them as representations of the production and distribution of value. According to Marx’s theory of value,

Not an atom of matter enters into the objectivity of commodities as values; in this it is the direct opposite of the coarsely sensuous objectivity of commodities as physical objects. We may twist and turn a single commodity as we wish; it remains impossible to grasp it as a thing possessing value. However, let us remember that commodities possess an objective character as values only in so far as they are all expressions of an identical social substance, human labour, that their objective character as values is therefore purely social. (Marx 1976a, 138–39)

Use value, for Marx an objective attribute of commodities, including labor, is “a *transhistorical category*, that is a concept which may be applied within all modes of production,” as is exchange value as price, whereas exchange value as a form of value is specifically capitalist (Sayer 1979, 13, 14, fn.2, 160). The phenomenal forms in capitalist accounts distort and obscure the social objectivity of value, but this nonetheless remains their real foundation, which according to the accounting interpretation is why they give capitalists results control of the production of surplus value (Bryer 2017). In *Capital*, Marx elaborated why capitalist ideology was functional by showing how it arose from the phenomenal forms that derive from the “laws of production” even though what appears “in the minds of agents . . . diverge drastically”:

If, as the reader will have realised to his great dismay, the analysis of the actual intrinsic relations of the capitalist process of production is a very complicated matter and very extensive; if it is a work of science to resolve the visible, merely external movement into the true intrinsic movement, it is self-evident that

conceptions which arise about the laws of production in the minds of agents of capitalist production and circulation will diverge drastically from these real laws and will merely be the conscious expression of the visible movements. (Marx 1998, 311–12)

Agents' perceptions diverge from the "real laws," but are the "conscious expression of the visible movements," of visible reality, phenomenal forms which "render invisible real relations and hence give rise to bourgeois ideology," "appear 'directly and spontaneously as current modes of thought,'" which means "the origin of ideological illusions is in the phenomenal forms of reality itself" (Mephram 1972, 14). Phenomenal forms are not pre-given 'facts,' but are embedded in the "language of real life," in the language of accounting, the 'language of business,' the calculative language of capitalism (Bryer 2017). Phenomenal forms are for Marx the "expressions" in which the visible "phenomena of the external world" (Sayer 1979, 9), use-values, and exchange values, "represent themselves" in such forms or categories as, for example, "wages" or "value of labour," but the same holds true for 'capital,' 'profit,' 'cost,' and so on, as we will see:

In the expression 'value of labour,' the idea of value is not only completely obliterated, but actually reversed. It is an expression as imaginary as the value of the earth. These imaginary expressions, arise, however, from the relations of production themselves. They are categories for the phenomenal forms of essential relations. That in their appearance things often represent themselves in inverted form is pretty well known in every science except Political Economy. (Marx 1996, 537)

In Marx's theory, "Imaginary expressions" like 'wages' "have their home in the ordinary language of everyday life. Classical Political Economy borrowed from every-day life the category 'price of labour' without further criticism" (Mephram 1972, 14), as it did other expressions, and so did accounting. These phenomenal expressions, Marx argued, obtain the "stability of natural, self-understood forms of social life" (1996, 86), which is certainly true of the definitions and terms of accounting. Regarding the expression 'wages,' "On the surface of bourgeois society the wage of the labourer appears as the price of labour, a certain quantity of money that is paid for a certain quantity of labour. Thus people speak of the value of labour" (Marx 1996, 534). For Marx "the fact that people speak of the value of labour, that this is a 'spontaneous, natural' mode of speech under capitalism, shows that 'ordinary language,' far from being something to which we should appeal in theoretical discussion, is something which we have good grounds for suspecting of distortion" (Mephram 1972, 15). The ordinary language of capitalism for Marx was accounting, which "is the repository of category mistakes," which

required “Theoretical discourse [to] correct” because this most capitalist “language, and the philosophy which makes a fetish of it, [that] has . . . things standing on their heads” (Mephram 1972, 15).

Marx’s definition of phenomenal forms does not therefore imply “that what is presented is not conceptually mediated” (Sayer 1979, 9). As in accounting, centered on the calculation of ‘profit’ and ‘capital,’ in Marx’s theory “the various appearance-forms are not independent. They support each other. Each form can appear as an element in the composition of any other form; and each element is itself a form constructed out of other elements. It is this that defines the categories as a structure of appearances” (Mephram 1972, 16). Exactly like accounting, “whichever category one starts with in the immediate problem . . . inevitably leads to an analysis in which all the central categories are employed” (Mephram 1972, 16). Traditional capitalist accounting’s so-called balance sheet equation, $\text{Equity} = \text{Assets} - \text{Liabilities}$, is actually an identity, not simply the balance of ‘equity’ as the sum of independently defined ‘assets’ minus ‘liabilities,’ but the interdependent definitions of ‘assets,’ ‘liabilities,’ ‘revenues,’ ‘expenses,’ ‘gains,’ and ‘losses,’ and so on, from the viewpoint of equity, the owners (e.g., Sprague 1907).

Marx’s Accounting Critique of the ‘Trinity Formula’

In capitalism, Marx argued, productive labor is the sole source of value, and value is the social form of wealth (Bryer 2017, chapter 7). All revenues as quantities of value, therefore, derive from productive labor, not from land, capital, or means of production. Smith’s ‘Trinity Formula,’ by contrast, claimed to explain the sources of revenues, the wages of laborers, the profit of capitalists, and the rent of landlords, independently, and the price of a commodity as the sum of these revenues. Marx criticized this formula as a reflection of capitalist ideology, and in its extreme form as “the nadir of vulgar economy” (Sayer 1979, 43), using his explanations of capitalist accounts. The classical formula was *capital – profit, land – rent, labor – wages*, which in its most vulgar or ‘neoclassical’ form abolished profit (with a subdivision for interest), reducing it to *capital – interest, land – rent, labor – wages* (Marx 1998, 801).² Marx explained the classical economists’ formula, which replicated the capitalist mentality, as distorted but rational for the “agents of production” by direct or implied reference to accounts, whereas he ridiculed the neoclassical formula as the fantasy of vulgar political economists.

Marx argued, “even the best spokesmen of classical economy remain more or less in the grip of the world of illusion which their criticism had dissolved, as cannot be otherwise from a bourgeois standpoint, and thus they all fall more or less into inconsistencies, half-truths and unsolved contradictions” (1998, 817), because they merely rationalized the phenomenal forms confronting

production agents. A fundamental half-truth, Marx explained in Volume 3 of *Capital*, was classical economists and capitalists' fixation on the rate of profit, their failure to understand that competition between capitals and capitalists' calculations meant that the profit realized by an individual capitalist would usually diverge from the surplus value generated to produce an equal rate of profit (Bryer 2017, chapter 5). He knew that "profit is habitually calculated on total outlay ($c + v$) rather than on variable capital alone," but argued that "this mode of calculation is thoroughly rational, since what it measures is of interest to the capitalist, the expansion of his capital value" (Sayer 1979, 53–54). As Marx put it,

Since the capitalist can exploit labour only by advancing constant capital, and since he can valorize the constant capital only by advancing the variable, these are both one and the same in his eyes, and this is all the more so in that the actual degree of his profit is determined in relation not to his variable capital but to his total capital; not by the rate of surplus-value but by the rate of profit. (Marx 1978, 133)

Focusing on the rate of profit was rational because it appeared to capitalists that the total capital outlay produced the profit, which was consistent with Marx's explanation of how the theory of value worked with competing capitals, with the fact that the profit realized on average was the product of the total outlay and the general rate of profit. It was also consistent with their accounts. Marx highlighted that capitalists obscured productive labor as the sole source of value by focusing on 'cost-price,' a foundation of capitalist accounts, which was a drastic divergence from the underlying reality, but argued that this was rational from the capitalist's perspective:

What the commodity costs the capitalist and its actual production cost are two quite different magnitudes. That portion of the commodity-value making up the surplus-value does not cost the capitalist anything simply because it costs the labourer unpaid labour. Yet, on the basis of capitalist production, after the labourer enters the production process he himself constitutes an ingredient of operating productive capital, which belongs to the capitalist. Therefore, the capitalist is the actual producer of the commodity. For this reason the cost-price of the commodity necessarily appears to the capitalist as the actual cost of the commodity. If we take k to be the cost-price, the formula $C = c + v + s$ turns into the formula $C = k + s$, that is, the commodity-value = cost-price + surplus-value. . . . The capitalist cost of the commodity is measured by the expenditure of *capital*, while the actual cost of the commodity is measured by the expenditure of *labour*. (Marx 1998, 28)

Marx here clearly had capitalists' accounts in mind, immediately noting, "the cost price of a commodity is by no means simply a category that exists

only in capitalist bookkeeping” (1998, 28), but it did exist there. Focusing on cost was rational from the capitalist’s perspective because capital “has ever to be reconverted from its commodity form by way of the process of circulation into the form of productive capital, so that the cost price of the commodity must always repurchase the elements of production consumed in its manufacture” (Marx 1998, 28, 30). Marx agreed with capitalists that cost recovery was necessary for what accountants call ‘capital maintenance’ (Bryer 2017, chapter 4). It was, by contrast, in “capitalist economics [that] the cost price assumes the false category of a category of value production itself” (Marx 1998, 31).

Because fluctuations in wages do not affect the value of a commodity, but the division of surplus value, capitalists do not see wages as the value-creating element, Marx argued, because in reality the “distinction between constant and variable capital has disappeared” (1998, 33, 34), and does not exist in their accounts (Bryer 2017, chapter 2). Capitalists added the wear and tear (depreciation) of productive fixed capital to the cost price of commodities in their accounts, Marx knew (Bryer 2017, chapter 6), but this “only confirms the seeming origination of the cost price from the expended capital value,” “and this completes the mystification of the self-expansion process of capital” (Marx 1998, 37–38). Particularly so when the capitalist measured surplus value (assumed equal to profit) as “an accretion in the value of the capital expended . . . and returning by way of its circulation,” as they did in their accounts, which therefore “seem to spring equally from all its different elements” (Marx 1998, 38, 39). “In its assumed capacity of offspring of the aggregate advanced capital, surplus-value takes the converted form of *profit*. Hence, a certain value is capital when it is invested with a view to producing profit, or, there is profit because a certain value was employed as capital” (Marx 1998, 40–41). This was Marx’s explanation of the capitalist accountants’ ‘cost-plus-profit’ approach to pricing and profit measurement: “Suppose profit is p . Then the formula $C = c + v + s = k + s$ turns into the formula $C = k + p$, or the *value of a commodity = cost-price + profit*” (1998, 41), and therefore profit = commodity value – cost-price.

Seeing and accounting for the value of a commodity as the cost price plus the profit was ideological mystification, but Marx argued it was nevertheless rational. It remained rational even though treating the cost price as the “true *inner* value” the “sale of a commodity appears to the capitalist as an excess of its selling price over its value,” so surplus value “is not realized through its sale, but springs out of the sale itself” (Marx 1998, 42), from the market, not from capital. This contradictory understanding was also rational from the capitalist’s perspective because the accounts recognized profits only on their ‘realization’ (Bryer 2017, chapter 3), and therefore their size and the rate of profit depended on circulation or turnover time. Therefore, although according

to Marx's theory, and in reality, turnover time is a barrier to the realization of surplus value, the market "can nonetheless *appear* to be a creative factor in its own right" (Sayer 1979, 54). With only an "inkling" of the source of profit, the capitalist behaves rationally, reconciles the contradiction, by focusing on the realized rate of profit:

So far as the individual capitalist is concerned, it is evident that he is only interested in the relation of the surplus-value, or the excess value at which he sells his commodities, to the total capital advanced for the production of the commodities, while the specific relationship and inner connection of this surplus with the various components of capital fail to interest him, and it is, moreover, rather in his interests to draw the veil over this specific relationship and this intrinsic connection. (Marx 1998, 47, 48)

Rather than focus on the intrinsic source of surplus value, Marx argued, capitalists focus on realized gross profit, as they do in their accounts (Bryer 2017, chapter 7), and they implicitly understand that "gross profit remains the immediate form of realisation of surplus-value in a capitalist economy and therefore constitutes the specific revenue of capital" (Sayer 1979, 54). An important veil over the creation of value therefore was dividing the profit into 'interest' and what political economists called 'profit of enterprise,' the 'bottom line' of net profit after interest in capitalist accounting practice. This division, Marx argued, nevertheless reflected the reality, the "qualitative distinction" made between "two different persons who both have different legal claims," the "objective fact . . . [that] interest flows to the money capitalist, to the lender, who is the mere owner of capital . . . ; while the profit of enterprise flows to the functioning capitalist alone" (1998, 372). Marx thought this ideological distortion made "practical sense" for the individual capitalist, but that "some vulgar economists" went too far in seeing capital as "the cause of profit" (1998, 375). The distinction "is correct in the practical sense for the individual capitalist. He has the choice of making use of his capital by lending it out as interest-bearing capital, or of expanding its value on his own by using it as productive capital, regardless of whether it exists as money-capital from the very first, or whether it still has to be converted into money-capital" (Marx 1998, 375). However, "to apply it to the total capital of society, *as some vulgar economists do*, and to go so far as to define it as the cause of profit, is, of course, preposterous" (Marx 1998, 375, emphasis added).

According to the Trinity Formula, 'rent' forms part of the value of the product contributed by 'land,' whereas according to Marx although land has a price it is not the product of labor and therefore does not have a value as such. Marx knew that landlords calculated the price of land by "capitalizing" rent (Sayer 1979, 64), that is, by calculating their PV (e.g., Marx 1998, 464, 642). They

thereby obscured the source of profit, but they again did so, Marx argued, by confirming everyday language and the empirical reality that their source was capital. For Marx “This mode of calculation is quite rational, given the conditions of capitalist production; it treats land as equivalent to loan capital, that is as a medium commanding surplus-value, which . . . it in fact does” (Sayer 1979, 64), and this is how it would have appeared in their accounts. Marx did not discuss lease accounting, but we can apply the capitalist accounting principles he explained (Bryer 2017, chapters 2 and 7) to “rent-bearing capital” (Marx 1998, 684), say agricultural land. In the farmer-lessee’s accounts rent remunerates the capital advanced, is charged in the profit or loss account like interest, as a necessary unproductive expense regardless of profits, the capital price of the land appears on the balance sheet as an asset, and the PV of required rentals and the land’s residual value appear as the capital liability to the landlord-lessor. In the landlord-lessor’s accounts, leases would appear as what Marx called “fictitious capital” (1998, 464), a debtor for the PV of future rents and the residual value of the land, and the rentals accounted for as interest income, and so it looks to the landlord as if land-capital produces the rent as a rate of interest, which empirical reality confirms.

Lessee-farmers and lessor-landlords’ accounts treat land as equivalent to loan capital, and the same accounting therefore applies to money capitalist’s loans, whose calculations are for Marx also rational. To this extent, the vulgar neoclassical formula’s substitution of interest for gross profit reflected production agents’ experience. It was “natural for the actual agents of production to feel completely at home in these estranged and irrational forms of capital—interest, land—rent, labour—wages, since these are precisely the forms of illusion in which they move about and find their daily occupation” (Marx 1998, 817). However, Marx excoriated vulgar political economists. “It is therefore just as natural that vulgar economy, which is no more than a didactic, more or less dogmatic, translation of everyday conceptions of the actual agents of production, and which arranges them in a certain rational order, should see precisely in this trinity . . . the natural and indubitable lofty basis for its shallow pompousness” (Marx 1998, 817). Vulgar economy was “shallow,” “devoid of all inner connection,” because replacing gross profit with interest discarded any connection with the creation of value in production, which meant, “This formula simultaneously corresponds to the interests of the ruling classes by proclaiming the physical necessity and eternal justification of their sources of revenue and elevating them to a dogma” (Marx 1998, 817). With no concept of value, vulgar economists had no concept of ‘gross profit’: “the trinity formula . . . employs no such category. Interest, a mere deduction from profit, is elevated into the only form of revenue which derives from capital as such; while profit of enterprise . . . is subsumed under

the relation labour—wages” (Sayer 1979, 54), that is, ‘profit of enterprise’ was changed into the capitalist’s ‘wages,’ the ‘wages of superintendence.’ As Sayer says, “Marx characteristically goes to considerable lengths to show the phenomenal support for this fallacious reasoning” (1979, 55), again using the capitalists’ accounts.

When ownership became divorced from control and management took over the labor of exploitation, Marx observed, the accounts recorded management’s wages as unproductive overheads (Bryer 2017, chapter 7), and when workers formed cooperatives, the ideological justification for profit vanished, in reality, and from the accounts when, not ‘wages’ or ‘interest,’ but “profit appeared in practice . . . as mere surplus value”:

Profit of enterprise and wages of supervision, or management, were confused originally due to the antagonistic form assumed in respect to interest by the surplus of profit. This was further promoted by the apologetic aim of representing profit not as a surplus-value derived from unpaid labour, but as the capitalist's wages for work performed by him. This was met on the part of socialists by a demand to reduce profit actually to what it pretended to be theoretically, namely, mere wages of supervision. . . . With the development of co-operation on the part of the labourers, and of stock enterprises on the part of the bourgeoisie, even the last pretext for the confusion of profit of enterprise and wages of management was removed, and *profit appeared also in practice as it undeniably appeared in theory, as mere surplus-value*, a value for which no equivalent was paid, as realised unpaid labour. (Marx 1998, 387–88, emphasis added)

The only place where profit “appeared,” Marx knew, was in the accounts. The neoclassical formula was therefore a serious ideological delusion because, unlike the accounts based on the production and realization of value, “relations of capital assume their most external and most fetish-like form” (Marx 1998, 388). This was a problem of “vulgar political economy, which seeks to represent capital as an independent source of value, of value creation” (Marx 1998, 390), not a problem with the capitalists’ ideology, or with their accounts. Marx accepted that “gross profit,” which he knew was the focus of capitalist accounts (Bryer 2017, chapter 7), “shows that interest and profit of interest have the same source, appearances notwithstanding even if this source is not phenomenally evident” (Sayer 1979, 58). The neoclassical formula for Marx, however, not only obscured the source of surplus value, “it positively falsifies it” (Sayer 1979, 58). It claimed that capital, land, and labor, each received their incomes as, respectively, interest, rent, and wages, and that “interest (instead of profit), rent and wages, are three component values of the products” (Marx 1998, 803). Marx thought the neoclassical version was “absurd,” but it was rational for the “agents of bourgeois production” in

their everyday lives, and “understandable to the popular mind.” Starting from interest,

Vulgar economy actually does no more than interpret, systematise and defend in doctrinaire fashion the conceptions of the agents of bourgeois production who are entrapped in bourgeois production relations. It should not astonish us, then, that vulgar economy feels particularly at home in the estranged outward appearances of economic relations in which these *prima facie* absurd and perfect contradictions appear and that these relations seem the more self-evident the more their internal relationships are concealed from it, although they are understandable to the popular mind. (Marx 1998, 804)

Capitalists’ accounts deduct interest, a legal charge, regardless of profit, making it appear that interest comes from the simple ownership of capital, whereas fluctuations in profit after interest appear to come from the active ownership of capital. For functioning capitalists, as Marx put it, “given the surplus-value for a certain variable capital, it still depends very much on the individual business acumen of the capitalist, or of his managers and salesmen, whether this same surplus-value is expressed in a greater or smaller rate of profit, and accordingly yields a greater or smaller amount of profit” (1998, 137). Thus, to the functioning capitalist, “both the restitution of the values advanced in production and, particularly, the surplus-value contained in the commodities seem not merely to be realised in the circulation, but actually to arise from it” (Marx 1998, 814). This, Marx argued, was “an appearance which is especially reinforced by two circumstances: first, the profit made in selling depends on cheating, deceit, inside knowledge, skill and a thousand favourable market opportunities and then by the circumstance that added here to labour-time is a second determining element—time of circulation” (Marx 1998, 814–15). Appearance and reality were in harmony because “it really is the case that the excess of profit above interest does depend upon the individual capitalist’s skill and acumen in a variety of ways: economy in the use of elements of production, ability to buy and sell when the market is favourable, and so on” (Sayer 1979, 55). Capitalists experience the effort, and see the results, in reality, and in their accounts, as fluctuating profit after interest, which Marx argued would demonstrate to them that “the capitalist can always lend money at the current rate of interest; that capital as such confers on its owner a title to revenue. For all practical purposes it is an attribute of money to make money . . . [but] the conditions of doing so are not apparent in the process” (Sayer 1979, 56). Therefore, Marx concluded, while the “conceptions of the merchant, the stockbroker, and banker, are necessarily quite distorted,” they were empirically rational, were the “conscious expression of the apparent movement” of capital, as were “those

of the manufacturer,” even though “vitiating by the acts of circulation . . . and by the levelling of the general rate of profit” (1998, 312).

Failing to see that Marx used his theory of value to explain capitalism’s phenomenal forms, those that appear from the circulation of capital in capitalists’ accounts, as the source of capitalist ideology, Marxists often conclude that by not providing a general theory of ideology he left an unresolved ‘problem.’ This conclusion presumes his theories of value and history are flawed, which overlooks the qualitative evolution in economic control he saw in capitalism, the final section argues, which focuses on a few influential contributions from a large literature, two of which recognize a link between ideology and accounting in Marx’s theory, but misunderstand it.

IS THERE A ‘PROBLEM OF IDEOLOGY’?

To justify Marx’s connections between real relations, phenomenal forms, and ideological categories requires, Mephram (1972) argues, a consistent articulation of his historical materialism, which he failed to provide. “The problem would be to spell out the properties of the new model in such a way as to preserve certain of Marx’s central tenets; in particular the interpretation would have to be compatible with some notion of historical materialism and with the doctrine of the determination in the last instance by the ‘economic’” (Mephram 1972, 18). However, because he can see no way of reconciling economic determination with his search for “a general theory of ideology” (Mephram and Ruben 1979, 4), he concludes, “the most blatant problem of the ‘phantom’ metaphor is its suggestion that social reality,” the social relations and their phenomenal forms, “is independent of ideas” (Mephram 1972, 18). Mephram’s economic determinist interpretation of ideology’s determination as a “structured discourse which originates in the opacity of reality, where the forms of society’s appearance mask its generative, underlying relations” means that, for him, “Marxist categories *cannot be thought*” (Russell 1979, 188). The weakness of this interpretation, as Russell points out, is that it “fails to allow for *change* in consciousness” (1979, 191). The accounting interpretation supports Russell’s (1979, 190) conclusions that “many analyses, including Mephram’s fall short” by failing to “give an account of how working-class people might transcend the dominance of bourgeois ideology,” and that without it “one has an inadequate description of Marxist science.”

Mephram admitted that this was one of his article’s “weaknesses” (Mephram and Ruben 1979, 4), but according to the accounting interpretation, its underlying weakness is overlooking the significance of Marx’s definition of a mode of production, the ‘economic,’ as a way of extracting surplus labor,

a particular calculative mentality. This removes the problem that “social reality,” the social relations of production and their phenomenal forms, is independent of “ideas” (Mephram 1979, 18), because the calculative mentality underlies the relations ideologically inverted in the structured discourse around the phenomenal forms, represented in the capitalists’ accounts. It also nullifies Cohen’s (1972, 188) criticism that Marx “thinks of the appearance as an attribute of reality. It is only derivatively a reflection of reality in men’s minds.” Appearance, the phenomenal forms, is not an attribute of a pre-given reality, but of the reality produced by a calculative mentality through the social relations of production, which appear as elements of reality in a structured discourse. This leaves open the possibility that “it is not that ideas corresponding to the real world cannot be thought, but that they are thought in a confused way” (Russell 1979, 192), the possibility that Marx had produced a theory of value that clarified the nature of social reality represented in accounts. If so, we can change workers’ ideology and retain Mephram’s conclusion that “Bourgeois ideology dominates because . . . it works, both cognitively and in thought,” and still understand how “through the use of bourgeois ideology workers acquire a way of understanding how it is that the capitalist profits from their labour—it appears as though the capitalist does not pay them enough. Hence, they demand more, ‘a fair day’s pay’” (Russell 1979, 189). We can understand the workers’ ‘spontaneous’ acceptance of bourgeois ideology as though it was a given social reality independent of ideas and still seek to change it with Marx’s “superior” (Russell 1979, 190) accounting theory that explains profit as surplus value, that leads to the demand for the abolition of the wage system.

Cutler et al. (1977, 111) are rare Marxists who recognize a “theorisation of enterprise calculation in Marx’s *Capital*,” that Marx linked ideology with accounting calculations, but criticize what they see as its inconsistencies with his theory of value. In Marx’s “theory of calculation,” they argue, “‘economic ideologies’ are ‘representations’ of the economic process that are related to the place/personification of the agent . . . defined by reference to the mode of production,” and question whether this is “consistent with its assigned function of realising the laws and tendencies” (Cutler et al. 1977, 111). Cutler et al use accounts to illustrate their argument, but they overlook that capitalists’ accounts are of the total circuit of capital, a structured discourse, and therefore wrongly conclude that Marx’s ‘agents’ as personifications of different ‘parts’ of it face ambiguous or contradictory phenomenal forms. They claim it is impossible to reconcile Marx’s view that capitalists have ‘false consciousness,’ a delusive ideology based on the phenomenal forms that drive their behavior, with his theory of value, because a delusive ideology implies a diversity of false sources, which would require capitalists to behave contradictorily. They see in the circulation of capital “a contradiction

between ‘representations of the production process’ and ‘representations of the exchange and circulation of commodities’” (Cutler et al. 1977, 114). Marx’s ‘economic ideologies’ would therefore drive the capitalist or agent simultaneously in two different directions, an argument Cutler et al sum up with a *reductio ad absurdum*:

If the agent derives the source of the surplus product from the *sale* of commodities then any concern with *production* costs should be totally incidental. The same is true vice versa, if the surplus product derives from the supervision of labour then concern with the sale of commodities is not germane. If the rate of profit is as determined independent of the action of the agent then the agent has a *carte blanche* for inactivity. . . . While this is a *reductio ad absurdum* it does raise serious difficulties. (Cutler et al. 1977, 119)

Cutler et al. (1977, 119) see no way of re-uniting the agent by the argument that the false sources of value have a “common basis,” an economic basis, that Marx meant “the ‘representation of production relations as exchange relations,’” which for them leaves unreconciled “the diversity of sources from the standpoint of the agent.” According to Cutler et al, therefore, “the theory of calculation advanced in *Capital* could not provide a satisfactory treatment of the forms of calculations engaged in by capitalist enterprises” (1978, 128). Marx reunited the agent as a subject of accountability, accountable for the rate of profit, according to the accounting interpretation, but according to Cutler et al, “It is, of course, well-known that concepts of returns to the enterprise, such as profit, and of rates of return, such as profit rates, are subject to a plurality of standards” (1977, 133). They point to the “report of the Inflation Accounting Committee [called the ‘Sandilands Committee’] [that] referred to a number of different concepts governing the measurement of the value of non-monetary assets, of profits, of stock, and of capital maintenance” (Cutler et al. 1977, 133). However, they overlook that the Sandilands Committee recommended replacement cost accounting (RCA), the system of capitalist calculation Marx had explained with his theory of value (Bryer 2017, chapter 4).

Marx referred to accounts to criticize the ‘wages of superintendence’ as ideological, Cutler et al recognize, but conclude, “Paradoxically Marx argues that it is the separation in capitalist accounting practice of profit of enterprise from wages of superintendence which reinforces the concept of profit as wages of superintendence” (1977, 114). In fact, as we saw, Marx argued that when capitalists or workers employed managers the accounts distinguish between non-production overheads and profit, which blew away the ideology of ‘wages of superintendence.’ Cutler et al ask, “how could the capitalist, represented as an administrative/supervisory worker, be not only a labourer but a ‘wage’ worker” (1977, 115), to which the accountant answers, as ‘an unproductive worker, a non-production overhead’ (Bryer 2017, chapter 7).

They were right that accounting standards were, and remain, ‘controversial,’ but the final chapter argues that this is largely because the neoclassical version of the Trinity Formula has captured the conceptual framework of ‘modern financial reporting.’

Rose (1977) also sees a link between Marx’s theory of ideology and accounting, but criticizes it for being ‘reductionist,’ ‘economistic,’ and ‘functionalist,’ effectively discarding his theories of history and value. As Rose says, in *Capital* Marx explained the phenomenal forms, the interests of agents, their “distorted” experience and rationality, that is, their ideology, and accounting as one of its “conditions of existence,” as the functional experiential consequences of the social relations of production, necessary for their “reproduction” (1977, 43). Like Mephram and others, however, Rose overlooks the calculative mentality underlying Marx’s mode of production, the way of extracting surplus labor. In Marx’s theory of history, we have seen, the causality runs, class conflict → calculative mentality → social relations of production → phenomenal forms → consciousness (ideology) (see figure 2.1). According to Rose (1977, 43, emphasis added), by contrast, Marx “proposes that the relations of production *construct* a series of places and ascribe certain interests to those places.” Rose, in other words, starts from the social relations as given.

Leaving out the calculative mentality naturally raises the “difficulty” of the “classical empiricist notion of knowledge,” where the “real object of knowledge pre-exists the knowledge process . . . ; it is given directly to the subject of knowledge in an immediate way through that subject’s experience” (Rose 1977, 43). Starting from the calculative mentality, however, nullifies the criticism that, according to Rose, “Like its interests and experience, its rationality is pre-given,” which means the “forms of economic calculation engaged in by subjects . . . , for example the development of double entry bookkeeping, or the mode of calculation of profits, can exert no independent determinations” (Rose 1977, 44). Rose (1977) thinks that accounts do exert independent determination, whereas according to the accounting interpretation, they operationalize the calculative mentality and social relations as a system of control, but not because the social relations are an external, given reality that simply through “experience and rationality” determine accounts as one of their “conditions of existence.”

Accounting history offers little support for Rose’s claim that “the nature of the balance sheet, and the calculations contained therein, are determined by certain legal and accounting discourses, and inscribed within determinate practices” (1977, 50), that is, that they exert “independent determination,” are not the product of capitalism. Rose refers to “the [then] current debates over the proposed shift from historic-cost to current-cost accounting” to prove that “there is no way in which the economic can be regarded as their prime cause”

(1977, 50), which for Marx meant the historically determined social relations of production and their mentality. While there was a debate, like Cutler et al. (1978), Rose (1977) overlooks that the Sandilands Committee recommended RCA (Bryer 2017, chapter 4). Rose also claims, “Whilst Marx argues that capitalist rates of profit are calculated according to a ratio of profit to cost price of production, profits in Britain are predominantly calculated according to a ratio whose denominator concerns not the cost price of production but the total capital employed in the enterprise” (1977, 50). However, he overlooks Marx’s definition of the general rate of profit, total surplus value divided by total capital, and its role in determining the individual capitalist’s price of production (Bryer 2017).

Marx left us a problem of explaining ideology, Sayer (1979, 7, 4) argues, because in his early works, particularly the *German Ideology*, “the matter in his materialism, human practice, included consciousness among its attributes,” the claim that “life is not determined by consciousness, but consciousness by life.” According to Sayer (1979, 3), “Marx left few systematic expositions of the principles of the materialist conception of history . . . [but] Part 1 of the *German Ideology* was the first and in many ways remains the best,” which according to chapter 2 is arguable. Inevitably, its exposition “immediately raises a problem,” which is that “their falsity must be explained in terms of the nature of the experience which is capable of sustaining such illusions, illusions, moreover, which must be assumed to be practically adequate in the face of the experience of the knowing subject” (Sayer 1979, 8). Sayer leaves open the “nature of the experience” and the meaning of “practically adequate.” He argues that any explanation of ideology must, “allow men and women [*sic*] to conduct and make sense of everyday activity,” give them “an account of the world [*sic*] which is characterised by its overall falsity,” but he does not define the meaning of “overall falsity,” or justify his claim that Marx merely “assumed” practical adequacy (1979, 8). He also fails to justify the implicit assumption that any explanation should be general, apply to ‘men and women’ in general, to ‘the world.’

Capitalists and their agents do not understand the social reality underlying their accounts, that they are an ideological distortion, but to be consistent with Marx’s materialism, ideology must be “practically adequate” (Sayer 1979), and so must accounts. Throughout the volumes of *Capital*, Marx elaborated why they are by showing how the phenomenal forms that capitalists record in their accounts derive from the “laws of production,” that is, from the circulation of capital valued according to his theory of value (Bryer 2017). Marx noted that as the scale of capitalist production and capital markets grew the need “to keep accounts of the whole process multiply accordingly” (1998, 298). As we have seen, he dealt in detail with the ideological distortions entailed in the capitalist’s categories he found in their accounts, but made no criticisms of their practical inadequacies (McGlone and Kliman 1996, 3).

Sayer does not justify giving Marx the problem of explaining the ideology of “men and women,” whether under slavery, feudalism or capitalism, even though he accepts that Marx “on several occasions contrasts feudalism and capitalism in terms of the transparency of their respective productive relations” (Sayer 1979, 10). Capitalism is different because, we have seen Marx argued, “surplus labour is never visible at the phenomenal level: its products take the form of profit and interest, which appear to originate from capital, and rent, which appears to derive from land,” “but, in feudalism surplus labour has ‘an independent and palpable form’” (Sayer 1979, 10, 11; Cohen 1972, 190–1). The link between accounting and capitalist ideology provides an empirical foundation for Marx’s assertion that there is “an internal relation between people’s action in, and consciousness of, the world” (Sayer 1979, 8). However, it goes far beyond Marx’s theory to suggest that he claimed to have shown “that *all* consciousness, including ideology, possesses a minimum of . . . practical adequacy” (Sayer 1979, 8, emphasis added).

Sayer (1979, 9, 10) accepts that explaining the distortion of capitalist ideology is the “project of [Marx’s] . . . science.” As Sayer (1979, 11) puts it, the task for Marx’s materialism is to explain “the opacity of the phenomenal forms . . . in terms of the particular relations held to underly them,” that is, why capitalist social relations of production produce misleading phenomenal forms that are, nonetheless ‘practically adequate,’ that is, objective both factually and socially. This, Sayer argues, Marx failed to provide. According to the accounting interpretation Marx explained the phenomenal forms in all modes of production, phenomena associated with their way of extracting surplus labor, by their underlying ‘essential relations,’ their social relations of production, but based on their calculative mentality, for capitalism his theory of value, and why particularly in capitalism their appearance is deceptive. Sayer, however, rejects Marx’s theory of value.

For Marx’s explanation to be scientific, as Sayer (1979, 11) says, “his derivation of the essential relations, and *a fortiori*, his explanation of ideology must be empirically specific.” However, because Marx’s critique of the phenomenal forms depends on “hypothetical entities, or qualities of empirical entities, which are not susceptible to direct observation” such as “Value and abstract labour—not to mention surplus value—are paradigm cases,” Sayer concludes, Marx’s theory of ideology is unscientific (Sayer 1979, 136). According to Sayer, “If we require all the propositions in a scientific explanation to be open to empirical refutation we must conclude that Marx was no scientist” (Sayer 1979, 136). According to the accounting interpretation, however, capitalist accounts and practices do provide observable evidence of value, abstract labor, and surplus value, and so on, which experience could have refuted (Bryer 2017). There are many possible ways of keeping accounts, no natural laws of accounting; it has no ‘essence’ (Miller and Napier, 1993). Many choices existed throughout the 5,000 years of

accounting history. The fact that we observe different modes of accounting in different historical epochs, and the distinctive form of capitalist accounting, shows that we can empirically test Marx's theory of history, and his theory of capitalism. Capitalists are not compelled to charge depreciation, use absorption costing, distinguish production and nonproduction overheads, use target costing, and so on, and therefore finding that they do provides empirical support for Marx's 'social science.'

Marx explained capitalist accounts as ideological, distorted representations of capitalist relations of production that stem "from the nature of the world [*sic*] rather than the intentions of the ideologues" (Sayer 1979, 33), that is, from the empirical reality produced by the social world of production, its relations and mentality. The accountants' principles and practices are inchoate descriptions of this world, "social hieroglyphics" as Marx put it in Volume 1 of *Capital*, the phenomenal forms produced by the underlying social reality they represent in accounts (Bryer 2017). However, this was their real foundation, Marx claimed, which remained invisible despite the "scientific discovery" of the labor theory of value by the classical political economists because they could not break free from the phenomenal forms:

Value . . . does not stalk about with a label describing what it is. It is value, rather, that converts every product into a social hieroglyphic. Later on, we try to decipher the hieroglyphic, to get behind the secret of our own social products; for to stamp an object of utility as a value, is just as much a social product as language. The recent scientific discovery, that the products of labour, so far as they are values, are but material expressions of the human labour spent in their production, marks, indeed, an epoch in the history of the development of the human race, but, by no means, dissipates the mist through which the social character of labour appears to us to be an objective character of the products themselves. (Marx 1996, 85)

Marx claimed to have turned the partial discoveries of political economy into a scientific theory of value, which *Accounting for Value* argued, is the foundation of his theory of capitalist accounting control (Bryer 2017). This theory, of a field unknown to philosophers and Marxists, could explain why to the uninitiated Marx's "curious theoretical constructions are required to grasp what men are doing" (Cohen 1972, 187). He did not have this in mind, but Mephram's (1972, 19) conclusion is consistent with Marx claiming a scientific theory of capitalist accounting: "For Marx . . . Scientific advance is not so much a matter of discovery as of penetration. And this is achieved by systematic conceptual innovation i.e., by theory, which allows us to grasp the hidden coherence of the object." Marx had not provided a scientific explanation, Cohen (1972, 188) argues, because even assuming he was right, "things do not seem different to a worker who knows Marxism. He knows

they *are* different from what they continue to seem to be,” but according to the accounting interpretation the worker who understood Marx’s accounting theory would see things differently, see beneath the phenomenal forms by explaining them. For example, it is true that unlike feudalism, “the working day and the working year are not manifestly divided into stretches of time for which the worker is compensated and stretches for which he is not . . . yet theory enforces a division” (Cohen 1972, 192). However, target costing does this when it specifies the maximum labor cost consistent with the required rate of profit (Bryer 2017). If workers see through accounts, it does not follow, “if factory workers knew they were not recompensed for all their labor, they would cease working for the capitalist, since their sole motive is self interest” (Cohen 1972, 192) unless an alternative means of earning a living existed. Workers would not cease working for capitalists, chapter 8 argues, but would seek to replace them because Marx explained how capitalism controls the social production and distribution of value, and how to expropriate its accounting control system for socialism.

Putting the “post-marxist” criticisms of Marx’s theory of ideology in the context of “marxist theory as a whole,” Hall argues, reveals “telling weaknesses and limitations in the classical marxist formulations about ideology,” “the problem of ideology” (1986, 29).³ Hall (1986) influentially employs ‘cultural theory,’ of which he is a leading exponent, to build on post-marxist criticisms of Marx’s theory, which Hall accepts. According to Hall, “the problem of ideology is to give an account, within a materialist theory, of how social ideas arise . . . [and] what their role is in a particular social formation, so as to inform the struggle to change society and open the road towards a socialist transformation of society” (1986, 29). By ideology Hall means “the mental framework—the languages, the concepts, categories, imagery of thought, and the systems of representation which different classes and social groups deploy in order to make sense of, define, figure out and render intelligible the way society works” (1986, 29). In short, Hall argues, the “problem of ideology . . . concerns the ways in which ideas of different kinds grip the minds of masses, and thereby become a ‘material force’” (1986, 29).

By contrast, according to the accounting interpretation, Marx’s focus was not the languages, concepts, categories, and imagery, the “different ideas,” of different “classes and social groups,” not explaining “social ideas” in general, but capitalist ideology. As a historian and revolutionary, Marx was interested in ‘ideas’ that sometimes ‘grip the minds of the masses,’ and argued that criticism could be a ‘material’ (important) force in a revolutionary situation. However, as a revolutionary critic of capitalism his focus was on the mentality, social relations, phenomenal forms, and ideology of capitalism, reflected in the work of political economists and the practical life of capitalists and

their agents, and ‘scientifically’ criticizing it using his theories of value and history.

Marx had no theory of ideology, Hall (1986, 29) argues, a theory of social ideas, a weakness he claims to rectify by applying what he sees as Marx’s implicit acceptance that it meant all “organized forms social thinking.” It is true that “Marx developed no general explanation of how social ideas worked, comparable to his historico-theoretical work on the economic forms and relations of the capitalist mode of production. . . . In fact, his theorizing on this subject was much more *ad hoc*. There are consequently severe fluctuations in Marx’s usage of the term.” By contrast, according to Hall, “‘ideology’ has come to have a wider, more descriptive, less systematic reference, than it did in the classical marxist texts. We *now* use it to refer to all organized forms of social thinking. . . . Marx did, on many occasions, use the term ‘ideology,’ practically, in this way. So its usage with this meaning is in fact sanctioned by his work” (Hall 1986, 29–30). It is true, “In *Capital* [Marx] frequently, in asides, addresses the ‘everyday consciousness’ of the capitalist entrepreneur; or the ‘common sense of capitalism’” (Hall 1986, 30). However, it is not true that by this he simply meant “the forms of *spontaneous thought* within which the capitalist represents to himself the workings of the capitalist system and ‘lives out’ (i.e., *genuinely experiences*) his practical relations to it” (Hall 1986, 30, emphases added). For Marx, we have seen, the phenomenal forms appear within a structured discourse, a language of real life, the language of capitalism and accounting, whereas Hall argues, by contrast, that Marx, in effect, accepted that there are alternative ‘discourses.’

Marx certainly argued, “the spontaneous forms of ‘practical bourgeois consciousness’ are real, but they cannot be adequate forms of thought, since there are aspects of the capitalist system—the generation of surplus value, for example—which simply cannot be ‘thought’ or explained, using those vulgar categories” (Hall 1986, 30). However, Hall overlooks that these spontaneous forms of practical bourgeois consciousness were the phenomenal forms, found in capitalists’ accounts, which Marx claimed to have explained using his theory of value. This was why, Marx argued, “on the other hand, they can’t be false in any simple sense either, since these practical bourgeois men seem capable enough of making profit, working the system, sustaining its relations, exploiting labor, without benefit of a more sophisticated or ‘truer’ understanding of what they are involved in” (Hall 1986, 30). Only by not taking Marx’s theory of value seriously, therefore, is it “a fair deduction from what Marx said, that the same sets of relations—the capitalist circuit—can be represented in several different ways or (as the modern school would say) represented within different systems of discourse. . . . To name but three—there is the discourse of ‘bourgeois common sense’; the sophisticated theories of the classical political economists, like Ricardo, from whom Marx learned

so much; and, of course, Marx's own theoretical discourse, the discourse of Capital itself" (Hall 1979, 30). This interpretation overlooks Marx's claim to have explained bourgeois common sense and classical political economy as ideology using his theory of value.

Because capitalism's calculative mentality, its law of value, underlies its social relations of production, invisibly organizes the experience they generate into the categories of structured discourse found in reality, and represented in capitalist accounts, for Marx capitalist thought was not simply 'spontaneous,' a reaction to experience. There is therefore no warrant for extending Marx's analysis and critique of capitalist thought further than the categories we find in capitalist accounts to the "wider, more descriptive" task of explaining or criticizing the 'ideologies,' languages, and so on of the masses. Marxists do not need a "materialist theory of how social ideas arise," according to the accounting interpretation, need to understand the languages of the masses to "inform the struggle to change society and open the road towards a socialist transformation of society" (Hall 1986, 29). What they need to understand is capitalism's mentality, its social relations and accounts, and to convince the masses by scientifically criticizing its explanations, justifications, and consequences. For Hall, by contrast, "the problem of ideology" arises because of the "massive growth of the cultural industries," which raises the "troubling questions of the 'consent' of the mass of the working class to the system of advanced capitalist societies . . . against all expectations" (1986, 29). Hall focuses on the way "mass consciousness is shaped and transformed" rather than the masses' economic ignorance, because he accepts the "general and wide-ranging criticism advanced against classical marxism itself: its rigid structural determinacy, its reductionism of two varieties—class and economic" (Hall 1986, 31). In effect, Hall dismisses Marx's theories of value and history, and any idea that he had justified socialism by 'scientific' criticism of capitalism.

Without Marx's theory of value, there is naturally for Hall "the extremely tricky ground of the 'distortions' of ideology, and the question of 'false consciousness'" (1986, 31, 33). This idea of 'distortion,' as Hall (1986, 33) says, has "brought Marx's critics bearing down on him. 'Distortions' opens immediately the question as to why some people—those living their relation to their conditions of existence through the categories of a distorted ideology—cannot recognise that it is distorted, while we, with our superior wisdom, or armed with properly formed concepts, can." In fact, Marx argued, anyone could see the distortions if they understood his theories of value and history. These answer Hall's (1986, 33) unanswered questions: "Are the 'distortions' simply falsehoods? [No, they are inversions] Are they deliberately sponsored falsifications? [No, they are the phenomenal forms] If so, by whom? [NA] Does ideology really function like conscious class propaganda? [No, it arises

from the circulation of capital] And if ideology is the product or function of ‘the structure’ rather than of a group of conspirators, how does an economic structure generate a guaranteed set of ideological effects?” [Through accounting control]

Without Marx’s theories of value and history, “the terms [distortion, truth, etc.] are, clearly, unhelpful as they stand. They make both the masses and the capitalists look like judgemental dopes” (Hall 1986, 31, 33), rather than merely ignorant. It is true that “Marx identified the importance of the market and market exchange” in confirming the capitalists’ ideology because it “obscures, hides, conceals,” “left aside the critical domain—the ‘hidden abode’—of capitalist production itself,” production of surplus value, which for Hall “contains all the so-called cardinal sins of classical marxist theory of ideology rolled into one” (1986, 34–35). These are “economic reductionism, a too simple correspondence between the economic and the political ideological; the true v. false, real v. distortion, true consciousness v. false consciousness distinctions” (Hall 1986, 35). Instead of ‘economic reductionism’ and ‘true’ versus ‘false,’ he argues, Marxists should think of ideology as language that “can construct different meanings around what is apparently the same social relation or phenomenon,” a discourse that gives a “partial” rather than “false” account (Hall 1986, 36, 39).

If only partial accounts are possible, the masses’ fixation on the market is understandable and unchangeable. In Hall’s view, “In a world saturated by money exchange . . . it should not surprise us if the mass of working people don’t possess the concepts with which to cut into the process at another point, frame another set of questions, and bring to the surface or reveal what the overwhelming facticity of the market constantly renders invisible” (1986, 38). Hall does not offer any concepts to help the working class “cut into” the facticity of money exchange. Alternatively, rather than the market’s “facticity,” it is Marxists failure to understand Marx’s theories of history and value that explains working peoples’ lack of alternative concepts. According to Hall, the “economic relations themselves cannot prescribe a single, fixed and unalterable way of conceptualising it” (1986, 38), the market, presuming the partiality, at best, of Marx’s theory of value. According to the accounting interpretation, by contrast, the task for Marxists is to use it to explain the apparently unalterable concept of ‘the market’ embedded in the phenomenal forms represented in capitalists’ accounts.

Cultural theorists and post-marxists prefer to avoid the “all-or-nothing distinction between True or False, or between Science and Ideology,” but while it may be true that “social explanations rarely fall into such neat pigeonholes” (Hall 1986, 39), it is possible to “pigeonhole” Marx’s use of his theory of value to explain capitalist accounting principles and practices as ‘science’ (Bryer 2017). It was from this foundation, the following chapter argues, that

Marx went beyond Hall's plea for "Understanding 'determinacy' in terms of setting limits, . . . the concrete conditions of existence, the 'givenness' of social practices," for "a 'marxism without final guarantees," rather than the "absolute predictability of particular outcomes" (1986, 43), to claim he had theorized the 'inevitability' of socialism.

CONCLUDING COMMENTS

The focus of Marx's struggle for socialism is the ideology represented in capitalist accounts. As Cohen (1972, 187) puts it, in Marx's work "There arises the desire to establish a social order which eliminates the gulf between essence and appearance, in which things are as they appear to be . . . [and] socialism is expected to satisfy this desire." For example, as Marx put it in Volume 1 of *Capital*, "The life-process of society, which is based on the process of material production, does not strip off its mystical veil until it is treated as production by freely associated men, and is consciously regulated by them in accordance with a settled plan" (1996, 90). For Marx, the chapter has argued, to establish a new social order the first aim must be to eliminate the gap between appearance and essence, to strip off the mystical veil, by understanding that the foundation of the phenomenal forms represented in capitalist accounts is value.

The following chapter supports this conclusion by an accounting interpretation of Marx's mature concept of 'socialism,' the first stage in establishing its higher form of 'communism,' in *Grundrisse* and later works where he outlined the socialist mode of production as a qualitative shift in the social relations of production, the method of producing surplus labor. Capitalists extract surplus value 'indirectly' from 'free' waged workers by holding management accountable for the rate of profit (Bryer 2017). On Day 1 of socialism with public ownership of the means of production, by contrast, Marx's comments are consistent with all workers holding management accountable for the production of value, but with the interim aim of increasing the forces of production such that every labor hour 'directly' produces the same social value. We cannot rule out starting from value a priori. Mephram points out, "it does not follow from the fact that the categories of bourgeois ideology exclude socialist categories that the reverse of this is also true" (1972, 16), and therefore, the following chapter argues, it does not follow that socialism cannot use capitalist accounts for its own ends. That by "consciously regulated by them according to a settled plan" Marx proposed democratic accounting control of the means of production by a "vast association of the nation." The "settled plan," that is, was the necessary means for achieving "conscious regulation," not a central plan of society's production, consumption, and investment.

The final question for the book is whether ‘critical accounting’ could be part of a ‘movement of history,’ supporting demands for change from capitalism by education, research and revolutionary calculations of the costs of fettering imposed by capitalist social relations, and preparing for Day 1. Chapter 9 outlines the history and tasks of ‘critical accounting’ in the light of the accounting interpretations of Marx’s theories of value, history, ideology, and socialism. An additional reason why workers have not chosen socialism, it argues, is that traditional financial accounting, an already difficult to penetrate ‘inversion’ of reality, became itself subject to radical ideological distortion, particularly in America. Marx explained capitalist ideology by reference to the phenomenal forms appearing in accounts, and saw his theory of value as its scientific death knell. However, in 1906 Irving Fisher published a seminal accounting theory, founded on the neoclassical version of the Trinity Formula (Bryer 2013a), which the FASB implemented from 1978 as the official ‘conceptual framework’ of ‘modern financial reporting.’ Chapter 9 concludes by outlining how from Marx’s perspective this has introduced vulgar ideological distortion, and illustrates the opportunities for Marxists. These include criticizing vulgar ideology in capitalists’ accounts, and using Marx’s theory of value to produce and campaign for institutions and comprehensive Marxian accounting standards that, according to his concept of socialism, the following chapter argues, would hold business enterprises accountable to workers and society, initially for the production and distribution of value.

NOTES

1. ‘Socialism,’ discussed in chapter 8, is the first stage of what Marx called ‘communist society.’
2. The chapter calls the most vulgar as ‘neoclassical’ because, we will see in chapter 9, neoclassical economist Irving Fisher made this formula the basis of his influential economic theory of accounting.
3. As Hall says, “The post-marxists use marxist concepts while constantly demonstrating their inadequacy” (1986, 28), which explains why they use the lower-case ‘marxist.’

Chapter 8

The Socialist Mode of Production

Workers will inevitably come to understand that capitalist social relations limit social surpluses and fetter the forces of production, Marx's theory of history predicts, and they will abolish these relations, creating ultimately a 'communist' society, a new and final mode of production, the "kingdom of freedom" (Engels 1989, 324). This has evidently not happened. The history and collapse of the USSR in 1991 probably convinced many that Marx's vision of postcapitalist society is defective and irrelevant, that there is no viable alternative to capitalism. Marxists offer no generally agreed alternative, having for many years contested what Marx meant (Blackledge 2006, 207). Without a reasoned alternative, as Ollman (1998, 1) says, "People . . . will put up with almost any degree of suffering. Why bother to struggle for a change that cannot be?" To make the case that Marx proposed a change that 'can be,' this chapter gives an accounting interpretation of his mature concept of socialism (from *Grundrisse* onward), the first or 'lower phase' of what he called 'communism,' that he argued would allow development to a second 'higher phase.'¹ The task of Marx's socialist government—usually called the 'rule of the proletariat,' and occasionally the 'dictatorship of the proletariat'—is to implement the socialist mode of production. This means, the chapter argues, the proletarian state replacing capitalist social relations—its mentality and system of accountability of 'free' wagedworkers to capital—with the socialist mentality and a universal system of cooperative enterprises accountable to workers and society.

Marx's use of the word 'dictatorship' has proven "unfortunate" (Ollman 1977, 14) for many Marxists, for whom it means absolutist autocracy, the modern meaning that became dominant from the end of the nineteenth century, and today is usually associated with Hitler, Mussolini, Stalin, and so on (Draper 1986, 11). Marx's 'dictatorship of the proletariat' certainly

meant that, like all previous states, the proletarian state has a monopoly of force. However, following a still common meaning in 1850, when Marx first used the phrase, he also meant, as under Republican Rome's *Dictatura*, which provided for the election of a 'dictator' in emergencies, that the proletariat's 'dictatorship' was constitutional and limited in function and duration (Draper 1962, 30; 1986, 12, 36, 111; Ollman 1977, 14–15; Sandle 1999, 18–19). Marx used the phrase in the early 1850s, and again in the early 1870s, Draper (1962, 1986) shows, to distinguish his position from the Blanquists' 'dictatorship of the party,' an elitist vision of socialism 'from above.'² Marx used 'dictatorship,' Draper (1986) shows, simply to mean replacing the existing capitalist 'dictatorship,' class rule by the bourgeoisie, by the workers' state, democratically elected and controlled by all workers, democratic socialism 'from below,' an interpretation the chapter supports, not the Blanquists' absolutist centralized autocracy.

The workers' government institutes radical political democracy, the chapter argues, by implementing a new economic foundation, a new mode of production from Day 1, a new mentality, social relations, and superstructure of accounting control, aiming to increase the forces of production, leading ultimately to the higher stage of communism. The qualitative difference between the capitalist and socialist modes of production, Marx argued, was that whereas capitalism aims for maximum surplus value, profit for capitalists, from Day 1 socialism aims for maximum social value for all workers, including its consumption as disposable (free) time. From Day 1, starting from capitalism that values workers' labor time 'indirectly' at the socially necessary average, the socialist aim is to increase the forces of production, particularly the capacities of workers, so that every labor hour 'directly' produces equal social value, the interim aim of the first phase, from when the 'dictatorship' ceases. To make this change the proletarian state takes all means of production into its hands, thereby abolishing the capital market, and abolishes the market for labor power, replacing 'free' waged workers with free social agents by replacing joint stock companies with a universal system of worker cooperatives, accountable to their worker-shareholders and to society.

'Bookkeeping' is even more important for socialism than for capitalism, Marx argued in Volume 3 of *Capital*. Accounting plays a vital role from Day 1 to the beginning of the higher phase of abundance in communism in Marx's concept of socialism, the chapter argues, initially accounting for value (Bryer 2017), but also for progress toward the interim aim. Socialist social and enterprise accounting goes beyond controlling the circulation of capital to calculating the social value of working time, and holding the management of publicly owned, worker-controlled, enterprises accountable for results. Socialism does not decree 'equality,' Marx argued, but changes the social relations and develops the forces of production to produce this result. When

the social value of all labor time is equal, the capitalist law of value ceases to operate, and the higher phase of communism begins.

The chapter explains and defends this accounting interpretation against Marxists' almost invariably critical interpretations. Marx's critics have failed to build constructively on his writings on socialism, it argues, because they have not understood that he used his theory of value to explain capitalist accounts, his theory of capitalist accounting control (Bryer 2017), which his concept of socialism incorporates and transcends. Understanding the function of accounts in capitalism is therefore a prerequisite to understanding their even more important function for Marx in socialism.

To make this case, the chapter first outlines the major issues raised by Marxists, their different interpretations, particularly the central planning and 'market socialism' interpretations, and the accounting interpretation. Second, it discusses Marx's early writings, highlighting that his criticism of the early socialists' 'crude communism' in the *Economic Manuscripts of 1844* was their commitment to central planning, a criticism he elaborated in *The Poverty of Philosophy* and *The Communist Manifesto*, and in later work. Marx and Engels were clear about what they opposed, but their early concept of the 'mode of commercial intercourse,' the section argues, generated ambiguities in their concept of socialism, leaving unanswered questions. Third, the chapter discusses Marx's mature writings on socialism, his comments in *Grundrisse* and the volumes of *Capital*. The section rejects the dominant interpretation that he advocated central planning. Marx's mature concept of socialism abolishes markets for capital and labor power, but the section argues it requires competitive markets for products and services, cooperative enterprises, and accounting to hold enterprise management accountable to workers, and workers accountable to society.

Fourth, the chapter analyses Marx's criticisms of the draft *Programme of the Socialist Workers' Party of Germany*, the *Critique of the Gotha Programme* (1875). Facing a distorted interpretation of his ideas he could not ignore, the section argues, Marx clarified the interim aim of 'directly' equal social value per hour of labor time, and reformulated the capitalists' profit and loss account, outlining the necessary social and enterprise accounts for Day 1 and progressing to the interim aim. He re-emphasized his long-standing vision of socialism based on a universal system of worker cooperatives that, transcending capitalist accounting control, must be accountable to workers and society for the production of value on Day 1, and for progress toward the interim aim. That is, consistent with his theory of capitalist accounting control, a system of accounting results control by all workers of cooperative enterprises, that are also accountable to society for financial targets, and for developing the forces of production to make each labor hour 'directly' of equal social value. The section provides an accounting illustration of Marx's

argument that to achieve its interim aim socialism must break the capitalist law of value, by using his accounts of capitalist reproduction (see Bryer 2017, chapter 3) to show how socialism could use them to progress toward directly equal social value. This accounting interpretation, it concludes, answers Marxists' criticisms that there is "little clarity" in Marx's discussions of the 'dictatorship of the proletariat' (Sandle 1999, 18–19), that its nature, function and duration are ambiguous. Finally, the chapter outlines a possible scheme of socialist accounting for Day 1, updating the *Manifesto* in the light of Marx's mature concept and the development of the capital market and accounting.

ISSUES

The most important issue dividing and perplexing Marxists is what socialists should do on Day 1 after the revolution. As Kliman says, "Identifying ultimate goals seems to be the easiest part of articulating a liberatory alternative to capitalism. The more we move back in time, towards the day after the revolution and what happens then, the more difficult the problems seem to be" (2004, 8). The 'ultimate' goals are the interim aim of 'directly' equal social value per labor hour, we will see, and the higher phase of communism, 'from each according to ability; to each according to need.' The difficult question as we move from the interim aim back to Day 1 is how to change *from* capitalism on Day 1 to achieve it. Marx's concept of socialism, the majority of Marxists argue, requires immediate central planning, abolishing all markets, whereas others maintain he foresaw a transitional role for markets, a gradual transition to socialism. Marx's answer, the chapter argues, was to identify the qualitative difference between the capitalist and socialist modes of production, which enabled his conceptualization of socialism on Day 1 to transcend, but not initially abolish, the capitalist law of value.

Leaving aside the obviously non-liberatory central planning interpretation for now, 'market socialists,' Marxists who see a continuing role for markets, have not persuasively explained how this is consistent with Marx's socialism, but their critics have no alternative. Kliman highlights the "glaring contradictions" in Marxist critiques of market socialism, which arise because "*they have no alternative to propose for the period immediately following the accession to power of a socialist government*" (2004, 10). Rejecting central planning, "Unwilling to accept the permanence of capitalism, but lacking an alternative to market socialism, they simply have no choice; they *must* believe that market socialism will somehow prove to be a feasible stepping-stone to genuine socialism, even though they themselves have told us it cannot" (Kliman 2004, 10). The key question these and other Marxists have

failed to address, the chapter argues, is the qualitative difference between the capitalist mode of production and Marx's "genuine socialism," his socialist mode of production.

Market socialists and their critics ineffectively grapple with the problem of changing from capitalism to socialism, we will see, of disengaging from it, progressively making the transition, while others presume it, jumping ahead to alternative 'non-capitalist' societies. For example, schemes such as 'participatory economics' ('parecon') proposed by Michael Albert and Robin Hahnel (see www.parecon.org), which as Kliman (2004, 11) says, "is only a model of how a non-capitalist economy might function once all the elements are in place and the new society is standing on its own feet. The problem of what happens *the day after* the revolution remains . . . perhaps [because] they simply do not have a vision of the road to take on the day after," but Kliman admits, "Nor do I have much to offer" (2004, 11). However, he makes a helpful suggestion: "except to say that I have increasingly come to suspect that the very idea of 'transitional society' is incoherent, and seems to stand in the way of thinking things through clearly" (Kliman 2004, 11). Rather than opting out, or making a transition from capitalism to socialism, Kliman (2004, 12) argues "what requires explanation is the *essential character* of the change, which is not gradual quantitative decrease, but [quoting Hegel's *Science of Logic*] the 'abstract transition of an existence into a negation of the existence,'" Kliman (2004, 14) therefore suggests, "Capitalism . . . cannot 'become' a new society; it cannot gradually cease-to-be as the new society comes-to-be. Is it not the case, then, that revolutionary transformation can only be *comprehended* as absolute liberation that begins *the day after* the revolution, rather than as gradual transition?"

A transitional mode of production is incoherent, but history shows pre-capitalist transitional societies in which different modes co-existed, where class conflict was driving change in which one became dominant. Changes in the dominance of pre-capitalist modes—slavery over primitive communism, feudalism over free peasants, and capitalism over feudalism—were transitions. In his early work, Marx used the idea of transitional societies, changing from one 'mode of commercial intercourse' to another to explain history and, particularly in *The Communist Manifesto*, argued for a transition to socialism. However, from *Grundrisse* onward he argued that the change to socialism was unique because, rather than an unconscious change in dominance from one form of exploitation to another, socialism results from consciously changing the social relations of production, and creating the necessary superstructure, to abolish it. Socialism becomes possible only if all (or the vast majority) of workers understand Marx's theories of value and history and, when they do, they 'inevitably' change society's social relations of production on Day 1 to abolish all exploitation.

There can, therefore, according to the mature Marx, be no transition to socialism, no ‘transitional society,’ part capitalist, part socialist, but only a once for all, immediate and comprehensive, qualitative change in the social relations of production. Marx’s mature concept specifies the “essential character” of the change, the chapter argues, which is the calculative mentality, social relations, and necessary superstructure of accountability, that the proletarian government implements on Day 1 to create the ‘kingdom of freedom’ that will increase the forces of production and eventually produce abundance. On Day 1, accounting assumes an even more important role than in capitalism, giving workers “absolute liberation” by giving them collective control of the production and distribution of value, the means to work immediately toward the interim aim of directly equal social value per labor hour. Starting from accounting for value and progress toward the interim aim from Day 1, it argues, resolves the contradiction of being against ‘markets’ in theory, but accepting them in practice, by accepting capitalist value ‘in theory,’ but refuting it in practice by increasing the forces of production to produce directly equal social value per labor hour.

Marxists often argue that all markets are anathema to Marx’s concept of socialism because they conflate them with capitalism (e.g., Lavoie 1985; Moore 1993; Ticktin 1998; Hahnel 2005). Others fear their inevitable ideological and dehumanizing dominance (e.g., Ollman 1998), which is not an issue here because, chapter 7 argued, Marx explained capitalism’s phenomenal forms using his theory of value to dispel the mists of ideology. All that follows presumes the validity of Marx’s explanation (see Bryer 2017) and that on Day 1 all workers understand it. The accounting interpretation, therefore, supports Marxists who argue that “socialism is compatible with the continuation of market relations” (Lawler 1998, 23), that is, with continuing competitive markets for products and services, which disappear only in the higher phase of communism, but argues that markets for capital and labor power cease on Day 1. The market for ‘free,’ propertyless, wagedworkers ends because all workers are equal members of cooperatives and shareholders in society, because the aim is to increase their capacities as forces of production, and because the proletarian state’s economic policies abolish the reserve army of labor, but a seller’s market for the services of ‘free agents’ continues through the interim phase.

Marx commented on socialist society in some detail only in a section of the 1844 *Economic Manuscripts*, in the *Communist Manifesto* (1848) and in *The Critique of the Gotha Programme* (1875). It is “commonplace” to describe them as “unfinished sketches,” “fragmentary,” “marginal and very general,” “sporadic, undeveloped, and (deliberately) vague,” “contain no doctrine” (Sandle 1999, 13; Avineri 1968, 220–221; Selucky 1974, 49; Balibar 1993, 169; Jossa 2005, 4). The chapter agrees that Marx’s comments

in the *Economic Manuscripts* and the *Poverty of Philosophy*, and those with Engels in *The German Ideology*, the *Communist Manifesto*, are ‘unfinished.’ However, his comments in *Grundrisse*, *Capital*, *The Civil War in France*, and the *Critique of the Gotha Programme*, it argues, are ‘finished,’ that is, specify his concept of the socialist mode of production, its calculative mentality, social relations, and system of accounting. Marxists have inconsistent interpretations, some focusing on his early views, some seeing continuity between his early and later views, while others see a decisive break in the *Critique of the Gotha Programme*. Marx did change his concept of socialism, the chapter argues, starting in *Grundrisse* when he formulated his developed concept of the capitalist mode of production, coinciding with his study of accounting from the late 1850s.

Is it a “puzzle” that Marx devoted virtually all his work to a critical analysis of capitalism, but “never wrote a systematic and detailed description of what he meant by socialism” (Foley 1986, 158)? Why did he show “a marked reticence about going into detail” (Avineri 1968, 221)? Some argue he avoided a detailed analysis because attempting it would “have plainly exposed his inability to reach a communist conclusion from the starting point of historical materialism,” that communism was for Marx a philosophical or moral ideal that he could not reconcile with his economics (Moore 1993, 10, 77), which the chapter argues is not the case. The reason, we will see, was that socialism’s starting point, at the dawn of Day 1, is capitalism, and by analyzing its functioning and contradictions in detail, he highlighted what must change, what elements to build upon, and what to discard. Although Marx “devoted his theoretical energy to [as he put it] ‘the critical analysis of the actual facts, instead of writing recipes . . . for the cook-shops of the future’ (Postface to 2nd ed. of *Capital*),” as Kliman (2004, 5) says, “critique as he practiced it was not mere negative social criticism. It was a road toward the positive.” Marx could not write recipes “instead” of a critical analysis of the facts, but by clarifying “what capital is and how it operates . . . he helped to clarify what the new society must not and cannot be like—which is already to tell us a good deal about what it must and will be like” (Kliman 2004, 5).

The chapter supports Kliman’s view that Marx’s criticisms of capitalism “clarify” his concept of socialism. It rejects the view that Marx’s concept of socialism answers all his criticisms of capitalism. Lavoie (1985, 30) for example, who argues, “where *Das Kapital* offers us a theoretical ‘photograph’ of capitalism, its ‘negative’ informs us about Marx’s view of socialism”; “implicit in his negative critique of capitalism are all the essentials of his positive theory of socialism” (see also Malle 1985, 293). This view pushes Marx’s socialism into the non-liberatory dead-end of omniscient central planning, seen as the only conceivable way of solving all problems, which is the dominant interpretation, as we will see. Marx criticized many aspects

of capitalism, but he emphasized that while socialism would remove its fundamental contradiction, its social relations of production on Day 1, some capitalist ‘birthmarks’ would remain until the higher phase of communism. Marx saw socialism abolishing the capitalist mode of production by transcending it, the chapter argues, changing the social relations to remove the contradictions between the private ownership of capital and the social production of value, between the ‘free’ wageworkers that produce surplus value and the capitalists who control and consume it. Socialism, according to Marx, would abolish exploitation to release society from the fetters of capitalist relations to develop the forces of production, not establish a utopia that immediately solved all problems.

Marxists often see the target of many of Marx’s criticisms as the ‘market,’ that he “saw rivalry as an inherent aspect of a market economy and the price system, condemned capitalism for having a rivalrous attribute, and proposed central planning as a non-rivalrous remedy” (Lavoie 1985, 23; see also Moore 1993). In socialism, according to this view, Marx argued, “Objective utility (ie social need) and not subjective utility (ie demand) would affect the compilation of the plan so that ‘production for use’ would supersede ‘production for profit’” (Bailey 1986, 52). In short, “The waste and inefficiency of capitalist production would be overcome through the conscious control of social and economic processes (embodied in central planning)” (Sandle 1999, 14). Not just critics think this, “A great many leftists, even revolutionaries . . . regard[ed] nationalized property and the State Plan, under the control of the ‘vanguard’ Party, as socialism, or at least as the basis for a transition to socialism” (Kliman 2004, 2). Sweezy, for example, argued, “The very term ‘market socialism’ is self-contradictory, the market being the central institution of capitalist society and socialism being a society that substitutes conscious control for blind automatism” (1971, 5). Supporters of the central planning interpretation offer an ‘argument,’ not proof, that this was Marx’s view. Ollman (1977, 18, emphasis added), for example, claims that although “Marx recognizes that demand is elastic, he never doubts [sic] that his proletarian planners . . . will make the right equations,” but admits their “*actual planning mechanisms are never discussed.*” In short, Marx never discussed central planning. According to Cohen (1972, 194, 195, 196) Marx argued for a “democratically formulated plan,” “centralized socialism” and “abolishing the market,” and concluded that therefore “socialism renders social science superfluous,” whereas according to the accounting interpretation, ‘accounting science’ becomes the key to social control.

The chapter rejects the central planning interpretation, first, because while Marx made relatively few comments on socialism, he made several “substantial critiques of other writers’ conceptions” (Foley 1986, 158). In these, we will see, he judged the early socialists from the perspective of

his emerging understanding of capitalism and its system of control, using it to criticize their attempts as “utopian” because they in effect called for, or presupposed, central planning. Second, while Marx often wrote, for example in Volume 1 of *Capital*, that socialism would function according to a “definite social plan” (1976a, 171), there are two meanings of the word “plan” we need to keep separate. The dominant interpretation is that by “plan” Marx meant, “A table or programme indicating the relations of some set of objects,” “a detailed formulation of a plan of action,” in his case a production and consumption program or plan of action for society.³ The chapter, however, argues he meant a “scheme,” “of arrangement” or “of action,” a “Method, way of proceeding,” “a method for achieving an end,” a way of organizing society. As Jossa (2005, 11) puts it, “while Marx and Engels certainly conceived of the plan as an antidote to the anarchical nature of the capitalistic market, they were thinking of a plan for abolishing the production of commodities and so not based on the law of value,” a scheme or way of organizing society for abolishing value.

Marx’s way of organizing socialist society, his concept of its relations of production, the chapter argues, is not the supervision or action controls implied by the central planning interpretation, but results control by workers. There are, as Jossa says, “at least two distinct groups” of Marxists, those who see socialism as “a system of self-managed firms [a scheme] and those who equate socialism with a state-planned command economy [a program]” (2005, 4; see also Selucky 1974, 49). The chapter highlights the continued enthusiasm Marx had for worker cooperatives in capitalism as “sprouts of the new” (1998, 438), and supports those who argue they played a key role in his concept of socialism, which in itself contradicts the claim that he advocated central planning (Jossa 2005). However, it argues against the common interpretation that according to Marx cooperatives in socialism are simply ‘self-managed firms,’ where workers are their own managers who supervise themselves. Rather, in Marx’s scheme, workers are above all shareholders in their cooperative enterprises, and in society, who hold managers, enterprises and the state accountable for results. Despite many failing in the 1860s, and the collapse of the Paris Commune (1871), Marx and Engels remained staunch advocates of cooperatives (Jossa 2005, 3–4, 12), we will see, whereas many Marxists are unconvinced that they are progressive within capitalism because their members become, as Marx himself put it, “their own capitalist” and perpetuate capitalism’s faults (1998, 438). Leading socialists have often “spelt out in bold letters that cooperation can at most be equated with a middle way between capitalism and socialism, not with socialism proper” (Jossa 2005, 13), and this is still a common view.⁴

The chapter, however, argues that according to Marx’s scheme, converting all joint stock companies into cooperatives financed by public equity on Day

1, and holding them accountable to their workers and society for value and progress toward the interim aim of directly equal social value per labor hour, overcomes the limitations of their being their “own capitalist.” It rejects the “hegemonic interpretation” that the question of capitalism versus socialism is “private property and markets versus . . . socialized property and planning,” and focuses “instead on the production, appropriation and distribution of surpluses” (Wolff 2009, 421) in socialism, according to Marx’s mature concept of its relations of production, and the accounting control they entail. It supports Marxists such as Bettelheim (1971, 19; see also Jossa 2005, 4) who argues, against Sweezy, “What characterizes socialism as opposed to capitalism is not . . . the existence or non-existence of market relationships, money and prices, but . . . the domination of the proletariat,” whose task is to abolish capitalist relations and replace them with socialist relations of production.

To abolish capitalism on Day 1 Marx first had to understand its mode of production and the socialist mode that replaces it. When Marx and Engels wrote the *Manifesto* in 1847–48 they could not qualitatively distinguish capitalism from socialism, seeing socialism as a humane, developed division of labor, and therefore, we will see, did not call for immediate public ownership of all capitalist enterprises, but proposed a gradual transition to control by a ‘vast association of the nation.’ When Marx wrote *Grundrisse* in 1857–58 he could qualitatively distinguish the capitalist and socialist modes, and from then he advocated immediate public ownership and transferring control of all capitalist enterprises to all workers, to the ‘vast association’ that controls them according to a ‘definite social plan.’ This development in Marx’s thinking supports those who argue his early work reflected “the Romanticist impulse . . . [that] sought to establish a society of unity, humanity and community, in which freedom was found in a society of diverse creative labour,” whereas “the modernist Marx viewed freedom . . . in . . . leisure and material plenty” (Sandle 1999, 24). However, Marx’s mature concept of socialism did not reject his early commitment to humanism (Dunayevskaya 2013), the chapter argues, but sought to implement it.

Marxists generally accept, as Avineri (1968, 221, 222) puts it, that Marx gave a “description of future society [as an] analysis of the passing of the bourgeois world,” projected “present actuality to its ultimate conclusions,” tried “to project an image of future society from the internal tensions and contradictions of existing society.” Socialism would not result from any “moral” imperative (Leadbeater 1985, 608), but from “the unfolding of existing historical forces” (Avineri 1968, 221). This, some conclude, explains why Marx did not provide any ‘blueprint’ for a future society, believing that socialism was ‘inevitable’ through spontaneous revolutionary action from below, interpreting his criticisms of the ‘utopian socialists’ as an injunction

not to engage in any systematic analysis of socialism (Lavoie 1985, 29). The chapter rejects this interpretation. Marx explained capitalism as the result of the unfolding of the historical forces of ‘free wage labor’ confronted by ‘free capital,’ which became ‘total social capital,’ the capital market (Bryer 2017, chapter 3), which was a process that, he argued, would ‘inevitably’ produce socialism when the necessary conditions existed.

One of them, Marx claimed in the Preface to *A Contribution to the Critique of Political Economy*, was that “no social order is ever destroyed before all the productive forces for which it is sufficient have been developed” (1971, 21), which “disappeared only after its full potential had been exhausted—when it had lost its dynamism” (Desai 2002, 7). Marx’s critics regularly denounce this as a “crude—indeed, naïve—‘theory,’” but Desai argues, it “was vindicated at the end of the twentieth century” by the collapse of the USSR. “Socialism was premature” (Desai 2002, 44). Based on central planning, according to the accounting interpretation the USSR did not implement Marx’s concept of socialism (Bryer 2019a). Nevertheless, it remains true that “Marx had the last laugh. . . . Capitalism would not go away until after it had exhausted its potential” (Desai 2002, 9), which he argued would happen only when capitalism became global, created universal wage labor and a ‘world market,’ and the collapse of the USSR was a step toward that. As Marx and Engels put it in *The German Ideology*, “Empirically, communism is only possible as the act of the dominant people, ‘all at once’ and simultaneously, which presupposes the universal development of productive forces and the world intercourse bound up with them” (1976a, 49). Today, with capitalism as the dominant mode of production in China and Russia, the “proletariat . . . exist[s] *world-historically*” (Marx and Engels 1976a, 49), capitalism is now globally dominant. Workers of the world will recognize that capitalism has “exhausted its potential,” limits the production of social surplus and fetters the development of the forces of production, Marx’s theory of history predicts, only when they understand his theory of value and do the necessary calculations.

The final issue, assuming the scientific validity of Marx’s theories, and given the necessary technical and social conditions for socialism, usually avoided by Marxists, is winning support for a political program to make the change ‘inevitable,’ for which Marx and Engels wrote the *Manifesto* (1847/8), which they never updated. Some Marxists argue that this was because they remained happy with it (Hobsbawm 2012), and some Marxists remain happy with it. The chapter, however, argues that the *Manifesto*’s program evidently needs rewriting in the light of Marx’s mature concept of socialism and the growth of the capital market and importance of accounting from the late nineteenth century. Marx theorized the capital market when he anticipated the formation of a ‘total social capital’ in Volume 3 of *Capital* (written in 1863),

and Engels lived to witness the London stock market's importance from the 1880s, but although we will see they did recognize the need, they never updated the *Manifesto*. Marx's theory of capitalist control and his mature concept of socialism, the chapter concludes, are consistent with a *Manifesto* today calling for the abolition of the capital market, taking over its system of accounting control, and using it from Day 1 to transcend the contradiction between social production and the private ownership of capital.

EARLY WRITINGS

In the *Economic Manuscripts of 1844* Marx agreed with the early socialists that in the "first stage . . . [of] socialism . . . private property will be abolished . . . through turning it into universal property, the property of all," which was "both the ultimate realization of the principles of civil society and their initial abolition" (Avineri 1968, 223). Because Marx also demanded public ownership of the means of production in the *Critique of the Gotha Programme* (1875), and elsewhere, Avineri concludes, as others do, "In both texts Marx distinguishes at least two main stages," that "Marx calls this [first] stage of the new society 'crude communism'" (1968, 221), followed by a higher stage. According to Avineri (1968, 223), in the first stage Marx saw the establishment of a "universal capitalist" as a *necessary* stage which "will retain some of the more unfortunate characteristics of capitalist society." If so, it is true, as Avineri says, "this description provides an insight into some of the elements of the . . . Soviet system" (1968, 225) as this developed from the mid-1920s. However, Avineri's interpretation of the *Manuscripts* is questionable, and an accounting interpretation of Marx's mature works, including the *Critique of the Gotha Programme*, shows it is untenable.

In the *Manuscripts* Marx criticized the early socialists' proposals for their "crude or utopian communism, like Proudhon et al."⁵ He credited them with recognizing the central contradiction, for insisting that "private property will be abolished," but was critical because "they see the abolition of property only objectively," "only through turning it into universal property, the property of all" (Avineri 1968, 222), by which they meant central control. Marx criticized their "despotic ruler of production and trustee of distribution," the fact that "society emerges . . . as a universal capitalist, not abolishing but universalizing the wage system" (1975, 295). As Dunayevskaya (2013, 62) says, Marx "adamantly insisted that to make 'society' the owner, but to leave alienated labor alone, is to create 'an abstract capitalist,'" and he concluded that abolishing private property would lead to socialism, "a new social order, *only if* 'freely associated individuals,' and not abstract 'society,'

become the masters of the socialized means of production.” Marx’s mature concept of socialism, we will see, abolishes private ownership and addresses “alienation,” “estrangement in the very act of labor,” the fact that capitalist masters subordinate their workers, deny them their humanity, their “free individuality” (Dunayevskaya 2013, 59, 61), brings into being a new social order, negating capitalist relations of accountability by transcending them.

Marx’s *Manuscripts* had no clear alternative to political economists’ concept of the capitalist as the “director” of labor, agreeing with them “capital is the governing power over labour and its products” (1975, 247), but he rejected the socialists’ crude communism. He denounced this “first positive annulment of private property—*crude communism*” as “merely a *manifestation* of the vileness of private property, which wants to set itself up as the *positive community system*” (Marx 1975, 296). Its fatal weakness was that “it has not yet grasped the positive essence of private property, and just as little the *human* nature of need, it remains captive to it and infected by it. It has, indeed, grasped its concept, but not its essence” (Marx 1975, 296). He contrasted it with Hegel’s notion of freedom, the abolition of alienation, criticizing it because the “antithesis between lack of property and property . . . is not comprehended as the antithesis of *labour* and *capital*” (Marx 1975, 293), and stressed that it “is a crude, vulgar, philistine and materialistic communism” (Avineri 1968, 223). Rather than social control, crude communism retained the capitalists’ focus on physical possession and control, “The relationship to capital as an object of possession remains very much the same as in capitalist society, though possession is now collective and not individual” (Avineri 1968, 224). Like capitalism, “Physical, immediate possession is the only purpose of life and existence as far as this communism is concerned; the category of worker is not abolished but extended to all men; the relation of private property remains the relation of the community to the world of things” (Marx 1975, 294). Worse, “ultimately, this movement to oppose universal private property to private property is expressed in bestial form—*marriage* (which is admittedly a form of exclusive private property) is counterposed to the *community of women*, where women become communal and common property . . . [which] revealed [the] secret of this as yet wholly crude and unthinking communism” (Marx 1975, 294–95). Avineri (1968, 223) wonders if “It may perhaps come as a surprise to find Marx saying . . . [such things] about the first stage of communist society,” but it would only be surprising if we believed that crude communism must be his first stage.

Marx recognized the obvious gap in his argument, the need for a positive alternative to capitalism, by building the methodology of its construction into his ideal. He defined “Communism as . . . the complete return of man to himself as a *social* (i.e., human) being—a return accomplished consciously and embracing the entire wealth of previous development” (Marx 1975, 296).

What ‘communism’ meant, therefore, depended on consciously embracing capitalism’s entire historical development, his theory of history, which Marx had yet to work out. Materialist history in the *German Ideology* (1845–46) was a history of the division of labor and commodity exchange, which had created the world of wealth and culture, which communist society would transcend by abolishing the division of labor. “In a communist society no one has a particular exclusive sphere of activity: each can cultivate any field he likes,” which would not destroy the world of wealth and culture because “Society regulates the general production and makes it possible” (Marx and Engels 1976a, 47), but it did not explain how.

In 1846–47, when he wrote the *Poverty of Philosophy*, Marx still was many years away from working out his mature concept of mode of production, the method of extracting surplus labor, seeing it as the *German Ideology*’s mode of ‘commercial intercourse,’ and his vision of socialism simply rejected market logic. “In a future society, in which . . . there will no longer be any classes, use will no longer be determined by the minimum time of production, but the time of production devoted to different articles will be determined by the degree of their social utility” (Marx 1976b, 134), which meant abolishing competition. In capitalism, “Competition implements the law according to which the relative value of a product is determined by the [minimum] labour time needed to produce it . . . and this minimum is ascertained by competition” (Marx 1976b, 135–36), by a law of competition, not of social production. Marx argued, “values can be measured by labor time, in spite of the inequality of value of different working days; but to apply such a measure we must have a comparative scale of the different working days: it is competition that sets up this scale” (1976b, 126). “Is your hour’s labor worth mine . . . is decided by competition” (Marx 1976b, 126). He emphasized the negative consequences: “The continued depreciation of labour is only one side . . . The excessive raising of prices, overproduction and many other features of industrial anarchy have their explanation in this mode of evaluation” (Marx 1976b, 136) by the market.

Marx’s later study led him to see not just competition enforcing the law of value but capitalist calculations that implemented it in production, not the minimum but the ‘socially necessary’ labor time (Bryer 2017). Without this, in the *Poverty of Philosophy* Marx left open exactly how to remove capitalist “anarchy” whilst preserving the capitalist forces of production and not stifling progress. “In existing society, in industry based on individual exchange, anarchy of production, which is the source of so much misery, is at the same time the source of all progress,” but if “you want progress without anarchy . . ., in order to preserve the productive forces, you must abandon individual exchange” (Marx 1976b, 138). The solution was not central planning, but “agreement” by all workers:

Thus, if all the members of society are supposed to be actual workers, the exchange of equal quantities of hours of labor is possible only on condition that the number of hours to be spent on material production is agreed on before hand. But such an agreement negates individual exchange. . . . What is today the result of capital and the competition of workers among themselves will be tomorrow, if you sever the relation between labor and capital, *an actual agreement based upon the relation between the sum of productive forces and the sum of existing needs.* (Marx 1976b, 143, emphasis added)

Marx and Engels made their first attempt at specifying how to get “an actual agreement,” abandon individual exchange, and yet retain progress, in *The Communist Manifesto*. However, in Part 2, we will see, their concept of ‘mode of commercial intercourse’ determined its socialist program, which meant they had little to say about how the workers should balance the “sum of productive forces” against the “sum of existing needs,” that is, how they should account for production and consumption.

Nevertheless, in the *Poverty of Philosophy* Marx again made clear his hostility to central planning when he criticized Proudhon’s proposal for a society where individual workers owned and operated their own machines in their own workshops. According to Proudhon, the development of the division of labor within the capitalist’s workshop had degraded the worker, “he lays the blame . . . on the workshop and the machinery . . . ‘by giving him a master’” (Marx 1976b, 185), and proposed reversing it “by [a] ‘reunited labor and property’ *within the present system of production*, which was to remain intact” (Dunayevskaya 2013, 51). His goal was “a society of equal producers” (Dunayevskaya 2013, 51). Workers owning their own workshop, Proudhon claimed, would reverse their degradation, liberate them by, as Marx (1976b, 183) put it, “leaving to each one the opportunity of devoting himself to the specialty best suited to him—a separation [of the different parts of labour] which M. Proudhon dates from the beginning of the world.” However, as Marx put it, for this to work for society meant replacing capitalists’ authority within the workshop and competition with a “single chief employer” who operates according to a plan, to “a previously fixed rule”:

Society as a whole has this in common with the interior of a workshop, that it too has its division of labor. If one took as a model the division of labour in a modern workshop, in order to apply it to a whole society, the society best organized for the production of wealth would undoubtedly be that which had a single chief employer, distributing tasks to different members of the community according to a previously fixed rule. But this is by no means the case. While inside the modern workshop the division of labour is meticulously regulated by the authority of the employer, modern society has no other rule, no other authority for the distribution of labour than free competition. (Marx 1976b, 184)

Marx's conclusion, as Dunayevskaya (2013, 52) puts it, was that Proudhon's individual workshop utopia implied centralized "abstract planning [that] would inevitably lead . . . [to] totalitarianism."

The Communist Manifesto

In 1847–48 their studies had only begun, but under pressure of events Marx and Engels thought it "high time that the Communists should openly, in the face of the whole world, publish their views, their aims, their tendencies" (1976b, 481), and they wrote *The Manifesto of the Communist Party*. Marx began his study of political economy in 1843, but did not begin the work eventually leading to *Capital* until 1850 (Hobsbawm 2012, 13). In the *Manifesto*, the basis of Marx and Engels' concept of capitalism was the proletarians' sale of *labor* to the capitalist, not *labor power*, which was the basis of Marx's theory of value (Hobsbawm 2012, 13), his concept of the capitalist mode of production, and his theory of history. After *Capital*, Marx and Engels supported the republication of the 1848 text with minor amendments, in part because, as Hobsbawm says, its core message, its "demonstration of the historical development of societies, and specifically of bourgeois society, which replaced its predecessors, revolutionized the world, and in turn necessarily created the conditions for its eventual supersession" (2012, 14), had not changed. Only in this broad sense, however, is it true that, "unlike Marxian economics, the 'materialist conception of history' which underlay this analysis had already found its mature formulation in the mid-1840s" (Hobsbawm 2012, 14).

In the preface to the 1872 German edition, Marx and Engels claimed "the general principles . . . are, on the whole, as correct as ever," but they accepted that the *Manifesto's* program in Part 2 needed updating, "would in many respects, be very differently worded today" (1988, 174–75). In the preface to the 1883 German edition, Engels hinted they had "considered a fuller *Umarbeitung oder Ergänzung*," a revision or supplement, but Hobsbawm thought its seriousness "may be doubted," implying that they never "bothered to comment on or modify the economic passages of the document" (2012, 14) because they remained broadly valid. Alternatively, perhaps because they knew the required changes were fundamental, they accepted, after several editions and translations, "But, then, the *Manifesto* has become an historical document which we have no longer any right to alter" (Marx and Engels 1988, 175), seeing no pressing need with *Capital* published in German (1867, 1873), French (1872, 1875), Russian (1872), and eventually English (1886).

Part 2 of the *Manifesto*, "Proletarians and Communists," the Communists' political and economic program, did not call for immediate state ownership of the means of production, limiting its Day 1 expropriations to the

nationalization of land and the formation of “a national bank with State capital and an exclusive monopoly” (Marx and Engels 1976b, 505). Instead, it argued,

The proletariat will use its political supremacy to wrest, by degrees, all capital from the bourgeoisie, to centralise all instruments of production in the hands of the State, i.e., of the producers organised as the ruling class; and to increase the total of productive forces as rapidly as possible. . . . When, in the course of development, class distinctions have disappeared, and all production has been concentrated in the hands of a vast association of the whole nation, the public power will lose its political character. (Marx and Engels 1976b, 504–5)

Part 2 proposed a list of other demands, for example, “A heavy progressive . . . income tax,” the “Abolition of all rights of inheritance,” “Equal liability of all to labour,” and “Free education for all children in public schools” (Marx and Engels 1976b, 505). To some Marxists the *Manifesto*’s “most amazing feature is that it does not include nationalization of industry as such” (Avineri 1968, 206). However, this would be ‘amazing’ only if Marx thought crude communism’s central planning was unavoidable, which is inconsistent with him arguing from 1844 for the ‘rule of the proletariat,’ for the ‘dictatorship of the Democracy’ (Draper 1986, 60, 112). The *Manifesto* argued, “the first step in the revolution by the working class is to raise the proletariat to the position of ruling class, to win the battle of democracy” (Marx and Engels 1976b, 504). Marx’s subsequent calls for the ‘dictatorship of the proletariat,’ we will see, also meant their democratic rule, ‘bottom up’ socialism, not ‘top down’ (Draper 1986).

An alternative interpretation is, therefore, that having won the battle of democracy by an “immense majority” (Marx and Engels 1976b, 495), having taken political control, the workers’ state progressively “centralizes” *ownership* of the means of production in its hands, but “concentrates” *control* in a “vast association of the nation,” that is, control by “the producers organized as the ruling class.” The *Manifesto* called for “Extension of factories and instruments of production *owned* by the State” (Marx and Engels 1976b, 505, emphasis added), not controlled. Marx and Engels distinguished public ownership from control and, consistent with their concept of the ‘mode of commercial intercourse,’ saw the aim of socialism as a new social division of labor, not central planning. The young Marx distinguished “between state ownership and the actual socialization of production,” arguing “that state ownership is a mere legal, formal act; only a step in the direction of a real emancipation of men which should be followed by . . . the development of the material base of society, *and particularly in the social division of labour*” (Selucky 1974, 57). In short, “the new society begins only when men have

abolished labour as drudgery and the mere means of making a living, and transformed it into creative activity” (Selucky 1974, 57).

The stated aim of the *Manifesto* was “the diminishment of bourgeois property and the increase of proletarian property” and therefore, as Lawler says, “Progressive centralization [ownership] of all instruments in the hands of the state . . . does not [necessarily] mean replacement of market production by central planning” (1998, 26; see also Desai 2003, 3; Jossa 2005, 11). To eliminate capitalism’s continual crises, Engels argued in *Principles of Communism*, written around the same time as the *Manifesto*, required “an entirely new organisation of society,” not central planning but a “definite plan” of society (1976, 347). Either “big industry must itself be given up, which is an absolute impossibility, or . . . it makes unavoidably necessary an entirely new organisation of society in which production is no longer directed by mutually competing individual industrialists but rather by the whole society operating according to a definite plan and taking account of the needs of all” (Engels 1976, 347).

According to some interpretations Marx and Engels contradicted their claimed democratic, incremental approach when, after presenting its platform, the *Manifesto* “jumps over the intervening period of step-by-step development to envisage the outcome of this process” (Lawler 1998, 26). The aim was a classless and state-free society, but the *Manifesto* appeared to envisage a quick route through this development, whereby the proletarian state uses its power to “sweep away” capitalism “by force”:

Political power, properly so called, is merely the organized power of one class for oppressing another. If the proletariat during its contest with the bourgeoisie is compelled, by the force of circumstances, to organize itself as a class, if, by means of a revolution, it makes itself the ruling class, and, as such, sweeps away by force the old conditions of production then it will, along with these conditions, have swept away the conditions for the existence of class antagonisms, and of classes generally, and will thereby have abolished its own supremacy as a class. (Marx and Engels 1976b, 505–6)

This, as Lawler says, is the “language of revolutionary negation of capitalism,” its immediate abolition by “force,” which appears to support “the notion that the state should be the master of the socialist economy” (1998, 27). “Force now seems to be everything,” “appears to be not only the first step or a necessary condition but the exclusive method of revolutionary change” (Lawler 1998, 27). However, the “force” Marx and Engels had in mind was economic or, as Lawler puts it, “the force that is exercised in the subsequent period after some required despotic inroads into bourgeois property is indirect rather than direct force” (1998, 28). According to this reading, with the proletarian state holding power and using it to favor workers, “there is a first

phase in which market relations involving capitalist enterprises continue to exist, while property passes gradually into the hands of the proletarian state primarily through economic means, with socialist enterprises successfully competing against capitalist ones” (Lawler 1998, 33). Consistent with this, Engels foresaw “Gradual expropriation of landowners, industrialists, railroad magnates and shipowners, partly through competition by state industry, partly directly through compensation in the form of bonds” (1976, 351), “in short, without recourse to revolutionary violence” (Jossa 2005, 11).

This interpretation, however, underplays the ambiguity introduced by the notion that the revolutionary proletarian state “sweeps away” capitalist conditions (or relations). This statement can be read as the contradictory claim that socialism, in effect, starts on Day 1 with the proletariats’ political victory, with its acquisition and rapid use of the necessary political power to “sweep away” capitalism, “To remove [it] forcibly or as at one blow”; “to remove [it] . . . with a single continuous forceful action.”⁶ This was certainly Marx’s mature aim, as we will see, but it did not fit comfortably within the *Manifesto*’s theoretical framework.

Elsewhere in the *Manifesto* Marx and Engels saw the transition as a gradual one, consistent with their concept in the *German Ideology*, from a bourgeois to a socialist ‘mode of commercial intercourse.’ The *Manifesto* talked of ‘modes of production,’ but linked these firmly to ‘exchange.’ It stressed, “The history of all hitherto existing society is the history of class struggles,” and the development of the bourgeoisie had divided the world into the two final contending classes, but driving the historical process the *Manifesto* describes in its opening passages is the extension of exchange and the division of labor:

The feudal system of industry, under which industrial production was monopolized by close guilds, . . . no longer sufficed for the growing wants of the new markets. . . . The guild masters were pushed on one side by the manufacturing middle class; division of labor between the different corporate guilds vanished in the face of division of labor in each single workshop. . . . Meantime the markets kept ever growing, the demand ever rising. Even manufacture no longer sufficed. Thereupon steam and machinery revolutionized industrial production. The place of manufacture was taken by the giant, Modern Industry, the place of the industrial middle class, by industrial millionaires, the leaders of whole industrial armies, the modern bourgeois. . . . We see, therefore, how the modern bourgeoisie is itself the product of a long course of development, of a series of revolutions in the modes of production and of exchange. (Marx and Engels 1908, 9–10)

Because the envisaged transition was in the mode of commercial intercourse, and the aim was worker rather bourgeois management, “common management of production by the whole of society,” Engels (1976, 353)

argued, it would require “quite different people,” “well-rounded” people who could understand and transcend the capitalist division of labor:

. . . communal control over production by society as a whole and the resulting new development will both require an entirely different kind of human material. People will no longer be, as they are today, subordinated to a single branch of production, bound to it, exploited by it; they will no longer develop one of their faculties at the expense of all others, they will no longer know only one branch, or one branch of a single branch, of production as a whole. Even industry as it is today is finding such people less and less useful. Industry controlled by society as a whole and operated according to a plan presupposes well-rounded human beings, their faculties developed in balanced fashion, able to see the system of production in its entirety. (Engels 1952, 17)

It was because workers lacked “the education and skills that would be required for this communist organization of society” (Lawler 1998, 33) that the first stage had to be incremental. It would take “a significant length of time, perhaps several generations, before workers will develop the capacity to control their affairs themselves” (Lawler 1998, 32). When workers’ education was complete, “it will be common management, not management by an elite central planning body of economic technocrats” (Lawler 1998, 33), because then the workers have the necessary industrial education and skills to supervise themselves, to become their own managers.

The *Manifesto* rejected the early socialists’ notion of property as the direct, physical control of use-values, taken from the political economists, for whom ‘capital’ was the capitalist’s ‘personal property,’ under direct physical control. It emphasized that capital was “social property,” the product of “social power,” and this would not change under socialism. “Capital is . . . not an individual power, it is a social power” (Marx and Engels 1976b, 499). “When, therefore, capital is converted into common property, into the property of all members of society, personal property is not thereby transformed into social property. It is only the social character of the property that is changed. It loses its class character” (Marx and Engels 1976b, 499). The *Manifesto*, however, did not explain how the “common property” functioned, how when state enterprises had out-competed the capitalists, the “vast association” controlled production and distribution as a social power, and neither did Engels. When they had social power, Engels argued, workers would abolish competition and “replace it with association,” a “common plan” for “all members of society” by “common agreement,” but he did not explain how the “common account” worked:

What will this new social order have to be? Answer. Above all, it will have to take the control of industry and of all branches of production out of the hands of mutually competing individuals, and instead institute a system in which all

these branches of production are operated by society as a whole, that is, for the common account, according to a common plan, and with the participation of all members of society. It will, in other words, abolish competition and replace it with association. . . . Private property must therefore be abolished and in its place must come the common utilization of all instruments of production and the distribution of all products according to common agreement—in a word, what is called the communal ownership of goods. (Engels 1952, 12)

After Marx had analyzed money, capital and surplus value, and understood wages as the price of labor power, which could be greater than bare survival; when he had mastered the circuits of capital and capitalist accounting, and understood total social capital, from *Grundrisse* onward, he made clear that the first phase immediately abolishes capitalist social relations of production. The key task for socialists became, not giving workers an industrial education, and not simply political organization, but educating them in the law of value and socialist aims, and working toward Day 1.

The *Manifesto's* comments on “Socialist and Communist Literature” are also inconsistent with a central planning interpretation. It criticized various early forms of “Reactionary Socialism,” “Conservative or Bourgeois Socialism,” and the more recent “Critical-Utopian Socialism and Communism” of Saint-Simon, Fourier, Owen and others, as Marx had in the *Economic Manuscripts of 1844*, for its “universal asceticism and social levelling in its crudest form” (Marx and Engels 2012, 72). As Draper (1986, 39) says, the utopian socialists “were all inventors of Socialism from Above . . . Saint-Simon was prolific in schemes for dictatorial regimes in which some man of power would impose the latest Saint-Simonian plan upon a happy people.” In 1848, Proudhon “avidly thirsted for absolute authority,” reserving the term ‘dictatorship’ for “*extreme democracy*” (Draper 1986, 59). Marx and Engels praised the socialists’ “critical element. They attack every principle of existing society” (2012, 74). However, because “class antagonisms . . . were at the time . . . under their earlier, indistinct and undefined forms only,” their “fantastic pictures of future society,” including abolishing wage labor and making the state attend to the “superintendence of production,” become its central planner and controller, were “of a purely Utopian character” (Marx and Engels 2012, 74). In the preface to the 1872 German edition of the *Manifesto*, after Marx had made the forms of class antagonism ‘distinct’ and ‘defined’ by defining the mode of production as the method of surplus extraction, this section, Marx and Engels “admitted . . . was out of date” (Hobsbawm 2012, 11). There was more literature, but Marx’s criticism of the utopians had significantly developed, alongside his criticism of capitalism, as we will see.

The *Manifesto's* greatest weakness, Marxists generally agree, was its prediction that the bourgeoisie will produce “above all . . . its own gravediggers,” the proletariat, “whose inevitable destiny . . . is to overthrow

capitalism,” which has been “a failure” (Hobsbawm 2012, 18, 21). Hobsbawm points out, nevertheless, the *Manifesto* “is not a determinist document. The graves have to be dug by or through human action” (2012, 27). However, it assumed that “the situation of the proletariat,” exploited workers whose “cost of production” was set by capitalists at “the physiological minimum of keeping the worker alive” would generate discontent, and “once organized as a necessarily political class movement, it could . . . rally round itself, the discontent of other classes, and thus acquire political power” (Hobsbawm 2012, 13, 20). Marx continued to argue for the inevitability of socialism in his mature work. However, its basis became explaining the capitalist mode of production ‘scientifically,’ and working out the socialist alternative so that workers would understand it was necessary, practical and desirable to remove the fetters of capitalist relations to develop the forces of production, a task he pursued from the late 1850s to the end of his life. In his later works Marx proposed immediately eliminating capitalism’s central contradiction, its ‘class character,’ the private ownership of capital and ‘free’ waged workers, through ownership of the means of production by the state and, according to the accounting interpretation, appropriating total social capital’s system of results control through accounting, to create a universal system of worker cooperatives.

MATURE WRITINGS

Having discovered his theory of surplus value, Marx used it in *Grundrisse* to criticize utopian socialists’ proposals for a ‘labor-money’ economy because, by proposing in effect to simply abolish capitalism’s law of value, they presupposed a central planning authority that could make what were, Marx pointed out, impossible calculations. An early example was Robert Owen’s society of co-operative communities where workers brought products to an ‘Equitable Labour Exchange’ and received a labor voucher for them worth their labor hours. The worker could use the voucher to take from the Exchange’s stock of products those worth the same number of hours to produce, after taking into account the labor-time costs of the raw materials. His ‘co-operative commonwealth’ based on labor-money exchange of all commodities for ‘equal values of labor,’ Owen argued, could work within capitalism. His scheme failed, but the idea of labor money appeared in other socialists’ writings, including Proudhon’s, whom Marx singled out for criticism for proposing it as a way of reforming capitalism. In his *Critique of Political Economy*, Marx (1971, 83) credited the English political economist John Gray with being “the first to set forth the theory that labour-time is the direct measure of money in a systematic way,” and noted, “sixteen years later . . . Proudhon would be taking out a patent for the same invention.”

The idea that “time-chits” for the actual hours worked measured the value of the worker’s labor time in producing the commodity, its ideal exchange value, and would maintain their convertibility as labor money with no market mechanism to balance production and consumption, was illusory, Marx argued, because in capitalism prices did this by fluctuating around average, socially necessary, labor time. The socialists’ labor money implied the direct “Equation of . . . value and price,” that ‘value,’ based on abstract labor time, equaled actual or concrete labor time, the ‘price,’ “But such is by no means the case. The value of commodities as determined by labour time is only their *average value*” (Marx 1973, 137). Marx gave an example where the worker brings 1lb of bread and receives a “time-chit” of “1/x hours” (1973, 138–39). If the value of 1lb of bread, its average price, is 8d, the time-chit representing the actual labor expended in making any particular loaf of bread will almost never equal its value. “An infinite equation would result. 1/x hours of labour (as contained in 8d or represented by a chit) > < than 1/x hours of labour (as contained in the pound of bread)” (Marx 1973, 139). Because to measure value the time-chit should represent “an ideal labour time which would be exchanged sometimes against more and sometimes against less of the actual variety,” without money based on a “third commodity” and necessary fluctuations in market prices around the ideal, “confusion” would result (Marx 1973, 139). The situation would constantly arise where, for example, “Commodity A, the objectification of 3 hours’ labour time, is = 2 labour-hour-chits; commodity B, the objectification, similarly, of 3 hours’ labour, is = 4 labour hour-chits” (Marx 1973, 139). The problem was determining the values of the time-chits, the average labor times, the exchange values or long run prices of commodities, because

The time-chit, representing *average labour time*, would never correspond to or be convertible into *actual labour time*; i.e. the amount of labour time objectified in a commodity would never command a quantity of labour time equal to itself, and vice versa, but would command, rather, either more or less, just as at present every oscillation of market values expresses itself in a rise or fall of the gold or silver prices of commodities. (Marx 1973, 139)

The utopian socialists had not recognized the problem because, Marx pointed out, criticizing Gray’s proposal for a central bank issuing time-chits as labor money, their convertibility in effect presumed that an omniscient bank would replace the market, would become society’s general buyer, seller and producer. The bank would have to buy all commodities produced and sell them all back in exchange for the time chits, would therefore have to set their prices (Foley 1986, 165), and would therefore have to organize the necessary production and distribution of all commodities, including labor, to achieve this. The Saint Simonians who adopted this proposal, had in effect, Marx

concluded, turned “their bank into the papacy of production,” that is, a central controller with impossible accounting calculations to perform:

“The bank would . . . be the general buyer and seller. . . . It would not only have to determine the time in which a certain quantity of products had to be produced, and place the producers in conditions which made their labour equally productive (i.e. it would have to balance and to arrange the distribution of the means of labour), but it would also have to determine the amounts of labour time to be employed in the different branches of production. The latter would be necessary because, in order to realize exchange value and make the bank’s currency really convertible, social production in general would have to be stabilized and arranged so that the needs of the partners in exchange were always satisfied. Nor is this all. The biggest exchange process is not that between commodities, but that between commodities and labour. . . . The workers would not be selling their labour to the bank, but they would receive the exchange value for the entire product of their labour, etc. Precisely seen, then, the bank would be not only the general buyer and seller, but also the general producer. *In fact either it would be a despotic ruler of production and trustee of distribution, or it would indeed be nothing more than a board which keeps the books and accounts for a society producing in common.* The common ownership of the means of production is presupposed, etc., etc. The Saint-Simonians made their bank into the papacy of production. (Marx 1973, 155–56, emphasis added)

Marx criticized the utopian socialists, in short, because their “labor certificate system implies full socialization of production under central direction” (Foley 1986, 165), which meant the idea of “a bank which directly creates the mirror image of the commodity in the form of labour money is a utopia” (Marx 1973, 160). Convertible labor money presupposed that individual labor was “*posited* at the outset as a link in *general* production” (Marx 1973, 171–72), was part of a comprehensive central bank plan or budget, which was impossible. It was therefore, as he put it in *A Contribution to the Critique of Political Economy*, mere “dogma that a commodity is immediately money or that the particular labour of a private individual contained in it is immediately social labour,” and he predicted “bankruptcy” for any bank that operated on that basis (Marx 1971, 85–86). Even assuming the bank knew the hours of concrete labor spent on all commodities, it could not calculate their abstract labor equivalents, their long-run exchange values, which required competitive markets, Marx argued, where short-term prices diverge from values (Moore 1993, 73–74). According to Gray’s proposal, by contrast, “Goods are to be produced as commodities” by individual producers, “but not exchanged as commodities” (Marx 1971, 85), which made their values, the real costs of production, incalculable.

Alternatively, assuming a society producing in common for use values, although “not what Gray had in mind,” Marx suggested, the bank becomes

society's bookkeeper of actual labor time certificates, "a board which keeps the books and accounts" (1971, 85; 1973, 156). These time-chits would not be money but contributions to "communal labour-time," the production and sharing of use values, which would mean "the very basis of bourgeois production would be abolished" (1971, 85). This was the "pious wish" of British socialists, as he put it in the *Critique of Political Economy*, "to get rid of money, and together with money to get rid of exchange value, and with exchange-value to get rid of commodities, and with commodities to get rid of the bourgeois mode of production" (Marx 1971, 86). However, "it was left to M. Proudhon and his school to declare seriously that the degradation of *money* and the exaltation of *commodities* was the essence of socialism and thereby to reduce socialism to an elementary misunderstanding of the inevitable correlation existing between commodities and money" (Marx 1971, 86). Abolishing money but not capitalism, Marx noted in Volume 1 of *Capital*, "One might just as well abolish the Pope while leaving Catholicism in existence" (1976a, 181).

In *Grundrisse* Marx criticized "the foolishness of those socialists" (1973, 248) who blamed the ills of capitalism on its distortion of markets, of exchange value, and claimed that their labor-money schemes would remove them. "The first basic illusion of the time-chitters consists in . . . expressing value in units of labor time itself instead of a given objectification of labour time, say gold and silver—that in so doing . . . the time-chit does away with all crises, all faults of bourgeois production" (Marx 1973, 138). Socialists had foolishly claimed to "demonstrate that exchange and exchange value etc. are *originally* (in time) or *essentially* (in their adequate form) a system of universal freedom and equality, but that they have been perverted by money, capital, and so on. Or, also, that history has so far failed to implement them in their true manner" (Marx 1973, 248–49). Socialists could not escape the problem of allocating labor in a complex economy, which capitalism solves by competitive markets, Marx argued in *Grundrisse* and the *Critique of Political Economy*, by abolishing them. In Volume 1 of *Capital*, we will see, "his language clearly implies that solution of this problem involves translating concrete into abstract labor" (Moore 1993, 74), which means starting from value on Day 1, which Volume 3 made explicit.

Rather than abolish money and markets, to implement socialism the fundamental contradiction to remove, Marx argued in *Grundrisse*, was that in capitalism the propertyless worker produced "the property of a personality alien to the worker" (1973, 512), who was, that is, accountable to a capitalist. Capitalism produced not just commodities, but through its system of accountability, capitalists and workers: "The *production of capitalists and wage labourers is . . . a chief product of capital's realization process*" (Marx 1973, 512). So long as workers remained accountable to capital, therefore,

the “idea held by some socialists that we need capital but not the capitalists is altogether wrong”:

When objectified labour is, in this process, at the same time posited as the worker’s *non-objectivity*, as the objectivity of a subjectivity antithetical to the worker, as *property* of a will alien to him, then capital is necessarily at the same time the *capitalist*, and the idea held by some socialists that we need capital but not the capitalists is altogether wrong. It is posited within the concept of capital that the objective conditions of labour—and these are its own product—take on a *personality* towards it, or, what is the same, that they are posited as the property of a personality alien to the worker. The concept of capital contains the capitalist. (Marx 1973, 512)

Capital is “necessarily at the same time the capitalist” because the commodities the worker produces are “property of a will alien to him,” a “personality” with a purpose for which the worker is accountable, and therefore only by removing this accountability is capital abolished. It was necessary, in short, to abolish the capital-labor relation itself. As he put it in *Theories of Surplus Value*, “English socialists say ‘We need capital, but not the capitalists.’ But if one eliminates the capitalists, the means of production cease to be *capital*” (Marx 1972, 296). In the *Critique of the Gotha Programme*, we will see, Marx proposed in effect abolishing the capitalist system of accountability, making publicly owned cooperative enterprises accountable to their workers and to the public, which meant ‘capital’ (public enterprise funds) would not ‘contain the capitalist.’

Abolishing capital and capitalists did not mean immediately abolishing all markets. Rather than simply abolishing the unbridled “anarchy of production” seen in the *Poverty of Philosophy*, in *Grundrisse*, as Lavoie (1985, 36) says, “it would be a caricature to refer to Marx’s anarchy of production as mere chaos, for the law of value enforces a regularity on the market.” With the development of the world market, Marx now recognized that capitalists, who are aware of market fluctuations, and of their interdependence, collect information to, within limits, manage supply and demand:

. . . institutions emerge whereby each individual can acquire information about the activity of all others and attempt to adjust his own accordingly, e.g. lists of current prices, rates of exchange, interconnections between those active in commerce through the mails, telegraphs etc. (the means of communication of course grow at the same time). . . . This means that, although the total supply and demand are independent of the actions of each individual, everyone attempts to inform himself about them, and this knowledge then reacts back in practice on the total supply and demand. (Marx 1973, 161)

To Lavoie this means, “Market processes operating through the law of value and the equalization of profit rates guide production well enough to permit a complex network of interdependent production plans to develop” (1985, 36). It follows, Lavoie concludes (1985, 36–37), that Marx was arguing, “mankind can do this system one better, that central planning can enable us to adopt a much more complete coordination of production activities.” This, according to Lavoie (1985, 37), is what Marx (1973, 162) meant when he argued, “individuals cannot gain mastery over their own social interconnections before they have created them,” and by his vision of “Universally developed individuals, whose social relations, as their own communal relations, are hence also subordinated to their own community control.” In short, Lavoie deduces, Marx argued that individuals’ mastery and control depended on socialism taking capitalist planning to its logical conclusion. However, according to the accounting interpretation, capitalists collectively control and coordinate production through capital and product markets and decentralized accounting calculations (Bryer 2017), which Marx explained by the law of value, not through “interdependent production plans.” In *Grundrisse*, he agreed with the classical economists, applauded the “objective connection” between individuals produced by markets, but concluded, “Competition in general, this locomotive force of the bourgeois economy, does not establish its laws but is their executor” (Marx 1973, 161, 552). In the 1840s, “Marx regarded competition as the crucial mechanism” driving the history of production through increasing the division of labor, whereas “*Grundrisse* marked an entirely new understanding” (Heinrich 1989, 64–65), that capitalist production explained its competition.

In *The Poverty of Philosophy*, competition “implements the law” that “relative value . . . is determined by the labour time,” but this was a law of competition, that only those with the lowest costs would survive the anarchy, a “minimum [that] is *ascertained* by competition” (Marx 1976b, 135–36, emphasis added), not the law of value in production. In *Grundrisse*, by contrast, “Conceptually, competition is nothing but the inner *nature of capital*, its essential character, manifested and realised as the reciprocal action of many capitals upon each other; immanent tendency realised as external necessity” (Marx 1973, 414). This inner nature, the production of surplus value, the monetary expression of surplus socially necessary labor time, was realized by competition, and now, Marx argued, through the “method by which capital calculates surplus value” (1973, 767; see Bryer 2017, chapter 5). Marx appreciated the social achievement of the market, “the beauty and greatness of it” compared to pre-capitalist societies (1973, 161), but criticized its limited consciousness of itself “as a whole”:

As much, then, as the whole of this movement appears as a social process, and as much as the individual moments of this movement arise from the conscious will and particular purposes of individuals, so much does the totality of the process appear as an objective interrelation, which arises spontaneously from nature; arising, it is true, from the mutual influence of conscious individuals on one another, but neither located in their consciousness, nor subsumed under them as a whole. Their own collisions with one another produce an alien social power standing above them, produce their mutual interaction as a process and power independent of them. (Marx 1973, 196–97)

Marx certainly argued, “A nonutopian socialism must be able to supplant the imperfect coordination of the law of value with some other ordering mechanism,” but it does not follow that this is “the conscious central plan” (Lavoie 1985, 37; see also Moore 1993, 68, 74). According to Lavoie (1985, 37), “The essence of Marx’s critique of capitalism is that the capitalist mode of production does not permit all of social production to be rationally planned in advance.” According to the accounting interpretation, by contrast, the ‘essence’ is capitalism’s mentality and social relations limiting social surpluses, fettering the development of the forces of production.

In *Grundrisse*, the historical “development of the social individual . . . appears as the great foundation-stone of production and of wealth,” but always holding it back, fettering its development, the aim of all class societies was the “creation of . . . not-labour time, free time, for a few” (Marx 1973, 705, 708). Capitalism distinctively “increases the surplus labour time of the mass by all the means of art and science, because its wealth consists directly in the appropriation of surplus labour time; since *value [is] directly its purpose*, not use value” (Marx 1973, 707). Capitalism, therefore, “despite itself,” was creating the necessary conditions for socialism because it was “instrumental in creating the means of social disposable time, in order to reduce labour time for a whole society to a diminishing minimum, and thus to free everyone’s time for their own development” (Marx 1973, 708). Capitalism was contradictory, however, because its “tendency [was] always, on the one side, *to create disposable time*, [and] *on the other, to convert it into surplus labour*” (Marx 1973, 708). Workers would come to understand this contradiction:

The more this contradiction develops, *the more does it become evident* that the growth of the forces of production can no longer be bound up with the appropriation of alien labour, but that *the mass of workers must themselves appropriate their own surplus labour*. Once they have done so—and *disposable time* thereby ceases to have an *antithetical* existence—then, on one side, necessary labour time will be measured by the needs of the social individual, and, on the other, the development of the power of social production will grow

so rapidly that, even though production is now calculated for the wealth of all, *disposable time* will grow for all. For real wealth is the developed productive power of all individuals. The measure of wealth is then not any longer, in any way, labour time, but rather disposable time. (Marx 1973, 708, first emphasis added)

Socialism would also produce surplus labor, but the method of its production and distribution would change. Instead of capitalists appropriating surplus labor, socialism puts it at every individual's disposal. Rather than measuring surplus labor as value, as average socially necessary labor time, "necessary labour time will be measured by the needs of the social individual," that is 'directly' as 'the offspring of association,' and "production is now calculated for the wealth of all, disposable time" (Marx 1973, 708), that is, equally. The difference was that whereas capitalism indirectly subsumed individuals under social production, valued their labor indirectly as the average necessary, in socialism the value of labor time would, Marx made clear in *Capital*, be an equal part of "directly social production," where individuals would subsume social production. Under capitalism,

The very necessity of first transforming individual products or activities into exchange value, into money, so that they obtain and demonstrate their social power in this objective [*sachlichen*] form, proves two things: (1) That individuals now produce only for society and in society; (2) that production is not directly social, is not 'the offspring of association,' which distributes labour internally. Individuals are subsumed under social production; social production exists outside them as their fate; but social production is not subsumed under individuals, manageable by them as their common wealth. (Marx 1973, 158)

As capitalism developed Marx foresaw "*The creation of a large quantity of disposable time* apart from necessary labour time for society generally and each of its members," so there was "room for the development of the individuals' full productive forces, hence those of society also" (1973, 208). In the *Critique of the Gotha Programme*, we will see, Marx clarified that socialism would use this room to develop the forces of production, including every individual, using art and science, so that the social value of every hour of labor would be directly equal, instead of value being determined indirectly as average socially necessary labor time.

Socialism in *Capital*

Workers would come to understand, Marx reiterated in Volume 1 of *Capital*, "The monopoly of capital [has] become . . . a fetter upon the mode of production which has flourished alongside and under it" (1976a, 929). Based on

this understanding, “The centralization of the means of production and the socialization of labour reaches a point at which they become incompatible with their capitalist integument,” because only when workers do understand is “This integument . . . burst asunder. The knell of capitalist property sounds. The expropriators are expropriated” (Marx 1976a, 929). The centralization of capitalist ownership of the means of production in fewer hands through joint stock companies and the credit system, the socialization of labor within larger concentrations, and capitalism’s superstructure of accounting control, create necessary conditions for socialism, which eventually workers will understand. Marx did not therefore simply conclude in *Capital* that it was “the commodification or marketization of the capacity of human beings to work that constitutes the essence of the capitalist system” (Lawler 1998, 34, emphasis added), which workers must understand, because it overlooks ‘free capital,’ the capital market, and its system of accountability.

Society’s production would be maximized only by “a community of free individuals carrying on their work with the means of production in common” (1996, 89), with “socialised man, the associated producers, rationally regulating” production “under common control,” Marx argued in *Capital* (1998, 807), not its central dictation. On Day 1 of socialism, according to the accounting interpretation, workers rationally regulate production because they understand the law of value underlying capitalist accounts, and that the key to production is ‘free social agents,’ that is, we will see, workers as shareholders in cooperative enterprises and in society, who exercise and are under results control, accountable for value. Workers’ understanding of the capitalist law of value answers the criticism that whereas Marx stressed the complexity of capitalism, his vision of socialism was an unhelpful ‘simplification’ (e.g., Nove 1983, 32; Blackburn 1991, 12). Blackburn (1991, 12) for example argues, “In some famous passages Marx uses a rhetoric which implies that in economics too the ‘simplification’ thesis holds—everything will be transparent and readily understood after capitalism has been suppressed.” Blackburn highlights what for him is “the strange proletarian ‘Robinsonade’ towards the end of the section on the fetishism of commodities in the first chapter of *Capital* Volume I, where the world working class, as a collective entity, is compared to Crusoe on his island” (1991, 12). Marx wrote,

Let us . . . imagine . . . an association of free men, working with the means of production held in common, and expending their many different forms of labour-power in full self awareness as one single social labour force. All the characteristics of Robinson’s labour are repeated here, but with the difference that they are social instead of individual. All Robinson’s products were exclusively the result of his own personal labour and they were therefore directly objects of utility for him personally. The total product of our imagined association is a social product. (Marx 1976a, 171)

Marx (1976a, 170) had Robinson keep accounts—“Our friend Robinson . . . having saved a watch, ledger, ink and pen from the shipwreck, he soon begins, like a good Englishman, to keep a set of books”—and he expected no less from his imagined proletarian association. Rather than an omniscient planner, Marx in effect imagines the association keeping accounts, targeted or ‘planned’ departmental and social income accounts, based on equal social value per labor hour, an assumption that, he clarified in *Critique of the Gotha Programme*, was the interim aim of socialism, his accounting metric for apportioning production to departments and distribution to individuals:

One part of this [social] product serves as fresh means of production and remains social. But another part is consumed by the members of the association as means of subsistence. This part must therefore be divided amongst them. . . . *We shall assume, but only for the sake of a parallel with the production of commodities, that the share of each individual producer in the means of subsistence is determined by his labour time.* Labour-time would in that case play a double part. Its apportionment in accordance with a *definite social plan* maintains the correct proportion between the different functions of labour and the various needs of the associations. On the other hand, labour time also serves as a measure of the part taken by each individual in the common labour, and of his share in the part of the total product destined for individual consumption. The *social relations* of the individual producers, both towards their labour and the products of their labour, are here *transparent in their simplicity*, in production as well as in distribution. (Marx 1976a, 171–72, emphases added)

Drawing a parallel between the determination of an individual’s subsistence by social labor time in socialism, and socially necessary labor time under capitalist production, implies that the value of every hour of social labor time is equal. Blackburn suggests, “The reference . . . [to] simplification . . . is at least half playful” (1991, 12). However, the social relations are “transparent” because Marx’s “definite social plan” for apportioning labor time between functions and individuals is a scheme based on society’s target income accounts, we will see, that all workers use to hold cooperative enterprises accountable for targeted results to them and society, not a central plan. Blackburn (1991, 12) accepts, “in the context of the book as a whole, [it] does not justify attributing to Marx the synoptic fallacy that the world economy could be run by an omniscient planner. The Comtean ‘socialism’ which did lead to such a view had no attractions for Marx.” It is therefore misleading to suggest, as others do, that Marx’s vision of “common control” means, “production in such a community is organized and *directed* socially,” that there is an “*authority that governs* production and the disposition of social labor” (Foley 1986, 168, emphases added).

This is not to say that society organized as an association of free producers does not plan. In Volume 2 of *Capital* Marx recognized it would be necessary for “society to calculate beforehand,” to budget for long-term investments, such as railways, to develop the forces of production:

The question then comes down to the need of society to calculate beforehand how much labour, means of production, and means of subsistence it can invest, without detriment, in such lines of business as for instance the building of railways, which do not furnish any means of production or subsistence, nor produce any useful effect for a long time, a year or more, while they extract labour, means of production and means of subsistence from the total annual production. In capitalist society however where social reason always asserts itself only *post festum* great disturbances may and must constantly occur. (Marx 1997, 314)

Calculating beforehand does not mean producing a central plan, as Marxists often conclude from Marx’s comment in Volume 1 of *Capital* that in the workshop the capitalist has “undisputed authority,” which they read to mean that the capitalist plans and supervises everything, and by endorsing “conscious attempts” to socially control production Marx proposed the same for socialist society. Marx wrote:

Division of labour within the workshop implies the undisputed authority of the capitalist over men, who are merely the members of a total mechanism which belongs to him. . . . The same bourgeois consciousness which celebrates the division of labour in the workshop, the lifelong annexation of the worker to a partial operation, and his complete subjection to capital, as an organization of labour that increases its productive power, denounces with equal vigour every conscious attempt to control and regulate the process of production socially, as an inroad upon such sacred things as the rights of property, freedom and the self-determining ‘genius’ of the individual capitalist. It is very characteristic that the enthusiastic apologists of the factory system have nothing more damning to urge against a general organization of labour in society than that it would turn the whole of society into a factory. (Marx 1976a, 476–77)

To many Marxists this passage means, “the authority within a production unit is its owner or his employee who directs and organizes the production unit . . . by an exact plan, and by a conscious coordination of employees,” so “why should it not be possible to apply these features of enterprise management in the whole of society” (Selucky 1974, 56). It shows, according to Lavoie, Marx “believed that . . . a gradually increasing concentration of capital into larger and fewer separate planning entities would pave the way for . . . a single, unified plan” because “Within the enterprise, production takes place rationally according to the single conscious will of the capitalist owner”

(Lavoie 1985, 23, 41), that is, using supervision and other action controls. This, Lavoie (1985, 44) argues, explains the more important role Marx saw for ‘bookkeeping’ in socialism (discussed below), which he supposes was for planning, accounting for “planned production,” that is, budgeting. *Accounting for Value*, by contrast, argued that Marx’s explanations of capitalist control of the labor process within the enterprise, its real subordination of labor, see capitalists exerting their “will,” their demand for maximum ROI, primarily through results control, which is also the basis of the enterprise’s external accountability to the capital market (Bryer 2017, chapter 2). There is “authority” in the factory, and on the railways, for example, that Engels (1872) argued would remain necessary, but Marx added, “discipline will become superfluous under a social system in which the labourers work for their own account, as it has already become practically superfluous in piece-work” (1998, 87), that is, insofar as workers are under results control.

Marx certainly criticized the “anarchic” *capitalist* “system of competition” based on “squandering” labor power and means of production and the large socially unproductive overheads it requires, particularly the costs of capitalist control, and the financial sector (see Bryer 2017, chapter 7). This, however, was “the anarchy in *production* itself, an anarchy that in its turn presupposes *unbridled exploitation of labour-power* by the capitalist” (Marx 1976a, 608, emphases added), not in markets generally. It was “The *capitalist mode of production*, while it enforces economy in each individual business, [that] also begets, by its anarchic system of competition, the *most outrageous squandering of labour-power* and of the social means of production, not to mention the creation of a vast number of functions at present indispensable, but in themselves superfluous” (Marx 1976a, 667, emphases added). The abolition of ‘free’ wage labor, of labor power as a commodity, and capital, was the core of Marx’s concept of socialism, not the “abolition of all market relations” (Lavoie 1985, 46). It is true that “Marx explicitly said that . . . ‘directly associated labour’ is ‘a form of production that is entirely inconsistent with commodity production’” (Lavoie 1985, 44), but by “commodity production” he meant capitalist production, with labor power as a commodity, not abolishing “all market relations” and introducing “central planning.”

As Jossa (2005, 4) puts it, according to Marx, “the main contradiction to be solved in capitalism is not the opposition between plan and market, but the capital-labour opposition, or, in different words, the conflict between a class that wields all power and another whose duty it is to obey passively.” The accounting interpretation supports Jossa’s conclusion that “to view market relations, not power relations, as the crucial factor . . . is a gross mistake which diverts attention to minor factors and away from the fundamental point, which is the existence—or absence—of a ‘bourgeois’ class opposing

the rise of workers to power” (2005, 4). Rather than central planning, Marx’s concept of socialism is consistent, we will see below, and in the following section, with initially retaining competitive markets for products and services, but not for labor power or capital, and society calculating beforehand by formulating a target national income account, and holding cooperative enterprises accountable for results to all workers. Society would not calculate beforehand using PV, discounting society’s expected future cash flows to reflect time-preference because, Marx insisted, “If we conceive society as being not capitalist but communist, there will be no money-capital at all in the first place, nor the disguises cloaking the transactions arising on account of it” (Marx 1997, 314).

Instead, Marx emphasized in Volume 2 of *Capital*, “Book-keeping, as the control and ideal synthesis of the process, becomes the more necessary the more the process assumes a social scale and loses its purely individual character” (1997, 138–39), which would therefore be more necessary in socialism. “It is therefore more necessary in capitalist production than in the scattered production of handicraft and peasant economy, more necessary in collective [communal] production than in capitalist production” (Marx 1997, 138–39; 1978, 212). Because workers remain accountable, Marx’s socialism does not depend on the selfless “socialist worker [who] gives [sic] her labor as part of the grand mosaic of social labor and works to ensure the survival and development of the society as a whole” (Foley 1986, 168), that is, works selflessly to implement the plan. The selfless socialist worker is the result, not the premise, of socialist accountability, and appears only in the higher phase of communism. During the first phase, as Marx put it, “Freedom in this field can consist only in socialised man, the associated producers, rationally regulating their interchange with Nature, bringing it under their common control,” consciously recognizing that socialism is still “a realm of necessity” (1998, 807) for the individual and society. This means, we will see, workers remain accountable to their cooperative enterprises and to society for results as rational free agents, just as enterprises and society are accountable to them (see figure 8.2).

Marx argued in *Capital* that socialism preserves the positive features of capitalism—innovation and the mobilization of society’s resources—and removes the negative—the conflict between private and social interests (Foley 1986, 160, 162). The most positive feature was its calculative mentality, its “matter-of-fact materialism,” its “restlessly seeking instruments to achieve its ends” (Foley 1986, 161), which had created machinery and a social organization of capital and labor that multiplied humankind’s productive powers, creating undreamed of amounts of surplus labor, its “civilising aspect” (Marx 1998, 806). In Volume 3 he stressed capitalism’s strength was that its method of extracting surplus labor promoted the rapid and extensive

development of the forces of production, “elements for a new and higher formation” where producing surplus labor would remain necessary:

Surplus labour in some form must always remain, as labour beyond the extent of given needs. It is just that in the capitalist, as in the slave system, etc., it has an antagonistic form and its obverse side is pure idleness on the part of one section of society. A certain quantum of surplus labour is required as insurance against accidents and for the progressive extension of the reproduction process that is needed to keep pace with the development of needs and the progress of population. It is one of the civilizing aspects of capital that it extorts this surplus labour in a manner and in conditions that are more advantageous to social relations and to the creation of elements for a new and higher formation than was the case under the earlier forms of slavery, serfdom, etc. (Marx 1981, 958)

In Volume 3 Marx theorized the universalization of the joint stock company, its role in the concentration and centralization of capital, the formation of the capital market, capitalism in its advanced form, and implicitly the role of accounting that would make these developments possible (Bryer 2000a, 2005, 2006a, 2017, chapter 3). In its advanced form the capitalists’ social power appeared in “the stock companies, in which social means of production appear as individual property,” so that “instead of overcoming the antithesis between the character of wealth as social and as private wealth, the stock companies merely develop it in another form” (Marx 1998, 437). To transcend this antithesis, Marx (1998, 438) argued, the proletariat must combine the “transitional form” of joint stock companies with the “transitional form” of worker owned cooperatives.

The mere fact that there are “a number of passages in which Marx explicitly extolled the cooperative movement,” as Jossa (2005, 4) says, “confute the wrong, but widely held assumption that Marx was inimical to the market and rejected cooperation as a production mode even for the transition period.” The movement of history that produced the necessary conditions for socialism was the concentration and centralization of capital, the socialization of production and capital, which had created joint stock companies, which allowed the creation of cooperative factories, workers owning and controlling the means of production. This new form of organization, Marx concluded, was one element of “the first sprouts of the new,” the new social relations of socialism, because the workers became their “own capitalist” (1998, 438), that is, they would reap what would now transparently appear to them as the surplus value they had produced and realized. “With the development of cooperatives on the workers’ part . . . the last pretext for confusing profit of enterprise with the wages of management was removed, and profit came to appear in practice as what it undeniably was in theory, mere surplus value, value for which no equivalent was paid, realized unpaid labour” (Marx 1981, 513–14).

Within capitalism, cooperatives must compete with capitalists who exploit labor-power. Despite being “first sprouts,” cooperatives must therefore also exploit labor power in their “actual organization,” that is, in their control of the valorization process, and therefore must “reproduce . . . all the shortcomings of the present system” because, the following section argues, it prevents them pursuing the socialist aim of ‘directly’ producing equal social value from every hour of labor:

The co-operative factories of the labourers themselves represent within the old form the first sprouts of the new, although they naturally reproduce, and must reproduce, everywhere in their actual organization all the shortcomings of the prevailing system. But the antithesis between capital and labour is overcome within them, if at first only by way of making the associated labourers into their own capitalist, i.e., by enabling them to use the means of production for the employment of their own labour. (Marx 1998, 438)

Becoming their “own capitalist” and competing against capitalists, cooperatives could only ever be “first sprouts.” Capitalism, however, had produced the material and institutional conditions that allowed cooperatives to emerge and its joint stock companies and credit system provided the necessary means to resolve the antagonism between capital and labor “positively,” which required joint stock companies transformed into cooperatives on a “national scale”:

They show how a new mode of production naturally grows out of an old one, when the development of the material forces of production and of the corresponding forms of social production have reached a particular stage. Without the factory system arising out of the capitalist mode of production there could have been no co-operative factories. Nor could these have developed without the credit system arising out of the same mode of production. The credit system is not only the principal basis for the gradual transformation of capitalist private enterprises into capitalist stock companies, but equally offers the means for the gradual extension of co-operative enterprises on a more or less national scale. (Marx 1998, 438)

Only a gradual extension of cooperatives was possible under capitalism, but for Marx, “The capitalist stock companies, as much as the co-operative factories, should be considered as transitional forms from the capitalist mode of production to the associated one, with the only distinction that the antagonism is resolved negatively in the one and positively in the other” (1998, 438). The cooperative movement, “especially the co-operative factories raised by the unassisted efforts of a few bold ‘hands,’” were “great social experiments” (Marx 1985a, 11). However, to transcend the contradiction between social

and individual wealth in joint stock companies, in his inaugural address to the Working Men's International Association in 1864 Marx emphasized, "To save the industrial masses, cooperative labour ought to be developed to national dimensions, and, consequently, to be fostered by national means" (1985a, 12), by a publicly owned credit system. For this, "the great duty of the working classes" was to "conquer political power" (Marx 1985a, 12), which they could use to expropriate the joint stock companies to positively resolve the antagonism between capital and labor generally.

Marx did not argue that the cooperative form of organization "does away with despotic capitalist relations," as some Marxists argue, because it "allows workers to supervise their own work process, returning in some sense to the self-directing work styles of previous societies" (Lawler 1998, 36). Cooperatives may well have a hierarchical organization, which Marx recognized existed in capitalist organizations not simply for exploitative purposes (Bryer 2017, chapter 7), and cooperative workers may not supervise their own work process. Marx argued, "Cooperative factories provide the proof that the capitalist has become just as superfluous as a functionary in production," but only "In so far as the work of the capitalist does not arise from the production process simply as a capitalist process, i.e. does not come to an end with capital itself" (Marx 1981, 511). Capitalists' discipline, their "fanaticism" of fines, dismissals, threats, and so on "would become superfluous in a state of society where the workers worked on their own account, just as it is already almost superfluous in the case of piece-work" (Marx 1978, 176). In a cooperative, the fundamental, qualitative difference was in accountability, that there was no "class of masters employing a class of hands; that to bear fruit, the means of labour need not be monopolized as a means of dominion over, and extortion against, the labouring man himself" (Marx 1985a, 11), who need not be accountable to a capitalist.

Cooperatives removed one aspect of despotic capitalist relations because the workers would appropriate any surplus, which shows that workers need not suffer "subordination" to capital, be accountable for producing profit to a capitalist, as he explained to delegates attending the Working Men's International Association in 1866. "We acknowledge the co-operative movement as one of the transforming forces of the present society based upon class antagonism. Its great merit is to practically show, that the present pauperising, *and despotic system of the subordination of labour to capital* can be superseded by the republican and beneficent system of the association of free and equal producers" (Marx 1985b, 190, emphasis added). Marx added, "to prevent cooperative societies from degenerating into ordinary middle-class joint stock companies . . . all workmen employed, whether shareholders or not, ought to share alike" (1985b, 190). However, to create "one large and harmonious system," required changes in the "general conditions of society," which required

workers' political control: "by their private efforts, the co-operative system will never transform capitalist society. To convert social production into one large and harmonious system of free and co-operative labour, general social changes are wanted, changes of the general conditions of society, never to be realised save by the transfer of the organised forces of society, viz., the state power, from capitalists and landlords to the producers themselves" (Marx 1985b, 190). The "general social changes" required were in the social relations of production, changing them to socialist relations to create the "definite social plan," as he put in *Capital* Volume 1.

Removing the capitalist would not absolve workers from holding themselves accountable for results, for the production of value, Marx clarified in Volume 3 of *Capital*, which would remain the case on Day 1, which is why the social regulation of labor time and the necessary "bookkeeping encompassing all this" would become "more essential than ever" (1998, 838). On Day 1, he emphasized, "even after the capitalist mode of production is abolished, though social production remains, the determination of value still prevails in the sense that the regulation of labour-time and the distribution of social labour among the various production groups, becomes more essential than ever, as well as the keeping of accounts on this" (Marx 1981, 991).

Holding cooperative member-workers accountable for producing value within capitalism reproduced the faults of the existing system. To eliminate them, all workers must become cooperative members and, Marx clarified in *Critique of the Gotha Programme* (1875), also hold cooperative entities accountable for progress toward the interim aim. In the critique Marx developed his conclusion in Volumes 2 and 3 that "book-keeping" would become "more essential than ever," arguing that, starting from value on Day 1, the interim aim of socialist cooperatives was 'directly' equal labor time, for which worker-entities should be accountable to society. In short, the following section argues, Marx's "definite social plan" was a scheme for controlling the allocation of labor to achieve a target social reproduction account.

CRITIQUE OF THE GOTHA PROGRAMME

Marxists often see Marx's criticisms of the draft *Programme of the Socialist Workers' Party of Germany* as the "classic text for Marx's thinking about communist society, although it consists of what he called 'marginal notes' . . . , was hurriedly written, and was not intended for publication" (Lawler 1998, 41). The aim of the draft program, for discussion at a congress in the German town of Gotha, was preparation for uniting two German socialist parties, the 'Eisenachers' and the 'Lassalleans,' which was "filled with concessions to

the Lassalleans” (Draper 1986, 303). Ferdinand Lassalle was an advocate of the Blanquist concept of ‘dictatorship of the Party,’ led by him, which Marx opposed with his concept of the ‘dictatorship of the proletariat’ (Draper 1986, 98–102). Marx sent his ‘marginal notes’ attacking the program’s Lassallean formulations and ideas to some Eisenachers (Draper 1986, 303).

Some Marxists see Marx’s critique as the “most persuasive basis for . . . [the] belief that . . . [he] later rejected his early support for market socialism” (Lawler 1998, 41), that the *Manifesto* proposed ‘market socialism,’ but that Marx abandoned this in *Capital* and the *Critique of the Gotha Programme* (Moore 1993, 74), whereas others argue, “there is no inconsistency” (Lawler 1998, 39). Many think it “outlines general principles of individual and collective provision, but has little useful to say about the coordination and socialization of production” (Blackburn 1991, 12–13). Blackburn (1991, 13), for example, accepts, “Marx’s contention in these passages is not that economic calculation becomes redundant after the expropriation of the expropriators,” but sees Marx simply assuming “that the rationality of applying labour to social need will become readily apparent once the veil of commodity entitlements has been lifted.”

However, faced with the Gotha Programme, in addition to clarifying communism’s ultimate aim (Moore 1993, 40), what follows argues, Marx clarified socialism’s Day 1 and interim aim and the role of accounting in pursuing them. Marx wrote to Wilhelm Bracke that the program threatened to associate him with its errors, which he could not ignore, despite doctor’s orders not to work. “[I]t is my duty to refuse recognition, even by maintaining a diplomatic silence, to a programme, which, I am convinced, is altogether deplorable as well as demoralising for the party” (Marx 1989b, 77–78). To deal with the threat, as Dunayevskaya (2002, 5) says, “there [was] no way now, no matter how Marx kept from trying to give any blueprints for the future, not to develop a general view of where we’re headed for the day *after* the conquest of power, the day *after* we have rid ourselves of the birthmarks of capitalism.” To deal decisively with the program, “its canonization of the Lassallean articles of faith” (Marx 1989b, 78), in other words, Marx clarified the interim aim, “where we’re headed for.” Seen in the context of his comments in *Grundrisse* and *Capital*, the *Critique* envisaged a transitional period when, although labor power is no longer a commodity, markets exist for products, services, and the skills and capacities of workers as free agents, who hold their cooperative enterprises and society accountable for value and progress toward the interim aim.

Marx criticized the program’s crude communism, implicit in its first paragraph, which claimed, “Labour is the source of all wealth and all culture, and since useful labour is possible only in society and through society, the proceeds of labour belong undiminished with equal right to all members of

society” (1989b, 81). Marx retorted, “*Labour is not the source of all wealth. Nature is just as much the source of use values (and it is surely of such that material wealth consists!) as labour, which itself is only the manifestation of a force of nature, human labour power*” (1989b, 81). Labor was the source of all ‘wealth’ only “insofar as man from the outset behaves toward nature, the primary source of all instruments and objects of labour, as an owner, treats her as belonging to him, [does] his labour becomes the source of use-values, therefore also of wealth” (Marx 1989b, 81). The propertyless worker, therefore, “the man who possesses nothing other than his labour power must, in all conditions of society and culture, be the slave of other men” (Marx 1989b, 81). This would be the case under the program because it presupposed society as the capitalist owner to whom not just the proceeds of labor, but also the means of production, “belong.”

Its view that “useful labour is possible only in society and through society” meant, Marx concluded, “the proceeds of labour belong to society—and only so much therefrom accrues to the individual worker as is not required to maintain the ‘condition’ of labour, society” (Marx 1989b, 82). “In fact,” Marx pointed out, “this proposition has at all times been made use of *by the champions of the state of society at any given time*” to justify the claims of the state “since it is the social organ for the maintenance of the social order,” and by property owners as “foundations of society” against social production (1989b, 82). The “fair distribution” that the program demanded in its third paragraph, Marx therefore concluded, “presupposes a society wherein,” as the program said, “the means of labour are common property and total labour is collectively regulated” (1989b, 84). In short, it presupposed central control, consistent with Marx’s view of Lassalle as “the worst case of ‘workers’ dictator’ among his associates” (Draper 1986, 93).

The program’s statement that “the emancipation of labour demands . . . a fair distribution of the proceeds of labour” was ambiguous because, leaving aside the meaning of “fair,” it did not distinguish between measuring “the proceeds of labour” ‘indirectly’ at value, and the interim aim, measuring ‘directly’ equal social labor time, discussed below, what here Marx called the “product of labour.” Marx (1989b, 84) asked, “What are the proceeds of labour? The product of labour or its value? And in the latter case, is it the total value of the product or only that part of the value which labour has newly added to the means of production consumed?” Evidently, Marx did not rule out retaining value on Day 1, but was highlighting the naivety of the phrase from the perspective of his theory of value—did “proceeds of labour” mean sales, the “total value of the product,” or did it mean adding together wages and profits, “value which labour has newly added”? To show the program’s view, that “the proceeds of labour belong undiminished with equal right to all members of society” (Marx 1989b, 81), was

simplistically misleading, he described in outline socialist society's income or profit and loss statement:

Let us take, first of all, the words 'proceeds of labor' in the sense of the product of labor; then the co-operative proceeds of labor are the *total social product*.

From this must now be deducted:

First, cover for replacement of the means of production used up.

Second, additional portion for expansion of production.

Third, reserve or insurance funds to provide against accidents, dislocations caused by natural calamities, and so on.

These deductions from the 'undiminished proceeds of labour' are an economic necessity, and their magnitude is to be determined according to available means and forces, and partly by computation of probabilities, but they are in no way calculable by equity.

There remains the other part of the total product, intended to serve as means of consumption.

Before this is divided among the individuals, there has to be deducted again, from it:

First, the general costs of administration not belonging to production. This part will, from the outset, be very considerably restricted in comparison with present-day society, and it diminishes in proportion as the new society develops.

Second, that which is intended for the common satisfaction of needs, such as schools, health services, and so on. From the outset, this part grows considerably in comparison with present-day society, and it grows in proportion as the new society develops.

Third, funds for those unable to work, and so on, in short, for what is included under so-called official poor relief today. (Marx 1989b, 84–85)

This passage, in effect, outlines Marx's socialist reproduction and distribution of surplus account, a reformulated capitalist profit or loss account, which we can measure using the 'product of labor' or 'value' (see table 8.1). Marx based his statement, as he put it, "first of all," as one possibility, on interpreting "the proceeds of labour in the sense of the product of labour," leaving open a value interpretation. The 'bottom line' of capitalists' profit or loss account is retained profit, whereas Marx's socialist 'bottom line' is the amount available for consumption by productive workers, but the structure of his account and its categories mirror the structure and value categories he knew appeared in capitalists' accounts (Bryer 2017, chapter 7).

Marx's account starts from the "proceeds of labour" defined as the "total social product" or "total value" (sales), and as in capitalists' accounts first charges the replacement of the means of production (fixed assets and materials), and subtracts necessary reserves (for expansion, etc.) and insurance provisions. In value terms, this left society's distributable profit before unproductive overheads and production wages, what Marx called "the other

Table 8.1 Marx's Socialist Reproduction and Distribution of Surplus Account

<i>Product of Labor</i>	<i>Value</i>
Total social product	Sales
<i>Less:</i>	<i>Less:</i>
Cover for replacement of the means of production used up	Depreciation and cost of materials
Additional portion for expansion of production	Retained profit
Reserve or insurance funds to provide against accidents, dislocations caused by natural calamities, and so on	Reserves and provisions
= The other part of the total product	= Distributable profit before nonproduction overheads and production wages
<i>Less:</i>	<i>Less:</i>
General costs of administration not belonging to production	Selling, distribution, and administrative expenses
Schools, health services, and so on	Social overhead expenses
Funds for those unable to work	Social overhead expenses
= Workers' means of consumption	= Production wages

Source: Created by the author based on Marx (1989b, 84–85).

part of the total product, intended to serve as ‘means of consumption.’” From this surplus it was necessary to deduct administrative costs (nonproduction overheads), which left society’s surplus (value added after reserves) before ‘means of consumption’ to cover social overheads for education, health care, pensions, and so on, which left workers’ consumption (production wages) as the ‘bottom line’ (see table 8.1).⁷

Because Marx “emphasized the need to set aside from the total social product *before distribution* . . . the necessary quota for depreciation and net investment and for a reserve fund against contingencies” shows, some Marxists argue, that he “believed in the necessity of ‘central control’ over the allocation of resources” (Malle 1985, 295). However, first, capitalist companies account for depreciation without central planning. Second, while the “proceeds of labor” were “diminished” by costs of production and social overheads, whereas in capitalism the profit goes to the capitalists, in socialism “what the producer is deprived of in his capacity as a private individual benefits him directly or indirectly in his capacity as a member of society” (Marx 1989b, 85). Workers were now the collective owners of the means of production and, in effect, shareholders in society. Rather than see Marx’s income statement as something which “may be interpreted as an argument in favour of some sort of central planning” (Malle 1985, 295), therefore, we can

see it as society's target-income statement, and an argument that in distributing wages workers must calculate the surplus ex-ante and ex-post.

The question is whether Marx proposed measuring this using the product of labor, value, or both. On Day 1, "after the abolition of the capitalist mode of production," we saw Marx argued in Volume 3 of *Capital*, "but still retaining social production, the determination of *value* continues to prevail" (1998, 838, emphases added). However, in the *Critique of the Gotha Programme*, Marxists often argue, "Marx writes clearly and in a way that seems to allow of no doubt that there will be no commodity production, no market, in a communist society" (Lawler 1998, 41). Marx wrote,

Within the *collective society*⁸ based on common ownership of the means of production, the producers do not exchange their products; just as little does the labour employed on the products appear here *as the value* of these products, as a material quality possessed by them, since now, in contrast to capitalist society, individual labour no longer exists in an indirect fashion but directly as a component part of the total labour. The phrase 'proceeds of labour,' objectionable even today on account of its ambiguity, loses all meaning. (Marx 1989b, 85)

Many Marxists conclude that this statement means, "Value and money cease to exist" (Ticktin 1998, 59; see also Selucky 1974, 59; Moore 1993, 68) from Day 1. However, as Marx often used 'product' to mean a 'commodity,' and even services, we can interpret "do not exchange their products" to mean that the producers do not exchange capitalist commodities based on average socially necessary labor time. In other words, as Kliman (2004, 17) says, the statement is Marx's "interim aim," measuring "directly social" labor time. The disappearance of production for value is, as Lawler is "tempted to argue . . . , the future goal," not the long-term goal as he argues, but the interim aim, and not when "common management is possible" (1998, 41–42), but when the forces of production are developed such that every hour of labor directly creates equal social value. This must therefore be an interim aim because developing the forces to achieve this will take time. Having outlined the interim aim, Marx immediately looked back to Day 1:

What we [must deal with] here is a communist society, not as it has *developed* on its own foundations, but on the contrary, just as it emerges from capitalist society, which is thus in *every respect*, economically, morally and intellectually, still stamped with the birth-marks of the old society from whose womb it *emerges*. Accordingly, the individual producer receives back from society—after the deductions have been made—exactly what he gives to it. What he has given to it is his individual quantum of labour. (Marx 1977, 568; Marx 1989b, 85–86)⁹

The interim aim is to abolish indirectly valued labor, so this is where communist society starts, where it “emerges *from* capitalist society,” on Day 1. It has capitalist “birth-marks,” including its law of value on Day 1, but with the critical difference that, also immediately pursuing the interim aim, to workers value would not “*appear* here as the value of products,” not as the commodity fetish that value was a “material quality possessed by them” (Marx 1989b, 85, emphasis added). Marxists often adopt a central planning interpretation, seeing Marx as arguing, “Only when the capital relationship is abolished will the capitalist form of alienation vanish; only when the market relationship is abolished and commodities again become products without mystery, will the market form of alienation disappear” (Selucky 1974, 54; see also Moore 1993, 58–63). The capitalist and market forms of alienation are aspects of commodity fetishism in Marx’s theory of ideology, which disappears, chapter 7 argued, when workers understand the theory of value. As he put it in Volume 1 of *Capital*, “The veil is not removed from . . . the process of production, until it becomes production by freely associated men, and stands under their consciousness and planned control” (1976a, 173). Because consciousness must come before the political act of “freely associated men” taking control of production, when workers come to understand Marx’s theory of value they free themselves from the “mystical veil” without abolishing the “market relationship,” and then they abolish the “capital relationship,” ‘free’ wage labor and capital, on Day 1.

Marxists typically do not recognize Marx’s Day 1 and interim aim (e.g., Ollman 1977; Blackburn 1991; Moore 1993). Blackburn, for example, who rejects the central planning interpretation, and accepts, “the *Critique of the Gotha Programme* did not offer the principle ‘to each according to their work’ as the *sole* principle of distribution in the initial or lower stage of socialism, but also argued for public provision for education, health and welfare” (1991, 13). However, not appreciating that for Marx these expenditures were essential to develop the human forces of production to pursue the interim aim, and not seeing value on Day 1, Blackburn (1991, 13) concludes, “it must be conceded that Marx never sketched out exactly how the socialist economy would function. In all probability the unmet human need he could see around him required no very complex assessment while the major industrial processes still had a fairly rudimentary character.” Marx explained capitalism’s circulation of capital and law of value “exactly” using his “value theory of reproduction schemas” (Blackburn 1991, 14), his social reproduction accounts (Bryer 2017). The following section (see tables 8.2 and 8.3) modifies Marx’s accounts to illustrate socialism’s interim aim ‘exactly,’ how it reproduces directly social value, and how doing this breaks the capitalist law of value.

Recognizing Marx's interim aim removes the supposed contradiction, highlighted by Moore (1993, 87), that Marx "confines commodity fetishism [i.e., value] to class societies, he does not apply the word to socialist economies," "But the central principle of his theory of value—that labor time is the sole measure of real cost—he does apply to socialism." According to Moore, Marx equates commodity fetishism with markets and the law of value, yet in the *Manifesto* markets, and *Critique of the Gotha Programme* the regulation of production by labor time, continue under socialism. However, Marx denied in his *Notes on Wagner*, "Marx's theory of value is 'the cornerstone of his socialist system'" (1989a, 533). He insisted, "my analysis of value is concerned with capitalist relations—not with applying this theory of value to the 'social state' constructed, not by me, but by Herr Schaffle for me" (Marx 1989a, 537). Schaffle cited Marx's example in chapter 1 of *Capital* Volume 1 (Moore 1993, 38–39, 87), which we saw implicitly referred to socialism's interim aim, which he made explicit in the *Critique of the Gotha Programme*, that Moore (1993, 68) sees as the basis of "planning" on Day 1 following the abolition of all markets. In this sense, as Marx (1989a, 533) emphasized, he had "never established a 'socialist system' . . . [which] is a fantasy of Wagner, Schaffle [etc]," including Moore. It is true, as Moore (1993, 87) says, in the *Capital* example, and in the *Critique of the Gotha Programme*, "labor time" remains the sole measure of real cost, but this is not average socially necessary labor time, and refers to Marx's interim aim.

To measure the quantum of labor during the first phase of communist society, Marx repeated from Volume 1 of *Capital* what he again highlighted was an "example" calculation of an individual worker's income using the ratio between social and individual working time, the worker's "share," which assumes that the social value of every hour is equal:

For example, the social working day consists of the sum of individual hours of work; the individual labour time of the individual producer is the part of the social working day contributed by him, his share in it. He receives a certificate from society that he has furnished such and such an amount of labour (after deducting his labour for the common funds), and with this certificate he draws from the social stock of means of consumption as much as the same amount of labour costs. The same amount of labour which he as given to society in one form he receives back in another. (Marx 1989b, 86)

Marx pointed out, "Here obviously the same principle prevails as that which regulates the exchange of [capitalist] commodities, as far as this is the exchange of equal values" (1989b, 86). Even if it were equal capitalist values it would remain true that in the first phase "Content and form are changed" because "no one can give anything except his labour," everybody is a worker,

who individually own nothing “except individual means of consumption” (Marx 1989b, 86). If, as in his example, the quantum of labor is equal social value per labor hour, “as far as the distribution of [means of consumption] . . . among the individual producers is concerned, the same principle prevails as in the exchange of [capitalist] commodity equivalents” (Marx 1989b, 86). Even with equal social value per labor hour, Marx pointed out, “*equal right* here is still in principle—*bourgeois right*” (1989b, 86). However, with this metric “principle and practice are no longer at loggerheads,” because it broke with capitalist value, the law that “the exchange of equivalents in commodity exchange only exists *on the average* and not in the individual case” (Marx 1989b, 86). Even if “The right of the producers is proportional to the labour [time] they supply,” Marx pointed out, “In spite of this advance, this *equal right* is still constantly encumbered by a bourgeois limitation” (1989b, 86), was a continuing capitalist birthmark.

Marx warned workers against demanding a “‘fair’ distribution. Do not the bourgeoisie assert that present-day distribution is ‘fair’? And is it not, in fact, the only ‘fair’ distribution on the basis of the present-day mode of production” (1989b, 84). The Gotha programme “had fallen back into the modes of thought of bourgeois ideology on this point and . . . [Marx] restates, in his Critique his analysis of the real relations involved” (Mephram 1972, 15). Marx reiterated, from *Grundrisse* and *Capital*, in capitalism “wages are not what they appear to be, namely, the value, or price, of labour, but only a masked form for the value, or price, of labour-power . . . [and therefore] the system of [capitalist] wage-labour is a system of slavery . . . whether the worker receives better or worse payment” (Mephram 1972, 15). The idea of a ‘fair wage’ under capitalism, “another of the imaginary expressions of everyday life, is an absurd one. The very meaning of wages . . . is the extraction of unpaid labour. Therefore wages are unfair as such” (Mephram 1972, 15). Even with equal pay, Marx pointed out, “one man is superior to another physically or mentally and so supplies more labor in the same time, or can labor for a longer time; and labor, to serve as a measure, must be defined by its duration or intensity, otherwise it ceases to be a standard of measurement. This equal right is an unequal right for unequal labor” because it treats the “productive capacity of the workers as natural privileges” (1989b, 86). It was also unequal because “one worker . . . has more children than another, etc., etc. Thus, given an equal amount of work done . . . one will be richer than another, etc” (Marx 1989b, 87). In the first phase, “communist society as it is when it has just emerged . . . from capitalist society,” where the “right of producers is *proportional* to the labour they supply,” such “defects are inevitable” compared to the communist principle of consumption according to need (Marx 1989b, 86–87).

The key issue, Marx emphasized, was not the determination of wages, the distribution of consumption, but the social organization of production. It was

“a mistake to make a fuss about so-called *distribution* and put the principal stress on it. . . . Any distribution whatever of the means of consumption is only a consequence of the distribution of the conditions of production themselves” (Marx 1989b, 87). Clearly, “If the material conditions of production are the collective property of the workers themselves, then there likewise results a distribution of the means of consumption different from the present one” (Marx 1989b, 88). With workers in control, wages would probably rise at the expense of profits, but on Day 1, workers would still take out only an ‘unequal’ proportion of the value they created.

Engels (1987, 296, 297) criticized Eugen Duhring, influential among German Social Democrats in the mid-1870s, for arguing that “in existing society the worker does not receive the full ‘value’ of his labour, and that socialism is destined to remedy this,” which implied that labor power “should be exchangeable not for its *value*, but for its *use-value*,” the product. Whereas Duhring’s proposal implied that “the law of value is to apply to all other commodities, but . . . repealed so far as labour-power is concerned,” Engels pointed out that exchanging labor for commodities meant “labour-power is a commodity, just like the commodity for which it is being exchanged” (1987, 297). As labor power would remain a commodity, Duhring “converts the basic law of existing society to the basic law of his imagined society,” his “economic commune” (Engels 1987, 297), which was, in effect, state capitalism. By contrast, according to the accounting interpretation, Marx argued that from Day 1 socialism transforms propertyless wagedworkers into worker-shareholders and, in pursuit of the interim aim, progressively repeals the capitalist law of value and, as it does, labor exchanges for a proportion of the progressively directly equal social value it produces every labor hour.

Indirect value would progressively give way to the interim aim of direct social value, Marx argued, not that all measurement of value would cease. The fact that every hour of work has the same social value does not mean that enterprises and society keep accounts only of use-values produced and consumed. As in capitalism (Bryer 2017, chapter 5), we can work with directly social labor time or money values in socialism, because both are expressions of each other. Lawler points out, “Marx . . . in fact . . . describe[s] a *de facto* system of exchange. Workers receive ‘certificates’ based on their labour, and with these they purchase goods on some sort of market” (1998, 48) with the same social value. To calculate the social value of a product would still require full absorption costing in units of social labor time or money, including for the wear and tear of fixed capital, and so on (see Bryer 2017).

Marx’s note in Volume 1 of *Capital* that “labour money . . . is no more money than a ticket for the theatre” (1976a, 188), leads Lawler (1998, 48) and others to conclude that Marx’s labor time certificates are “not money in the full sense of the term,” but only “fulfill some of the functions of true money.”

However, Marx's note is not relevant to his concept of socialism because he was criticizing the "shallow utopianism of the idea of 'labour-money' in a society founded on the production of commodities Owen's 'labour money,' for instance, is no more 'money' than a theatre ticket is. Owen presupposes directly socialized labour, a form of production diametrically opposed to the production of commodities" (Marx 1976a, 188).¹⁰ Similarly, in Volume 2 labor certificates are not money when they stem from "collective production":¹¹

With collective production, money capital is completely dispensed with. The society distributes labour-power and means of production between the various branches of industry. There is no reason why the producers should not receive paper tokens permitting them to withdraw an amount corresponding to their labour time from the social consumption stocks. But these tokens are not money; they do not circulate. (Marx 1978, 434)

Socialist certificates are not fully money, Lawler (1998) argues, because only in capitalism does value and its monetary expression depend on exchange value. In capitalism, he argues, according to Marx it is "only when . . . [producers] come to sell their goods do they learn, by the fact of selling their product, whether their production has been socially useful," whereas in socialism "the labor of the individual is directly validated at the workplace" (Lawler 1998, 49). Alternatively, according to the TSSI in capitalism Marx argued that workers create value in production (Kliman 2007), which *Accounting for Value* supported by showing that traditional capitalist accounts calculate and account for the monetary expression of value created during production (Bryer 2017). Capitalism values individual labor 'indirectly,' by reference to the money value of socially necessary labor, of 'average' labor, whereas Marx envisages the development of the forces to the point where all individual labor is 'directly' of the same social value.

Marx's 'certificates,' while they are not capitalist money, the monetary expression of socially necessary labor time, do therefore measure social value, provide a unit of social exchange value, and a store of social value, just like capitalist money, except that its value is directly social. Not a theater ticket or a ration book allowing only the consumption of specified use values, Lawler (1998, 49, emphases added) accepts, Marx's certificate "is more like a certificate of merit, stating that a certain person earned by work the equivalent of so many *units of value*, which, for old time's sake, *may be called dollars*. Here it has become illegal for individuals to accumulate money from the work of others. Hence 'money' is personalized," but it is still money, "dollars" that the worker can spend "on whatever he or she wants," just like capitalist money. Marx's labor certificates are "not money," Ollman (1977, 20, 26) argues, but then defends the continuation of personal property

in the first stage of communism because “Most people attached great value to the particular objects they used for these were not easy to replace, and, in any case, *cost money* (labor vouchers) which could be spent on something else.”

Lawler and Ollman overlook that in *Grundrisse*, Marx accepted that money in all its forms carried with them greater or lesser “evils,” which are overcome only when it ceases to be an “essential relation of production”:

Various forms of money may correspond better to social production in various stages; one form may remedy evils against which another is powerless; but none of them, as long as they remain forms of money, and *as long as money remains an essential relation of production*, is capable of overcoming the contradictions inherent in the money relation, and can instead only hope to reproduce these contradictions in one or another form. (Marx 1973, 123, emphasis added)

Marx had “some small scruples” (1973, 136) about labor money, which would also apply to his certificates. “First of all: if we once presuppose money, even if it is only time-chits, then we must also presuppose the accumulation of this money, as well as contracts, obligations, fixed burdens etc., which are entered into in the form of this money” (Marx 1973, 136). There was therefore the problem, “The accumulated chits would constantly appreciate together with the newly issued ones, and thus on the one hand the rising productivity of labour would go to the benefit of non-workers, and on the other hand the previously contracted burdens would keep step with the rising yield of labour” (Marx 1973, 136). Presumably, although ‘personalized’ workers could assign their certificates to others (for example, family, personal services, gifts) as well as use them to acquire means of subsistence, and the proletarian government could redistribute accumulated wealth.

Although it came with problems, the difference would be that whereas money is an ‘essential relation’ in the capitalist mode of production, where all commodities including labor power necessarily have a money value, and the capitalists’ aim is its unending accumulation through circulation as capital, money is not an essential relation in socialism. From Day 1 the aim becomes the development of the forces of production to produce directly equal social value, and certificates are a step in the development of money appropriate to its new social relations, which will nevertheless continue to have contradictions until its ultimate abolition in the higher phase of communism. Therefore, as Kliman says, although “It is easy to read” Marx’s labor time certificates “as a middle-aged man throwing in the towel after having come up empty,” this would be wrong:

Marx seems to be repeating the very proposal that he had excoriated for more than a quarter-century when it was made by Bray, Gray, Proudhon, and

Darimon. I do not think this is so, however. They were trying to institute equal exchange in a society dominated by the law of value, while Marx was theorizing a society in which that law has been abolished. Whereas the commodification of labor-power is, in Marx's view, the defining characteristic of capitalism, the CGP [*Critique of Gotha Programme*] projects an absolute liberation from wage-slavery (the commodification of labor-power), beginning at the very start of communist society. (Kliman 2004, 14–15)

Whereas Marx criticized early socialists for proposing, in effect, capitalist central planning, his labor time certificates presume the end of wage slavery, that “the sale of labour power is abolished” (Ticktin 1998, 59). To achieve this, first, the abolition of the other defining feature of capitalism with which it is interlocked, free capital, and with it the abolition of capitalist exploitation and the ‘reserve army of labor.’ Given worker control of enterprises, the development of the forces of production, the availability of free and equal education for all, labor power is no longer a capitalist commodity. Second, “beginning at the very start,” Kliman (2004) makes clear, means labor time certificates are the interim aim that socialist society starts pursuing from Day 1. Workers aim from Day 1 to operationalize the principle of directly social labor—so that “the individual’s labor will be directly social. No one’s labor-hour is ‘more equal’ than another’s any longer” (Kliman 2004, 16)—by increasing the forces of production, developing technology to eliminate unnecessary labor, and developing workers through education, healthcare, and so on, and by the organization of work. Because the main force of production is “the human being himself,” and the aim is “socialised man, the associated producers, rationally regulating their interchange with Nature, bringing it under their common control” (Marx 1973, 422; 1998, 807), to increase the forces the socialist state develops and enforces policies to eliminate harmful technologies, and to protect the environment. Starting from capitalism, the following section shows that to make all labor time of directly equal value, Marx’s concept of socialism requires accounting for value and the product of labor from Day 1, by using his social reproduction accounts to illustrate the interim aim.

Accounting for Directly Social Labor

In tables 8.2 and 8.3, Department 1 produces society’s means of subsistence (MOS) and Department 2 produces its means of production (MOP). Table 8.2 presents Marx’s accounts of a capitalist society (see Bryer 2017, table 3.3, 67). Assume the output represents one week’s work of 40 hours per worker, that there are 10 million workers in each department, that each £1 of the sales of Department 1 represents one use value (unit of output), and that the relative wages of the two departments in table 8.2 reflects the difference in their labor productivity.

Table 8.2 Capitalist Reproduction and Circulation

Department 1—Means of Subsistence (MOS):			
Dr	£m		Cr £m
Wages [10 million x £10]	100.00	Wages (MOS)	100.00
Means of production	400.00	Wages (MOP)	133.33
		Profit (MOS)	200.00
Profit [2 x £100]	200.00	Profit (MOP)	266.67
	-----		-----
Production	700.00	Sales	700.00
	=====		=====
Department 2—Means of Production (MOP):			
Dr	£m		Cr £m
Wages [10 million x £13.333]	133.33	MOS	400.00
Means of production	533.33	MOP	533.33
Profit [2 x £133.33]	266.67		
	-----		-----
Production	933.33	Sales	933.33
	=====		=====
Gross Product (Society):			
Dr	£m		Cr £m
Wages	233.33	MOS	700.00
Means of production	933.33	MOP	933.33
Profit [2 x £233.33]	466.67		
	-----		-----
Production	1,633.33	Sales	1,633.33
	=====		=====

Source: Created by the author based on Marx's example (see Marx and Engels 1985, 485–87, 490–91).

To increase the wages of Department 1 (£100 million) to those of Department 2 (£133.33 million), table 8.3 shows, requires an increase in the social value of the output of Department 1. Leveling down to the average wage would lower the value of Department 2's output if this reflected its social value, or shift profit from Department 1, that pays below average wages, to Department 2 that pays above average, if the law of value continues to operate. To increase the wages of workers in Department 1 to those of Department 2 whilst maintaining the rate of surplus value (s/v) requires Department 1 to increase the social value of its output by £100 million. Because the increase in wages cannot come simply from more use values, but only those that embody social (market) value, Department 1 could do this by (say) increasing its output by 100 units to 800 by increasing its labor productivity through technological advance and selling them at £1 per unit. Alternatively,

Table 8.3 Socialist Reproduction and Circulation

Department 1—Means of Subsistence (MOS):			
Dr		Cr	
	£m		£m
Wages [10 million x £13.3333]	133.33	Wages (MOS)	133.33
Means of production	400.00	Wages (MOP)	133.33
		Social surplus (MOS)	266.67
Social surplus [2 x £133.33]	266.67	Social surplus (MOP)	266.67
	-----		-----
Production	800.00	Sales	800.00
	=====		=====
Department 2—Means of Production (MOP):			
Dr		Cr	
	£m		£m
Wages [10 million x 13.333]	133.33	MOS	400.00
Means of production	533.33	MOP	533.33
Social surplus [2 x £133.33]	266.67		
	-----		-----
Production	933.33	Sales	933.33
	=====		=====
Gross Product (Society):			
Dr		Cr	
	£m		£m
Wages	266.67	MOS	800.00
Means of production	933.33	MOP	933.33
Social surplus [2 x £266.67]	533.33		
	-----		-----
Production	1,733.33	Sales	1,733.33
	=====		=====

Source: Created by the author based on Marx's example (see Marx and Engels 1985, 485–87, 490–91).

it could increase the quality and price of the existing use values, for example, organically produced food for which consumers will pay more. Either way, this increase in value would violate the capitalist law of value, where value is 'conserved' so increased labor productivity reduces price, and increased wages reduce profits, but achieves the socialist aim of directly equal social value where, given the assumptions, the increase in use values counts as an increase in social labor time.

In the circumstances assumed for table 8.3, the increased output of 100 million units is equivalent to some 50 million additional hours of social labor producing at the new rate of 2 units per hour, or £100 million at a MELT of £2 per hour [£800 million/400 million hours]. Under capitalism, the rate of output per hour was 1.75 units [700 million units/400 million hours]. In the circumstances, increasing the social value of its output to £800 million means that Department 1 can pay higher wages and retain the same rate of social surplus value it had under capitalism, which increases its rate of profit to 50% [£266.67/£533.33] from 40% [£200/£500].

Table 8.3 shows that equal social value for every hour of labor is conceivable across departments. It is therefore conceivable for all individuals within departments by consciously engineering their productivity to make the social value of their work directly equal to that of all other individuals, rather than unconsciously, indirectly, through the market for labor power as a commodity, and the production of surplus socially necessary labor time. Because achieving this would take time, as Kliman (2004, 17) says, “Marx projected the direct sociality of the individual’s labor as an interim goal. Equal remuneration was not the goal, but the effect of, and a measure of, the direct sociality of labor.” Clearly, therefore, “Marx did not spell out what must be changed in order for the goal to be achieved, in order for directly social labor to be a sustainable reality” (Kliman 2004, 17) in detail. In 1872, in arguing for the nationalization of land, for example, he simply noted, after workers “do away with the capitalist form of production . . . all branches of production . . . will gradually be organized in the most adequate manner” (Marx 1988, 136).

Equal remuneration was not, Marx argued, “something one can impose by fiat or by passing a law . . . [because] lasting changes in the political realm must be grounded in changes in the mode of production, not the reverse” (Kliman 2004, 17). Marx revised his concept of socialism from *Grundrisse* onward, but he retained his view that it would result, not from laws, but from the ‘movement of history,’ from a qualitative social transcendence of capitalism. As Marx and Engels had put it in the *German Ideology*, “Communism is for us not a state of affairs which is to be established, an ideal to which reality [will] have to adjust itself. We call Communism the real movement which abolishes the present state of things” (1976a, 49). To abolish the present state of things, as Kliman concludes, “one of the most fundamental tasks we face today . . . is to work out how to create the social conditions such that each hour of labor will really count as equal—beginning on the day after the revolution” (2004, 17). The necessary social conditions—concentrated and centralized capital, total social capital and, according to the accounting interpretation, productive labor under accounting results control—exist today, the result of a ‘movement of history.’

From Day 1, socialist society sets off toward the interim aim, but from there, “Marx was careful to stress that the higher phase of communism can come only at the end of a long, hard road” (Kliman 2004, 14). The higher phase arrives when through science and art society has developed the forces of production to create sustainable abundance with minimal direct labor. Only when, as *Grundrisse* put it, “the human being comes to relate more as a watchman and regulator to the production process itself,” when “labour in the direct form [has] ceased to be the great well-spring of wealth,” then “labour time ceases and must cease to be its measure,” and “production based on exchange value breaks down” (Marx 1973, 705). The higher stage arrives

only when the worker “steps to the side of the production process instead of being its chief actor” (Marx 1973, 705). Only then, as the *Critique of the Gotha Programme* concluded, is work “life’s prime want . . . and all the springs of co-operative wealth flow more abundantly—only then can the narrow horizon of bourgeois right be crossed in its entirety and society inscribe on its banners: From each according to his ability, to each according to his needs” (Marx 1989b, 87). This higher stage comes, Marx emphasized, only “after the enslaving of the individual to the division of labour, and thereby also the antithesis between mental and physical labour, has vanished” (1998, 87, emphasis added), and only then would these “birthmarks” of capitalism fade. Before then, value and markets are continuing “birthmarks” during the interim socialist phase, requiring sellers of products and services to compete, and allowing buyers to choose freely. Markets for products and services continue to play a coordinating role because, table 8.3 implies, for the social value of all labor to be directly equal requires its ‘realization,’ the demonstration of its reality in practice, through freely chosen purchases and sales.

Market Socialism

Markets are inconsistent with Marx’s concept of socialism, Marxists often argue, because he saw them as inevitably dehumanizing or overpoweringly ideological (e.g., Moore 1993, 19; Ollman 1977), usually based on his early works, or they confuse them with his concept of capitalism (e.g., Lavoie 1985; McNally 1993; Ollman 1998; Ticktin 1998). Leaving aside the dehumanizing and ideological domination interpretation, Ticktin (1998) and Ollman (1998), for example, Kliman (2004, 9) says, “offer standard, but nonetheless strong, arguments as to why market socialism is neither workable nor a road forward to genuine socialism,” but they are debatable.

According to Ticktin (1998), markets contradict Marx’s concept of socialism because they are necessarily capitalist. A Marxist economist, he argues, “would have to define . . . [a market] as the sphere of action of the law of value, or [in other words] the point at which values are realised” (Ticktin 1998, 58), that is, would necessarily adopt the market-centered interpretation (cf. Kliman 2011). According to the production-centered interpretation, however, the sphere of action of the law of value is production, where workers create value and surplus value that capitalists then realize on the market (Kliman 2007, 2011; Bryer 2017). Marx’s criticism of capitalist markets was, we saw, that they were capitalist, not that they were markets, which appeared in different forms in different modes of production. Ticktin admits, “the market did indeed exist before capitalism,” but suggests they were “immature forms” (1998, 59). In pre-capitalist markets buying and selling was “sporadic,” he

argues, “and *as a result*, it is clear that, while exchange value existed, value, by and large did not” (Ticktin 1998, 59, emphasis added), implying Marx had argued that frequently traded markets, rather than the market for labor power, produced the capitalist law of value.

Based on the *Manifesto*, Ticktin nevertheless contradictorily accepts the need for a “historical period between capitalism and socialism” during which “the market would continue” (1998, 64, 67). That is, until workers gradually phase out the “bureaucracy” that grows up to control the market and replace it with the “devolution of power to the level of the local unit,” when “the worker . . . [is] in charge of his own work” (Ticktin 1998, 67). Capitalism and capitalist markets continue, in short, until the worker comes “to control the management of his enterprise and the political life of the country” (Ticktin 1998, 67), that is, until the workers become the management and government. Coupled with Ticktin’s insistence that with socialism both “value and money cease to exist” (1998, 59), accounting here reduces to counting use values, and management to worker supervision.

The “market,” Ollman warns, is not like a “can opener” that we manipulate, but a “meat grinder” that “manipulates us, and worse” (1998, 120), but this is because like Ticktin (1998), by not distinguishing capital and labor power markets from commodity markets they are for him all inherently capitalist, as they are for other Marxists. Hahnel, for example, concludes, “Unfortunately for advocates of market socialism, every reason that markets are inefficient applies to private *and* public-enterprise market systems alike” (2005, 178) because both produce ‘externalities’ (unrecognized social costs), instability, and monopolies. Seeing only the irremediable evils of capitalism, Hahnel proposes progressively abolishing all markets, but commodity markets would be socially efficient if Marx’s socialist state used taxes and subsidies to make enterprises internalize externalities, employed effective stabilization and anti-trust policies (cf. Hahnel 2005, 178), and held enterprises accountable for their results, including progress toward equal social value per labor hour. Ollman fears markets, but also contradictorily accepts, “the first few decades after the socialist revolution can best be understood as a transition to socialism” when capitalist market allocation continues, “a substantial private sector” with capitalists, “people who will be allowed to take from what society produces according to their property and not according to their work” (1998, 116–17). Ollman (1998) therefore in effect also proposes Marx and Engel’s strategy in the *Manifesto* of transitioning to socialism by gradually out-competing capitalists.

The reason for their inconsistency is, as Schweikart (1998, 171) points out, “they have no alternative to propose for the period immediately following the accession to power of a socialist government.” Like many other

Marxists, they overlook Marx's enthusiasm for worker cooperatives, which is consistent with him accepting a continuing, but limited, role for markets. For example, as Selucky puts it,

Any workable model of self-management [sic] or worker's participation requires decentralization of micro-economic decisions, an indicative rather than command central plan, information coming both from the plan and consumers, control of macro decision-making from the bottom and real autonomy of enterprises and self-managing bodies. It is, therefore, quite clear that any concept of a self-managing socialist economy would require a revision of the Marxist rejection of the market socialist economy. (Selucky 1974, 60)

Selucky argues, "The concept of self-management cannot either be accepted or rejected without a substantial revision of the original Marxist theory" (1974, 62), that supposes Marx rejected markets. Without a role for markets, Selucky is right, key aspects of Marx's concept of revolution are in jeopardy—with central planning there is no historical role for the proletariat as the ruling class, and the state cannot 'wither away' (discussed below)—and he concludes, therefore, that revising Marx's apparent rejection of markets would be a small price to pay:

In order to accept the concept of self-management, it is necessary to revise the Marxist concept of the market. In order to reject the concept of self-management, it is necessary to revise the Marxist concept of the historical role of the proletariat; the Marxist concept of socialist revolution; and finally, the Marxist concept of the State. . . . If we compare the significance of the Marxist concept of the market with the combined significance of the concepts of the historical role of the proletariat, the socialist revolution and the State, we can easily find the way out of this dilemma. The Marxist concept of the market is far less important for the whole doctrine than is the Marxist concept of revolution. (Selucky 1974, 62–63)

The choice, however, is a false one. The required revisions are in Marxists' interpretations. In Marx's mature concept the proletariat abolishes the capital market and the market for 'free' wage labor, according to the accounting interpretation, but workers freely choose their occupation, and are free as consumers to buy, and cooperative enterprises freely compete to sell, in markets for products and services, within the law and subject to social regulation.

Worker Cooperatives

Some Marxists complain that Marx does not discuss "such obviously important developments as workers' control. We can only guess how much

power workers enjoy in their enterprises and through what mechanisms they exercise it on the basis of the democratic processes Marx favors for politics” (Ollman 1977, 20). However, this takes no account of his persistent advocacy of worker cooperatives, or the implications of his theory of capitalist accounting for their accountability to workers and society, in providing the economic foundations of his democratic ‘dictatorship of the proletariat.’

The significance of the Paris Commune in 1871, Marx explained to “the mouthpieces of present society” in *The Civil War in France*, was that its vision of a system of “united cooperative societies” represented a movement of history, “a lever for uprooting the economical foundations upon which rests the existence of classes, and therefore of class rule,” a “‘possible’ communism”:

If co-operative production is not to remain a sham and a snare; if it is to supersede the capitalist system; if united co-operative societies are to regulate national production upon a common plan, thus taking it under their own control, and putting an end to the constant anarchy and periodical convulsions which are the fatality of capitalist production—what else, gentlemen, would it be but communism, ‘possible’ communism? (Marx 1986b, 334–35)

The Commune’s revolutionary workers “have no ideals to realize,” Marx argued, “but to set free elements of the new society with which old collapsing bourgeois society is itself pregnant” (1986b, 335), who proposed doing this, not by central planning or “self-management” (cf. Selucky 1974), but a scheme of “self-government,” a “political form”:

The Paris Commune was, of course, to serve as a model to all the great industrial centres of France. The Communal *regime* once established in Paris and the secondary centres, the old centralized Government would in the provinces, too, have to give way to the self-government of the producers. In a rough sketch of national organization which the Commune had no time to develop, it states clearly that the Commune was to be the political form of even the smallest country hamlet. (Marx 1986b, 332)

According to Selucky (1974, 61), just like the *Manifesto*, Marx in 1871 argued, “All functions of management (e.g. planning, allocation of resources, distribution of wealth, etc.) should be taken over by direct producers.” However, ‘self-government’ does not necessarily mean ‘self-management’ because whereas governments have constitutions that specify rights and processes, like capitalist joint-stock companies, their managers are workers hired by contracts to act in the interests of the owners (Mayson, French, and Ryan 2006). Rather than workers hiring themselves to supervise themselves in their own interests, we can interpret Marx’s scheme as taking the means

of production into public ownership, thereby abolishing the capital market, abolishing 'free' wage labor, and establishing a system of cooperative enterprises and accounting results control by a 'vast association' of workers. Starting from capitalism where management is accountable to total social capital, the 'dictatorship of the proletariat' converts the concentrated and centralized capitals in joint stock companies into worker cooperative enterprises accountable to their workers and society.

A qualitative transformation of society, Marx emphasized in the *Critique of the Gotha Programme*, would not result from the German workers' party "demand [for] the establishment of producer co-operatives with *state aid under the democratic control of the working people*" (1989b, 93). He (Marx 1989b, 93) criticized the absurdity that "instead of arising from the revolutionary process of transformation of society, the 'socialist organization of the total labor' 'arises' from the 'state aid' that the state gives to the producers' co-operative societies and which the *state*, not the workers, 'calls into being.' It is worthy of Lassalle's imagination that with state loans one can build a new society just as well as a new railway!" State aid made cooperatives accountable to a capitalist state, a subservience not mitigated by the plea for 'democracy.' The word 'democratic,' Marx (1989b, 93) pointed out, "means in German 'Volksherrschaftlich' [by the rule of the people]. But what does 'control by the rule of the people of the toiling people' mean? And particularly in the case of a toiling people which, through these demands that it puts to the state, expresses its full consciousness that it neither rules nor is ripe for ruling!" It was not revolutionary to 'demand' state aid for proletarian cooperatives, or to ask for 'democracy.' The revolutionary action required was creating cooperative enterprises "from the standpoint of a class movement," that is, on a "national scale" by the workers, and accountable to them, "to revolutionize the present conditions of production," that is, change the social relations of production:

That the workers desire to establish the conditions for co-operative production on a social scale, and first of all on a national scale, in their own country, only means that they are working to revolutionize the present conditions of production, and it has nothing in common with the foundation of co-operative societies with state aid. But as far as the present co-operative societies are concerned, they are of value only insofar as they are the independent creations of the workers and not protégés either of the governments or of the bourgeois. (Marx 1989b, 93–94)

Cooperatives in capitalism were progressive for Marx only when workers created them, not if they were accountable to a capitalist state or benefactor and necessarily shared their capitalist aims. While for Marx "the first sprouts of the new society are [cooperative] enterprises producing for the market" (Lawler 1998, 39, 51), socialist cooperatives would be qualitatively different

from cooperatives operating within capitalism. They would, he implied, also be accountable to society, by persistently criticizing ‘anarcho-syndicalism,’ the other branch of utopian socialists, Louis Blanc and Michael Bakunin, who wanted workers’ control of every factory and all industries, but failed to specify a “procedure through which” society would co-ordinate them (Lavoie 1985, 35). Marx and Engels criticized the anarchists because, as Lavoie (1985, 34) says, they “would abandon the imperfect organization of anarchic production that is enforced by the profit and loss system [i.e. capitalism] and replace it with no social organization of production at all.” Marx and Engels insisted there must be “Some process . . . [to] ensure that society’s scarce resources are used in such a manner that the means of production are reproduced and, preferably, expanded” (Lavoie 1985, 35).

In 1886, Engels proposed, “the introduction of cooperatives into existing production . . . just as the Paris Commune demanded that the workers should manage cooperatively the factories closed down by the manufacturers” (1993, 389). Neither he nor Marx, Engels emphasized, had ever “doubted that, in the course of the transition to a wholly communist economy, widespread use would have to be made of cooperative management as an intermediate stage” (1993, 389). Engels added, “Only it will mean so organising things that society, i.e. initially the State, retains ownership of the means of production and thus prevents the particular interests of the cooperatives from taking precedence over those of society as a whole” (1993, 389). Engels did not spell out how the state should reconcile the “interests” (wages and surplus) of cooperatives with society’s “interests,” “The most important progressive function of society, accumulation,” which should not be “placed at the arbitrary . . . discretion of individuals” (1987, 297). However, retaining “ownership” of the means of production rather than control, which was in the hands of the cooperatives, the state would necessarily rely on accounts, as Engels knew (Bryer 2017, chapter 3).

For Lavoie (1985) the ‘procedure’ or ‘process’ must be central planning. However, Marx and Engels consistently argued for a democratically elected and accountable workers’ state, for control by workers, which is what they meant by their occasional uses of ‘dictatorship of the proletariat,’ not ‘dictatorship of the Party’ or their leaders (Draper 1986). Against Lassalle’s “fetishism of the state, the theoretical side of his pervasive authoritarianism” (Draper 1986, 304), as Marx put it, “freedom consists in converting the state from an organ superimposed upon society into one completely subordinate to it” (1989, 94), that is, in making the state fully accountable to workers. To provide the economic basis for democracy on Day 1 of the ‘dictatorship of the proletariat,’ to transcend capitalism’s profit and loss system of accounting control that Marx had explained in *Capital* (Bryer 2017), it implements a system of cooperative enterprise and social accounts, not central planning, a conclusion that Engels accepted, and Lenin eventually drew (see Bryer 2019a).

'Dictatorship of the Proletariat'

Marx criticized the Gotha programme's demand for "the free state," for a state above class conflict, for seeing it "as an independent entity that possesses its own 'intellectual, ethical and libertarian bases'" (1989b, 94), seeing the state as 'free' or independent from the underlying mode of production. For Marx, by contrast, "existing society (and this holds good for any future one) [is] the basis of the existing state (or of the future state in the case of future society)," and "its present root is bourgeois society" (1989b, 94). Because the program ignored the economic foundation, it had not raised and had no answer to the question, "What transformation will the state undergo in communist society?" (Marx 1989b, 95). Marx's answer was "between capitalist and communist society there lies the period of the revolutionary transformation of the one into the other. Corresponding to this is also a political transition period in which the state can be nothing but *the revolutionary dictatorship of the proletariat*. . . . Now the program does not deal with this nor with the future state of communist society" (1989b, 95).

Marxists often highlight what they see as "ambiguities in Marx's writings on the dictatorship of the proletariat" (Sandle 1999, 19). First, they dispute, "how long the dictatorship of the proletariat will last? Was it a short period between capitalism and socialism? Or was it the entire period between capitalism and the onset of full communism" (Sandle 1999, 19), meaning that the dictatorship continues through the lower phase of socialism? For example, Walicki (1995) argues for the former and Ollman (1977, 15) for the latter. Both interpretations are consistent with Marx's early model of a transition from capitalism, despite the fact that Ollman (1977, 8) "tried to reconstruct Marx's vision of communism from his writings of 1844—the year in which he set down the broad lines of his analysis—to the end of his life."

While Marx and Engels always argued for the "definitive conquest of state power by the proletariat," for a "social revolution as against notions of a gradual socialistic permeation of capitalist society without a transformation of state power" (Draper 1986, 213), in his early work the proletarian state would use it to make the economic transition from capitalism to socialism. In a letter to Weydemeyer in 1852, for example, Marx still argued, "this dictatorship only constitutes the transition to the abolition of all classes and to a classless society" (Marx and Engels 1983a, 62, 65), and it manages the transition from capitalism to the lower phase of socialism. However, according to the accounting interpretation, in the *Critique of the Gotha Programme* the 'dictatorship of the proletariat' institutes the lower phase of socialism on Day 1 by changing the social relations of production and managing progress to the interim aim. Figure 8.1 shows these alternatives as A, B, and C, respectively.

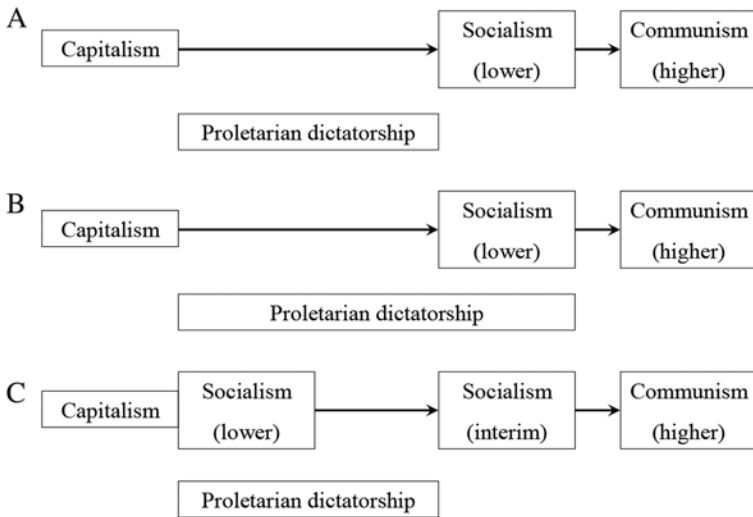


Figure 8.1 Interpretations of the Proletarian Dictatorship. Source: Created by the author based on Sandle (1999, 19).

Marxists also often argue, “the nature and purpose of the proletarian dictatorship” is ambiguous (Sandle 1999, 19). Based on Marx’s supposed adoption of Blanquist views (Draper 1986, 119), many argue he advocated centralized, dictatorially repressive, state planning, and control. By contrast, according to the accounting interpretation its purpose is the interim aim, and its “nature” is democratic control; for example, Draper’s (1986, 274) conclusion, that “inaugurating a political system of democratic control from below . . . is what . . . [Marx] thought the dictatorship of the proletariat was supposed to do.” To Marx it meant “a state in which the proletariat exercises dominant political power. . . . No more, no less” (Draper 1986, 269). Marx used the phrase ‘dictatorship of the proletariat’ in 1850, Draper (1986, 212, 264) shows, to distinguish his view that socialism meant rule by the workers as a class, a democratically elected and controlled workers’ state, from the Blanquist ‘dictatorship of the party,’ or person, over the workers, and used it in the early 1850s only for this purpose. From 1852, Marx did not use the phrase, preferring the ‘rule of the proletariat’ or ‘conquest of political power,’ or similar phrases, and its last use by him for this purpose was in the *Critique of the Gotha Programme* (Draper 1986, 111, 269, 306). Engels used the phrase before and after Marx’s death with the same meaning and for the same purpose (Draper 1986, 111, 296, 298, 302, 317–23). In 1874–75, Marx made the same criticism without using the phrase in a commentary ridiculing Bakunin’s *Principle Bases for the Social Order of the Future* for its “barracks-communism Everything is

here: common pots and dormitories, control commissioners, and *comptoirs*, the regulation of education, production, consumption—in a word, of all social activity; and at the top, *our Committee*, anonymous and unknown, as supreme direction,” and made the same criticisms of August Comte’s system (Avineri 1968, 238–39).

Representative democracy defined what Marx meant by ‘class rule,’ both bourgeois and proletarian (Draper 1986, 116). Bourgeois democracy was only “vulgar democracy,” Marx argued, but it was “precisely in this . . . form of state of bourgeois society that the class struggle has to be fought out to a conclusion” (1989b, 96). This leaves unanswered the “far more basic question of the alleged impossibility of real *democracy*,” the routine “scorn . . . for the belief that that democratic control is possible,” how “the complete and thoroughgoing democracy of society” is conceivable, Draper concludes, which to him, “to be sure, is another subject” (1986, 117). However, creating a complete and thoroughgoing democracy in the “future state of communist society,” the chapter has argued, was for Marx a question that “could only be answered scientifically” (1989b, 96), which meant it was a question of accounting and accountability (Bryer 2017). This would justify Marx’s curt answer in 1873 to Bakunin’s jibe, “The Germans number nearly 40 millions. Will, for example, all 40 million be members of the government?” “Certainly,” Marx replied, “for the thing begins with the self-government of the commune” (Marx, Engels, Lenin 1972, 150). The chapter concludes with an outline of a system of Marxian accounting giving all workers democratic economic control of enterprises and the state, a key part of the necessary superstructure of self-government, it argues, to implement Marx’s mature concept of the democratic socialist mode of production (see figure 8.2).

The “final ambiguity,” some Marxists argue, is whether the proletarian state would “be abolished . . . as envisaged by Marx? Or would it ‘wither away,’ as envisaged by Engels” (Sandle 1999, 19; Bender 1981). In fact, both Marx and Engels were for abolishing the capitalist state and for creating a proletarian state that “begins to wither away immediately” (Lenin 1964, 401, 407, 444). They shared the aim, which did not change, of creating a “dictatorship . . . [that] only constitutes the transition to the abolition of all classes and to a classless society,” as Marx put it in his letter to Weydemeyer in 1852. Engels’ ‘withering away’ is consistent with Marx’s interim aim, which implies that the ‘dictatorship of the proletariat,’ which arises as Engels put it, from the initial need for continuing “state interference in social relationships” (1987, 268), ends with the equalization of directly social labor time when having abolished class and removed its blemishes the need disappears (see Bryer 2019a). The state’s remaining functions are to administer society’s central bank and accounting system, until abundance in the higher phase when the need for money and to appropriate surplus labor disappear.

A SCHEME FOR SOCIALIST ACCOUNTING: DAY 1

On Day 1, the proletarian state abolishes the capital market, the capitalists' collective results controller of the production of surplus value (Bryer 2017). The state replaces the capital market with a 'vast association,' all workers thoroughly versed in Marx's explanation of capitalist accounting. Socialists must be ready with an articulated system of Marxian accounting for value, accounting standards based on Marx's theory of value, and an institutional structure for using it self-consciously to give workers collective results control of society's production and distribution of value.

This means state ownership, but collective worker control of all enterprises, transformed into worker cooperatives, by using accounts to hold enterprise management accountable to workers, and worker-shareholders accountable to society, for value from Day 1, but also for immediately pursuing the interim aim of developing the forces so that every labor hour produces directly equal social value. Table 8.4 outlines some of the necessary institutions.¹² To implement them would require detailed inputs from many disciplines, from accountants, economists, lawyers, social scientists, and so on. They presume the state's taxation of social surplus, its use in providing social overheads such as free banking, education, health care, legal system, social services, and so on, and its management of the economy.

The collective worker has results control of the bank, and the bank and workers have results control of cooperative enterprises (see figure 8.2). All workers have a share in their own cooperative enterprise and are public shareholders of the bank, which creates a democratic, forward-looking and adaptive 'vast association.' On Day 1, workers remain accountable to their enterprises, but as free agents, free from capitalist ideology and the economic compulsion to sell their labor power, by holding all enterprises accountable to them, and their enterprises to society, as its dispersed and collective owners for the production and distribution of value. All workers are bank shareholders who receive a public dividend income, and members of a cooperative enterprise, which pay their wages and worker dividend incomes.

Abolishing the capital market, Ludwig von Mises and Frederick von Hayek influentially argued, abolished 'rational economic calculation,' which reduced socialism to ethics or 'psychology' (Hayek 1935, 2). Mises taunted

All socialist systems, including that of Karl Marx, and his orthodox supporters, [who] proceed from the assumption that in a socialist society a conflict between the interests of the particular and general could not possibly arise. Everybody will act in his own interest in giving of his best because he participates in the product of all economic activity. . . . They believe they can construct a socialist commonwealth on the basis of the Categorical Imperative alone. (Mises 1935, 119)¹³

Table 8.4 Implementing Marx's Concept of Socialism

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1. A state bank owns all the equity shares of every cooperative enterprise.^{a)}
 2. The bank advances public funds to existing and new cooperative enterprises on approval of a prospectus drawn up by freely associating workers.^{b)}
 3. The bank allocates an enterprise's equity votes to its workers. The shares are not tradable.^{c)} All workers (including management) hold one share with one vote in their enterprise.
 4. Workers receive wages for their work and an equal share of any workers' dividends from surplus after taxation.^{d)}
 5. The bank distributes the social surplus after worker dividends, public expenditure, and investment, as public dividends to all individuals, as of right.
 6. The bank administers society's accounting system and produces its consolidated accounts.^{e)}
 7. All enterprises implement legally binding accounting standards based on Marx's theory of value.
 8. Cooperative enterprise management is legally accountable to worker shareholders for agreed target rates of surplus social value (s/v), target organic compositions of funds (costs and surplus) ($v/[v + c]$), targets for asset turnover ($[v + c]/K$), and hence targets for ROI, within parameters set by the bank.^{f)}
 9. Cooperative enterprises are legally accountable to the bank for minimum targets.
 10. The bank sets minimum financial targets to encourage the development of the forces of production such that every hour of labor directly has equal social value.^{g)}
 11. The bank employs public auditors to audit all cooperative enterprises' accounts.
 12. The courts enforce the accountability of managers to worker shareholders, the accountability of enterprises to the bank, and the propriety of auditors.
 13. All workers, educated in the fundamentals of Marxian accounts and financial analysis, have a legal duty to vote independently at bank and enterprise shareholder meetings.
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Notes:

^{a)}Cooperative enterprises are remodeled joint-stock companies. Social overhead providers are not-for-surplus cooperative entities. There are no other banks, there is no money capital, and there are no credit markets. The bank advances public funds as equity. There could be a size threshold before compulsory public ownership.

^{b)}The bank is a joint stock holding company controlled by the collective worker, its shareholders. All workers are shareholders having one share each.

^{c)}With this exception cooperative shareholders have the same rights as capitalist shareholders, to appoint, fire, and remunerate, the 'directors,' their managerial agents, to approve major fund raising or expenditures, investments, mergers, dividends, and so on.

^{d)}The bank's workers get the average worker's dividends, as do other socially necessary but unproductive workers (e.g., doctors, nurses, police, teachers, and administrators).

^{e)}The bank produces the national accounts, and is accountable for national results to its shareholders, the collective worker. The bank keeps income and expenditure accounts for all workers, who can save and, within limits, borrow money (with no interest) on approval of a budgeted repayment schedule.

^{f)}The bank sets minimum targets based on averages.

^{g)}For example, in the situation in table 8.2, the bank gives the MOS department a target ROI of 50 percent, a target rate of surplus value of 2, an organic composition of 0.33, and an asset turnover ratio of 0.75. The bank advances capital for agreed MOS's investment plans that progress toward this target.

Source: Created by the author.

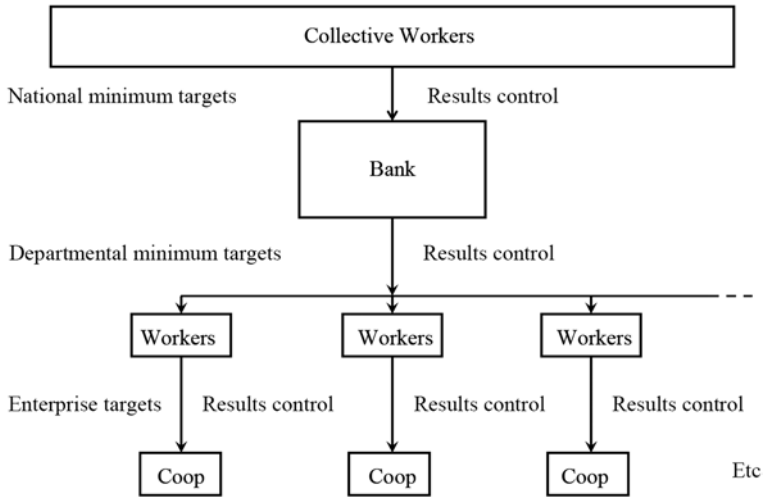


Figure 8.2 Socialist Accounting Day 1. *Source:* Created by the author.

Socialism does not abolish self-interest. However, rather than a moral choice, for Marx socialist economic calculation was a question of knowledge, of ‘science,’ how to calculate to reconcile individual and social interests in the production and distribution of value, a question of accountability. Ignorant of capitalist accounting, von Mises and von Hayek conclude that individual property rights over the means of production are essential to ‘rational economic calculation,’ the vulgar interpretation of the Trinity Formula, which confuses accounting with the fictional world of money capital (Bryer 2019a).

The economic rationality of socialist calculations on Day 1 depends on workers understanding the capitalist law of value, and accepting the task of breaking it by increasing the forces of production so that every labor hour directly produces equal social value. Large accumulations of individual wealth are therefore not acceptable, but individual reward for innovation and results is encouraged by the prospect of higher wages, worker dividends, and social surpluses. ‘Entrepreneurs’ who organize successful new cooperative enterprises will get higher wages and worker dividends, and their worker-shareholders can, within limits, choose to pay them ‘bonuses’ from above target surpluses. The bank rewards enterprises for exceeding targets according to an agreed formula permitting additional worker dividends, and punishes them for not meeting targets by limiting dividends, withholding or limiting additional funds, or closure. Persistent failure to meet agreed financial targets leads to enterprise reorganization, closure, and so on, but a function of the

bank is to advance public funds to existing and new enterprises to ensure continuous full employment. The bank approves mergers and reorganizations of cooperatives that promote increases in the forces of production, which produce increasingly equal higher incomes, and increased social surpluses.

Enterprise management makes investment decisions by forecasting expected ROI. Socialism abolishes money capital and therefore 'time preference' as a rate of interest on capital is not relevant. Its aim is to increase the forces of production as rapidly as possible so that each hour of labor produces equal social value. As workers understand the law of value, they accept the need to publish enterprise financial and management accounts, to deposit them at the bank, including their assumptions and forecasts, and to be accountable to society. As in capitalism, distortion of accounts would be a criminal offense. Every year the bank forecasts the national income account, based on consolidating cooperatives' forecasts, and its own forecasts commissioned from many independent sources. The bank accepts all investment proposals, within society's investment budget approved by the bank's shareholders, from enterprises offering the highest, risk-adjusted, forecast surplus social value, and at least the target return on public funds, which progress toward the interim aim. To replace the capital market's 'rational economic calculations,' the basis of the bank's investment appraisals is pooled, continuously updated, forecasts of enterprise and national ROI, their ratios, and risks, from many independent analysts.

Will socialist enterprises waste or use capital inefficiently because a capitalist does not own it? As in capitalist joint-stock companies, neither the public funds nor the means of production or other assets of a cooperative enterprise are the personal property of individuals. Socialist enterprises can buy and sell their assets, but they are required to use and publish replacement cost accounts and maintain the current value of their public funds. Wages and dividends depend upon realized value. If workers accept the law of value and the aim of socialism, they will accept that change is inevitable and desirable. Meeting or exceeding targets means change, for example, fewer and more highly skilled workers; failure to meet financial targets means change, for example, closure, which workers will accept because although there are costs, the guaranteed public income, grants for education, retraining, and so on, and an otherwise fully employed workforce, minimizes them. All workers have an incentive to increase the forces of production to produce increasingly equal and higher incomes and social surpluses.

Starting on Day 1 with accounting for value, the result, as Marx and Engels concluded Part 2 of the *Manifesto*, should be, "In place of the old bourgeois society, with its classes and class antagonisms, we shall have an association, in which the free development of each is the condition for the free development of all" (1976b, 506). Or, as Marx put it in 1872, the

result should be that “*National centralisation of means of production* will become the *natural* basis of a society composed of associations of free and equal producers, carrying on the social business on a common and rational plan” (1988, 136, emphasis added).¹⁴ That is, public ownership of the means of production controlled by associations of free agents in cooperatives was the “natural basis,” the fully human basis, based on a common and rational way of keeping enterprise and society’s accounts. Accounts were necessary for carrying on the “social business” in a “rational” way, which was “the humanitarian goal to which the great economic movement of the nineteenth century is tending” (Marx 1988, 136), and to achieve it socialist ‘bookkeeping’ would, as Marx said, be even more important than it is in capitalism. The bank, money, and accounting would only become unnecessary when the development of the forces created abundance in the higher phase of communism.

CONCLUDING COMMENTS

Accounting is integral to Marx’s concept of socialism from *Grundrisse* onward. Understanding his theory of capitalist accounting control is critical because to abolish capitalism and implement socialism requires accounting for value and the interim aim from Day 1, to allow all workers to hold cooperative enterprises and the proletarian state accountable for results. This interpretation supports those who argue that Marx’s concept of socialism developed over his life, and those who argue he persistently sought to abolish capitalism and alienation, because democratic control of production and distribution by all workers using accounts could provide the economic foundation of the radical, nonparliamentary, political democracy he always advocated.

To get to Day 1, chapter 7 argued, requires ‘critical accounting.’ The final chapter explores its tasks in the light of the accounting interpretations of Marx’s theories of value, history, ideology, and socialism. These are its roles in education and research, in class conflict, social movements, its critique of capitalist corporate governance, and the additional task created by the infiltration of neoclassical economics, the neoclassical version of the Trinity Formula, into modern financial reporting, which has created a further ideological obstacle to socialism, but also an opportunity. Marx claimed his theory of value had stripped the mystical veil from the phenomenal forms, the categories in traditional capitalist accounts, reinverted their categories, stood them right-side up, but the neoclassical version of the Trinity Formula introduced a radical distortion that not merely ‘inverted’ the categories, but changed them. The infiltration of American accounting by neoclassical

economics therefore presents an additional ideological barrier to socialism. Whereas Marx assumed capitalist accounts were objective representations of value, today financial accounting is increasingly subjective, and the extent to which it is ‘practically adequate’ is increasingly questionable.

Marxist economists who consider the issue rightly conclude, “Profits . . . are the most difficult of economic quantities to measure. Profit measures the difference between ‘revenue’ and ‘cost,’ but these two items are themselves the subject of much controversy as to what should be included and how to measure it” (Sherman 1968, 20, quoted by Dawson and Foster 1994, 316). It is true that today “profits by themselves are notoriously difficult to measure . . . [and] the profit rate is even more so, since there are also deep disagreements among economists, business analysts and accountants about what kind of base to measure the profits against” (Dawson and Foster 1994, 316). It is important to understand, however, that it was the exceptional historical infiltration of Irving Fisher’s neoclassical theory of accounting (1906; 1930), which now underlies the FASB’s conceptual framework, that introduced “deep disagreements” by theorizing financial accounting from the perspective of money capital, a historical development that Marx did not anticipate (Bryer 2012, 2013b, 2016, 2019b). Neoclassical ‘modern financial reporting’ is both a threat and an opportunity for Marxists. A threat if they confuse neoclassical accounting with necessary reality, but an opportunity if they understand its historical origins because this would allow them to engage in the critical deconstruction of capitalist accounts and the construction of the socialist mode of production. Critical accountants, in short, also face the challenge of revealing the radical distortions produced by the neoclassical Trinity Formula, and their consequences, but have the opportunity of demonstrating the social functionality of accounting for value.

NOTES

1. Engels and Lenin popularized using ‘socialism’ for Marx’s ‘lower phase’ and ‘communism’ for his ‘higher phase’ (Sandle 1999, 15; Moore 1993, 3).

2. Historians have often called Marx’s ‘revolutionary dictatorship’ idea ‘Blanquist,’ but the top-down ‘educational dictatorship’ that was common currency among early nineteenth-century utopian socialists, Draper (1986, 33–34, 37, 39–40) shows, came from François Babeuf, whose followers rejected the Blanquists’ support for a one-man or ‘revolutionary gang’ dictatorship. Draper (1986, 34–39, 111–174; 264–288) refutes the myths that Marx derived the phrase ‘dictatorship of the proletariat’ from Louis Blanqui, or accepted the early socialists’ concept of ‘dictatorship.’

3. *Shorter Oxford English Dictionary on Historical Principles*, 3rd ed. 2 vols. s.v. “plan,” *Merriam-Webster’s Collegiate Dictionary*. 11th ed. s.v. “plan.”

4. See, for example, the Socialist Party of Great Britain, Socialist Standard, No. 1313 January 2014 ‘Marx, Co-operatives and Capitalism.’

5. <http://www.marxists.org/archive/marx/works/1844-epm/3rd.htm> (3 of 39) [23/08/2000 18:59:01].

6. *Shorter Oxford English Dictionary on Historical Principles*, 3rd ed. 2 vols. s.v. “sweep”; *Merriam-Webster’s Collegiate Dictionary*. 11th ed. s.v. “sweep.”

7. Marx’s analysis of ‘productive’ and ‘unproductive’ labor explains the distinction in capitalist accounts between production and nonproduction overheads (Bryer 2017, chapter 7). Applying it to his account, would include production overheads as elements of ‘means of production’ (materials) and ‘means of consumption’ (wages).

8. Also translated as “co-operative society” (Marx and Engels 1968, 319).

9. The Moscow edition translates “What we must deal with here” (Marx 1977, 568) as “What we are dealing with here” (Marx 1989b, 85), which could suggest that this paragraph also refers to the interim aim of the previous paragraph.

10. The Moscow edition translates ‘directly socialized labour,’ that is, centrally directed labor, as ‘directly associated labour’ (Marx 1996, 104), which is not the same as ‘directly social labour.’ We saw earlier that Marx criticized Saint-Simonian labor money schemes for their bank’s ‘papacy of production.’

11. The Moscow edition translates “collective production” as “socialised production” (Marx 1997, 356).

12. References to the ‘state’ and ‘nation’ mean ‘the world.’

13. The ‘categorical imperative’ is part of Immanuel Kant’s moral philosophy, acting for the ‘right’ motives.

14. The editors ‘corrected’ Marx’s manuscript by replacing ‘natural’ with ‘national’ (Marx 1988, 136, cf. Selucky 1974, 49).

Chapter 9

The Tasks of Critical Accounting

Critical accounting appeared in the 1970s, grew in influence during the 1980s, and today is an established but minority research interest, part of a movement within accounting research adopting ‘interdisciplinary perspectives’ (Roslender and Dillard 2003).¹ This community rejected the managerialist and ‘mainstream’ academic view, derived from neoclassical economic theory, that the objective of accounting was to report the ‘facts’ to promote ‘rational’ decision making, to “rationalize resource allocation” for the “common good” (Morales and Sponem 2017, 159). To overthrow the conventional wisdom that “accounting is a neutral, objective technology that functions to improve the allocative efficiency of markets” (Arnold 2005, 805), these scholars turned to a variety of disciplines (Roslender and Dillard 2003). One of them, “Marxist oriented critical accounting research—‘as we know it’—began to emerge in the UK in the mid-1970s” (Tinker 2005, 106), “influenced directly or indirectly by Marxist thought” (Arnold 2005, 805), labeled as a ‘political economy’ or ‘labor process’ approach, and became an important stream in the 1980s. The ‘Marxist-oriented’ perspective has remained a recognized stream of interdisciplinary research, but “its influence was overshadowed in the 1990s by the rise of postmodern and poststructuralist theories” (Arnold 2009, 805).² A critique of postmodernist accounting research is beyond the scope of the chapter, which evaluates the Marxist contributions (hereafter ‘critical accounting’), those that refer to Marx or Marxism or imply they are relevant to the study of accounting, from the perspective of the accounting interpretation of Marx’s theories of value and history.

Most Marxist-oriented critical accounting research “as we know it,” consciously or otherwise, reflected the prevailing currents of Marxist debate, which in the 1970s and 1980s saw Marxism in retreat in the face of renewed attacks on Marx’s theories of value and history. Working in

a climate dominated by belief in the supposed demonstration that Marx's illustration of the transformation from values to prices in Volume 3 of *Capital* was inconsistent, which undermined his theory of value, overlooking the development of alternative interpretations from the early 1980s (Kliman 2007), perhaps understandably, almost all critical accountants have ignored, downplayed, or rejected it.³ They often stress the importance of history, but Marx's historical materialism is also conspicuous by its virtual absence.

Postmodern and poststructuralist theories, many critical accountants accept, "took hold in critical accounting, in part, as a needed corrective to the economic determinism and functionalism found in both neoclassical and Marxian economics" (Arnold 2009, 805). Tinker (1999, 651), for example, rejected "what is sometimes called a base-superstructure reading of Marx," in which "Marx's own contribution is confined largely to the (economic) base, that elucidates capitalism's development in terms of an inexorable law of value," as an "economistic caricature." The chapter supports Tinker's (1999, 2005) view that "the critical accounting project as the source of criticism about accountancy must have its roots in Marxist theory. In other words, if it ain't Marxist, it can't be critical" (Roslender and Dillard 2003, 340), but differs in its interpretation of what that is. Previous chapters supported a "base-superstructure reading," but rejected the charge of economic determinism, embraced functional explanation, and identified the necessary conditions, including those met from capitalism's development, which Marx argued would make socialism inevitable.

The chapter discusses the limits of critical accounting research without Marx's theories of value and history, absences that have, it argues, undermined its goal of "revolutionary praxis" (Roslender and Dillard 2003, 340).⁴ To pursue it, chapters 7–8 argued, requires engaging in the tasks that follow from the accounting interpretation of Marx's theories of value, history, and ideology, and his concept of socialism, which critical accountants have not clearly recognized. In addition to Marxist accounting education, these tasks are, first, interventions in class struggles by calculating rates of profit, explaining them by rates of exploitation, compositions of capital, and capital turnover, and calculations making the case for the socialist alternative of universal worker cooperatives. Second, accounting interventions in social movements by calculating the social surpluses foregone by capitalist relations fettering the development of the forces. Third, interventions in corporate governance, revealing the distortions and social dysfunctionality of the 'modern financial reporting' introduced by Irving Fisher's neoclassical theory of accounting in contrast to 'Marxian accounting,' accounting consistent with Marx's theory of value, by developing comprehensive Marxian accounting standards for Day 1.

Critical accountants generally accept, “As Marx noted long ago, the role of philosophy is not to describe the world but to change it. And the aspirations of critical accountants should be no less” (Neimark 1990, 110; see also Tinker 1999, 645; Roslender and Dillard 2003, 338). However, without his theories of value and history, the chapter argues, they have found it impossible to persuasively “devise an approach to accounting studies that consciously privileges the realization of the [Marxist] philosophy of praxis” (Roslender and Dillard 2003, 325). Following the ascendancy of postmodernist research there remains, “the challenge . . . to reclaim the critical accounting project as an explicitly radical, politically engaged programme that exists within the more inclusive present day . . . [interdisciplinary] project” (Roslender and Dillard 2003, 339). The chapter identifies the fundamental problem as critical accountants’ failure to recognize the principles and practices of traditional capitalist accounting, that Marx explained using his theory of value (Bryer 2017), as the primary subject of inquiry that could provide a foundation for revolutionary praxis, and distinguish this from modern financial reporting based on neoclassical economics.

The chapter first outlines the emergence of critical accounting and its broad limits from the perspective of the accounting interpretation. Second, focusing on a few influential contributions, it explores these limits without Marx’s theory of value and, third, without his theory of history. The chapter concludes with an outline of the challenges posed by modern financial reporting and the opportunities for developing Marxian accounting standards.

CRITICAL ACCOUNTING

Critical accounting emerged within an interdisciplinary research movement questioning the conventional view in textbooks, supported by managers, investors, regulators, and ‘mainstream’ researchers employing financial economics, that sees the role of accounting “as merely residing in the technical domain, serving the role of a neutral facilitator of effective decision-making” (Hopwood 1989, 141). This view makes several unquestioned assumptions, leading members pointed out, about the nature of the social and organizational worlds, accounting, and its role. It assumes organizations have clear economic goals that are congruent with the interests of its members, that behavior is rational and co-operative, and that accounting gives investors and managers objective and neutral information, a “mirror-like objective depiction of reality,” essential for decision making. It assumes accounting is for the good of all, and, therefore, individuals who do not co-operate are “deviants” (Hopper et al. 1987, table 1, 442).

Accounting scholars began to challenge these assumptions from the late 1970s (e.g., Burchell et al. 1980; Cooper 1983; Hopper et al. 1987; Hopwood 1980, 1983, 1989; Parker 1977; Tinker 1980). Rather than a facilitator of rational decisions, they argued, “accounting is . . . related to the pursuit of particular economic, social and political interests,” and therefore questioned the objectivity and central significance of accounting numbers, sought “to undermine the pretensions of the accounting potential of old” (Hopwood 1989, 141, 149). Organizational goals, some argued, are the problematic outcomes of processes of social interaction between individuals in which actors negotiate uncertain meanings that change. From this ‘naturalistic’ perspective, accounting is a “language subjectively created, sustained and modified intersubjectively” (Hopper et al. 1987, table 1, 442), having neither a technical nor a social essence. As Burchell et al put it, “Rather than being essential to the accounting mission, the roles which accounting serves in organizations are created, shaped and changed by pressures of organizational life. They are implicated in action, rather than being prior to it” (1980, 19).

Others advanced a ‘political economy’ or ‘labor process’ view that questioned the naturalists’ “neglect of organizational goals as [the] articulation of vested interests” (Hopper et al. 1987, table 1, 442). They challenged the “inadequate explanation of persistent conflict and the elements of compliance” (Hopper et al. 1987, table 1, 442), the inadequate theorization of power and politics. They emphasized the failure “to grasp the significance of the class structuring of managerial work” (Hopper et al. 1987, table 1, 442). The role of management accounting, they argued, is “the institutionalized subordination of labour,” so we should view the “organization as a site of class struggle and domination” (Hopper et al. 1987, Table 2, 446; see also Armstrong 1991; Cooper 1983; Hopper and Armstrong 1991; Bryer 2006a). These “strong forms” of “emerging social analyses” of accounting—the Marxist-oriented labor process and political economy approaches—the naturalists countered, implicitly assumed accounting’s social essence, as Hopwood (1989, 148–49) pointed out, that “accounting is a reflection of an abstract conceptualisation of directed social relations and interests” and, therefore, “can be reduced to its social core.” They, in other words, appeared to assume that accounting’s “social core” is ‘capitalist’ without explaining its historical or social origins, apparently found it “tempting to attribute to accounting a mobilizing essence which is abstracted from the practice of accounting itself,” which was a “somewhat paradoxical . . . conception of an accounting potential,” similar to the one whose “pretensions” they criticized (Hopwood 1989, 149).

The accounting interpretation of Marx’s theories of value and history answers this criticism, and we can use them, subsequent sections argue, to identify and address the limits of critical accounting thinking about how to unleash accounting’s radical potential. Marx used his theory of value,

Accounting for Value argued, to explain capitalist control, which gave Marxists a theory of the accountability of individual capitals to total social capital for the rate of profit, and chapter 7 (above) argued, a theory of ideology according to which the phenomenal forms in capitalists' accounts are inversions of the invisible social essence. Marx's mode of production, the "mobilizing essence," is therefore not "abstracted from" traditional capitalist accounting practice in this interpretation, but determines it through class conflict.

At the end of the 1980s, Hopwood saw "the language of the social . . . being intertwined with that of the technical," emphasized the need to understand accounting's "functioning when seen in organizational and social rather than purely technical terms," and called for continually "trying to intertwine accounting with the social" (1989, 142, 149). Critical accountants, we will see, have generally not risen to this challenge, neglecting the "technical," whereas the 'technical' and social are "intertwined" in Marx's capitalist mode of production because, according to the accounting interpretation, its accounting's principles and practices, a key element of the controlling superstructure, 'intertwine' with the social relations by seeking to stabilize them.

Rejecting neoclassical economics and Marx's theory of value, with no economic foundation, accounting is necessarily "seen as essentially political; accounting policies are influenced by ruling elites and dominant ideologies, and accounting practices, in turn, affect the distribution of income, wealth and power within society" (Arnold 2005, 805). Critical accountants have therefore "emphasized . . . the ways in which accounting is a partisan practice that is implicated in distributive *transfers* of wealth between social classes" (Arnold 2005, 805, emphasis added), not its prior appropriation in production by the capitalist class. Rather than its determination by the capitalist mentality and social relations of production, "in this view, accounting both shapes and is shaped by relations of power within the political economy in which it operates" (Arnold 2005, 805), which inevitably leads to the conclusion that accounting, subsumed under the hegemonic power of capitalist 'ideology,' has no revolutionary potential.

Without Marx's theory of value, we will see, activists have found it impossible to challenge the ideological grip of accounting 'facts,' and theorists have not fulfilled critical accounting's promise of producing "better" accounts from the perspective of society (Cooper and Hopper 1990, 10). Without it, earlier chapters argued, we cannot understand Marx's concept of capitalism as a historical mode of production, and therefore cannot understand it as a distinctive mode of accountability, or the socialist goal of accountability to workers and society. Without a theory of history 'class

conflict' is only over the rate of exploitation, not historic conflict between the forces and relations of production. If Marx's theories of value and history are scientifically valid, however, capitalist accounting presents revolutionary opportunities, following sections argue, particularly calculating the social losses from contradictions between the relations and forces of production, and writing and campaigning for Marxian accounting standards that hold management accountable for the production, realization, and distribution of value to a vast association of the world.

WITHOUT MARX'S THEORY OF VALUE

In an early seminal paper Tinker (1980, 147) pertinently asked, "What does the figure at the bottom of an income statement mean?" Is it "indicative of social, institutional and monopolistic power," the explanation of classical political economy, or does it measure "social efficiency and productivity," the marginalist explanation of neoclassical economics? The marginalist explanation is "fallacious," Tinker (1980, 147, 152) argued, because its foundation is the unacknowledged tautology that to measure capital's marginal 'contribution' to society's 'production function,' that is, Smith's Trinity Formula, presupposes the distribution of income it claims to explain, which presumes the existing distribution is optimal, which makes it "ideological." Few Marxists would dispute this well-known criticism of marginalism, the conclusion to the 'Cambridge capital controversies' (Tinker 1980, 151). Without a theory of value, however, Tinker's (1980) criticism of neoclassical accounting, Cooper's (1980) commentary, and their subsequent work, influentially failed to distinguish traditional capitalist accounting principles and practices based on stewardship, from academic economic theorizing based on decision usefulness, which we will see unnecessarily limits the critical accountants' mission, the scope and effectiveness of their practical interventions. Tinker claimed, "contemporary accounting theory and practice depend . . . heavily . . . on marginalist thought" (1980, 149), but as Tomlinson (1990, 72) pointed out, "it is far from clear that the practices of accounting are as closely related to neo-classical economics as . . . [Tinker's] argument suggests," but he did not pursue it.

Based largely on Tinker and Cooper's early papers (discussed below), by the mid-1980s "within critical accounting scholarship, there is a widespread recognition of the distributive and hegemonic effects of accounting (Cooper & Sherer, 1984). For example, accounting techniques, numbers and discourses support and assist in the appropriation of surplus value in core and peripheral countries (Tinker 1980)" (Neu, Cooper, and Everett 2001, 735). For Marx "accounting techniques" play a vital role in controlling the appropriation of

surplus value (Bryer 2017), but Tinker (1980) did not discuss surplus value or demonstrate its appropriation using accounts. Instead, he made inflation-adjusted calculations using data from accounts to analyze the proportions of sales and PV taken by various groups involved with a Scottish-owned iron ore company, Delco, from the early colonial period starting in 1930, until its collapse in 1976 under the postcolonial state of Sierra Leone (Tinker 1980, 154–55). He calculated the investment's ex-ante internal rate of return and ex-post PV, and linked the changing share each group took of sales (Tinker 1980, figure 3, 154; table 4, 156) to the changing “sociopolitical” environment, and therefore did not analyze the role of accounting's “techniques, numbers and discourses.” Tinker's discussion said nothing about the influence of the enterprise's management practices in determining the distribution, “let alone its accounting,” and without a theory of value, we will see, “he is unable to show how his preferred ‘classical economic theory’ could be translated into different accounting practices” (Tomlinson 1990, 73). In short, the critical accounting that developed in the 1980s, in which Tinker (1980) played a seminal role, began and has remained part of “a further phase in the long established tradition of exploring the *non-technical* aspects of accounting, employing the lens of another discipline” (Roslender and Dillard say 2003, 332, emphasis added).

Tinker (1980, 158) appeared to allow for the ‘technical’ when he argued, apparently following Marx, “In order to understand the processes of price formation and income distribution within advanced industrial societies one needs to take into account the second dimension of ‘capital,’ i.e. the state of social relations,” in addition to paying attention to the “economic realm.” Tinker did not cite Marx, however, and these “social relations” are not the method of extracting surplus labor, which for Marx is the “economic realm.” Instead, Tinker argued, “trade unionism, institutionalization of welfare demands and other supply conditions—the ‘sociological datum’ . . .—need to be reflected in any model for explaining price formation and income distribution” (1980, 158), not explaining the techniques of capitalist accounting. Cooper's commentary emphasized this point, “Institutional and social forces . . . must become central to the analysis” (1980, 163).

The problem with neoclassical accounting, Cooper argued, was its narrow focus, that “performance is assessed in terms of profitability or cash flows to investors. Yet the correspondence between investor and societal welfare is problematic” (1980, 165). Marx explained the lack of correspondence between “investor” (capitalists’) and “societal” (workers’) “welfare” using his theory of surplus value, but what “profitability” concretely meant, or whether capitalists measured this with cash flows, were of no apparent concern to Tinker (1980). Cooper found it “in some respects a frustrating paper” (1980, 165). He “want[ed] to know more about the deficiencies of neoclassical

economics and the implications of these deficiencies for the prescriptions accountants have made and continue to make” (Cooper 1980, 165), but not an explanation of what capitalist accountants did without the help of neoclassical economics. He wanted more about “the insight and understanding that is provided by an analysis using political economy” (Cooper 1980, 165), but not specifically Marx’s political economy.

Given the apparent illogicality and superficiality of marginalism as an explanation of prices and income distribution left the question of why, as Tinker and Cooper claimed, neoclassical economics remains the “theoretical backbone of accounting” (1980, 163–64)? As Cooper (1980, 164) put it, “If the implications of Tinker’s analysis (which is, of course, following the analysis of such notable radical economists as Dobb, Meek, Robinson, Sraffa and Sweezy) are so profound, why will not neo-classical economics wither away?” A possible reason was that economists defended it on “technical” grounds, but Cooper argued, “an alternative and I think more persuasive explanation for the continued vigour of neo-classical economics and its applied branch which we may call neo-classical accounting” (1980, 164) is that accounting scholars and practitioners succumb to “ideology” in taking the institutional and social forces for granted. Accounting therefore, Cooper (1980, 164) argued, is also ideology, as Neu, Cooper, and Everett put it, because “it aids in the construction of dominant class hegemony . . . by homogenizing, naturalizing and universalizing social practices in a manner that masks the underlying unequal social relations” (2001, 735), but not because the phenomenal forms it represents are inverted reflections of capitalist social relations.

By “ideology” Cooper meant “false consciousness” (1980, 165), but apparently rejected Marx’s concept of commodity fetishism. Cooper (1980, 165) referred readers to “Larrain (1979) [who] discusses the concept in great detail,” who concluded that Marx’s theory has “real problems and unsolved questions,” particularly economic determinism, “whether social being can be identified by economic conditions” (Larrain 1979, 64), a criticism chapter 7 rejected. A focus on “sociological datum” without a theory of value overlooks the possibility that traditional capitalist accounting’s phenomenal forms are themselves ideological, which leads, we will see, to the unwarrantedly “pessimistic” conclusion that accounting is “wholly reactionary” (Cooper 1995).⁵

Rather than any specific theory, Cooper “suggests that the assumptions of capitalism overwhelm current accounting. Accountants—theorists and practitioners alike—accept the socioeconomic institutional structure, thereby exhibiting a remarkable lack of historical perspective” (1980, 164). Similar to Marx’s criticisms of political economists for failing to understand capitalism as the product of history, Cooper criticized accountants and accounting

researchers for taking “for granted that legal and social institutions—the most obvious examples being the existence of markets and private property—have always existed, currently exist and will continue to exist” (1980, 164). Failure to integrate accounting within a historical understanding meant, Cooper (1980, 165) concluded, “we may regard our ‘theories’ as ideology and ourselves as ideologists. Wither accounting science?”

To rescue accounting from ideology, however, Tinker and Cooper adopted “a distinctly radical, Marxist theory based *sociological* perspective” (Roslender and Dillard 2003, 330, emphasis added), not Marx’s economics or history. Whereas Marx explained the phenomenal forms as functional inversions using his theory of value, Cooper argued, “Rather than providing a valid economic rationale for action, accounting information is used as a means to support those groups who are currently powerful in society. By failing to provide a framework for considering the justice of this system of economic organization, accounting faces the danger of being a mere tool of these powerful groups” (1980, 164–65). Whereas Marx advised against demanding “justice” (or ‘fairness’), and from his perspective accounting *is* a capitalist “tool,” a superstructure for controlling the production of surplus value, which explains capitalist accounting for wages, interest, reserves, capital maintenance, and so on, ‘scientifically’ (Bryer 2017), for Cooper they illustrate capitalism’s disdain for “justice”: “Wages are a cost yet ‘interest’ to investors is a distribution. Residual funds [reserves] are allocated (accounted for) as additions to capital, rather than any other allocation. The insistence on maintaining owners’ capital intact or the technical operating capacity intact is commonplace in accounting theory” (1980, 165). Cooper complained, “We do not seem to have systematically considered maintaining human capital or human potential” (1980, 165), whereas chapter 8 argued that Marx’s interim aim for socialism envisaged accounting for the development of human potential, of every individual, as the key force of production.

Tinker, Merino, and Neimark (1982, 168) raised the question of using Marx’s theory of value, but following Tinker (1980) included it within the “institutional datum.” They noted, “Marx argued that in order to understand exploitation and income distribution in the market sphere of exchange, it is necessary to consider the institutional datum; the social relations; the ‘hidden essence’ or ‘inner form’ lying beneath the ‘outward disguises’ or the ‘market appearances’ of things” (Tinker, Merino, and Neimark 1982, 181). The ‘hidden essence’ is Marx’s theory of value (Bryer 2017). Tinker, Merino, and Neimark noted, “Marx’s theory of value is one of the richest (and currently one of the most controversial) contributions to the literature” (1982, 182), but did not discuss it. Instead, they assured the reader, “The omission here of any detailed discussion of this value theory should not be taken as an indication of its lack of relevance. Rather in our opinion, it offers one of the most promising

sources of radical thought” (Tinker, Merino and Neimark 1982, 182). They advised readers, however, “for a summary of the current controversies surrounding Marx’s value theory, see Elson (1979) and Steedman & Sweezy (1981)” (Tinker, Merino, and Neimark 1982, 182). Unsurprisingly, as these authorities rejected Marx’s theory of value, agreed that it was fatally flawed, and dropped it as an accounting concept, arguing that explaining prices, wages, profits, and so on, was not his aim (Kliman 2007; Bryer 2017), unaware of alternative interpretations, few critical accountants took up the invitation to explore this “promising source.” Some argued, as Haslam put it, “Marx was not greatly interested in accounting” (1986, 44; see also Macve 1999). Haslam (1986, 44) complained, in particular, “Marx appears to have been unconcerned with the *degree* of adequacy of historical cost accounting as an artefact of capitalist society and as a basis for economic decisions under capitalism,” overlooking Marx’s RCA and stewardship focus (Bryer 2017).

Cooper and Sherer (1984, 207) influentially developed Tinker’s (1980) suggestion for a “political economy of accounting” (PEA), to “reinforce recent calls (Burchell et al. 1980; Tinker, 1980) to understand how accounting systems operate in their social, political, and economic context in order that ‘better’ accounting systems might eventually be designed.” The aim was again to overthrow the “dominant concern with shareholder interest [which] has limited the development of research about how accounting systems operate and for designing corporate accounting reports which may lead to a fundamental improvement in social welfare” (Cooper and Sherer 1984, 208). “Society,” rather than “investors”—that is, capitalists—became the focus: “A critical approach to accounting . . . starts from the premise that problems in accounting are potentially reflections of problems in and of society and accordingly that the latter should be critically analysed” (Cooper and Sherer 1984, 222). Key to this approach, however, was not a critical analysis of capitalism and its accounts, but again simply the call on accounting researchers to “cast aside the ideological mask”:

In order to achieve an improvement in accounting practices (to make them more accountable to society in a democratic way) it is important to cast aside the ideological mask which hides the reality of accounting research, to identify how accounting research justifies current political arrangements and patterns of advantage and disadvantage, and how accounting research similarly implies that such arrangements and patterns are immutable, efficient and even effective. (Cooper and Sherer 1984, 208)

Taking the mask off, Cooper and Sherer’s “PEA approach attempts to explicate and interpret the role of accounting reports in the distribution of income, wealth and power in society” (1984, 222). They criticized “social accounting” approaches (discussed later) because they provide “an

incomplete analysis of the social value of accounting information,” and instead argued for “A political economy of accounting [that] emphasizes the infrastructure, the fundamental relations between class in society” (Cooper and Sherer 1984, 208). The language was apparently Marx’s, but Cooper and Sherer (1984) did not define “social value,” “infrastructure,” or “class.” Rather than Marx’s concepts of value or ideology as commodity fetishism, their concern was making value ‘problematic’ by seeing it as ‘essentially contested.’ “Instead of assuming a basic harmony of interests in society which permits an unproblematic view of the social value of accounting reports, a political economy of accounting would treat value as essentially contested, with accounting reports operating in specific interests (e.g. of elites or classes)” (Cooper and Sherer 1984, 218). They agreed with “Tinker et al. (1982) [who] argue that concepts of value are socially determined and that alternative conceptions of value are required which do not uncritically accept that market exchanges are an adequate indicator of social value” (Cooper and Sherer 1984, 221), but did not suggest Marx’s theory of value.

Cooper and Sherer did suggest, “Such research might develop alternative conceptions of value including those based on socially necessary production, that is valuing products according to their ability to satisfy the needs of the community as articulated through democratic rather than market processes” (1984, 222). However, they did not refer to Marx’s vision of ‘socially necessary production,’ of democratic socialism based on a universal system of socially accountable worker cooperatives seeking to produce equal social value per labor hour. Rather than specific concepts of value, ideology, or economic democracy, for Cooper and Sherer the challenge for accounting researchers was critical self-awareness of the biases arising from their “socialization process” introducing “subconscious bias in the definition of the problem set of accounting and the choice of theories to analyze and solve these problems” (1984, 222). Critical awareness meant, by contrast, “recognizing the contested nature of the problem set and theories and demystifying the ideological character of those theories” (Cooper and Sherer 1984, 222) including, Tinker later concluded, ‘economistic’ interpretations of Marx’s theory of value.

Tinker (1985) again argued, “Accounting is distributive in that it reflects and perpetuates unequal social relations” (Neu, Cooper, and Everett 2001, 735), but now explained that it did so by “appraising the terms of exchange between social constituencies (and by) arbitrating, evaluating and adjudicating social choices” (Tinker 1985, 81). “The problematic is founded in Marx’s theory of value” (Dillard 1991, 21), but what this meant, according to Tinker, is that with capitalism’s development capitalists can establish exchange values “that are no longer directly proportional to the amount of embodied labour in the product” (1985, 84). Whereas Marx (1998) had argued that

socially necessary labor remained the basis of prices, wages and profits in the real world with many capitals competing under total social capital (Kliman 2007; Bryer 2017), according to Tinker (1985) capitalists can make 'unequal exchanges,' which critical accounting should expose. Tinker's interpretation of Marx's 'value theory,' in short, "sees every exchange as potentially pure or potentially alienating and sees the function of accounting to highlight when either is present" (Laughlin and Puxty 1986, 84).

To expose this, Tinker (1985, 16) argued, "Instead of restricting the analysis to the financial impact on those immediately connected to the venture, Marx's value theory would allow us to expand the terrain of analysis to examine alienating and appropriative social relations underlying the business enterprise." This was necessary because "alienating transactions or unequal exchanges, may appear as quite profitable relationships on an accountants' income statement for an enterprise," and presumably would, but for Tinker "here is the root of the crisis in accounting: the subject has no way of detecting inequality and expropriation in exchange. Accounting not only needs a way to appraise 'the bottom line' but rather every line, to see whether the underlying transactions represent equal exchanges or exploitative ones" (Tinker 1985, 172). How Marx's value theory would help Tinker left unclear. Equal exchange under capitalism, according to Marx, remained exploitative. By contrast, according to Tinker, only unequal transactions are exploitative, but "the alternative proposed by him [Tinker] is not worked out in detail" (Laughlin and Puxty 1986, 87), inevitably according to the accounting interpretation, because the necessary basis for comparison, a world in which all commodities sold at their value, was for Marx hypothetical (Bryer 2017, chapter 5).

Tinker's (1985) interpretation of Marx's theory of value left him exposed, Laughlin and Puxty (1986, 87) concluded, "to the hard-nosed accountant who asks what a Tinker balance sheet will look like, and how it will differ from a conventional one, [because] it is difficult to find an answer." Raising this question, Tinker argued, failed to appreciate that accounting is "ultimately ideological because it facilitates the appropriation of surplus value, a process that has no ultimate logical foundation. Without such a foundation accounting is exposed as an ideology, a way of rationalizing or explaining away the appropriation of the production of one social class by members of another" (1985, 100). The underlying logic of capitalism, Marx (1998) argued, remained socially necessary labor time when many capitals competed and prices diverged from values, but because capitalism, according to Tinker, has no 'ultimate' logical foundation, accounting is itself illogical, mere apologetics, not the inverted representation of the phenomenal forms of an underlying social reality.

Tinker (1985), in short, did not distinguish traditional capitalist accounting from marginalist economics' rationalizations or rules, but "identifies the capitalist apologetic of marginalism as the underlying theoretical basis of conventional accounting" (Dillard 1991, 22). Tinker (2001, 85) later clarified, "This is not to say that orthodox accounting slavishly follows a theory of value such as neoclassicism. Obviously accounting practice is itself the object of conflict and an unstable compromise. Several passages in the book draw a sharp distinction between accounting 'theory' and 'practice'" (see, for instance, Tinker 1985, 82–4, 111, 178). However, Tinker did not explain what "orthodox accounting" is, what "accounting practice is itself," or how it constitutes "an unstable compromise," and the passages referred to emphasized that, for example, "contemporary accounting practices . . . ha[ve] been overwhelmingly influenced by . . . marginalist economic theory" (Tinker 1985, 82).

Solomons (1991a, 1991b), an accounting academic who had worked for the FASB, exposed the weakness of this position. Solomons (1991b, 287) "criticize[d] Radical Accounting, as represented by Tony Tinker's *Paper Prophets* [1985], and others who assert that accounting policies should be chosen for their supposedly desirable economic consequences rather than for their capacity to depict relevant phenomena faithfully." Challenged by Solomons to produce better accounting rules, with no alternative 'economic' theory of value Tinker (1999, 646) necessarily declined, emphasizing (unlike Marx) his lack of interest in "bookkeeping": "Solomons . . . exemplifies this bookkeeping centrality. He throws down the gauntlet to 'radicals,' challenging them to show their 'new' financial statements. The slightest hesitation is taken as de facto proof that they are charlatans." Tinker rejected any idea of "economic reality," any idea that we can "find and extract pure, uncorrupted, neutral 'facts' from Economic Reality" (1991, 298). He criticized Solomons for believing that any "economic reality exists, independent of our apprehension of it, and that this is the ultimate touchstone of truthfulness and accuracy for accounting symbols" (Tinker 1991, 297), which rules out explaining capitalism's phenomenal forms using Marx's theory of value. There were no economic facts, Tinker argued, evidenced by the "many valuation alternatives [that] have been proposed" (1991, 303), but declining to debate capitalist accounting's aim and methods left him open to the charge that the "emperor simply has no clothes" (Solomons 1991b, 312).

Tinker (1999, 655) clarified his view of Marx's "value theory" when he criticized "renditions of Marxism . . . that place the labor 'theory' of value as the centerpiece of Marx's project." Following Elson (1979, 123) and others, Tinker (1999, 656) argued, "Marx was only incidentally concerned with a labor 'theory' of value to explain price, surplus value, exploitation,

etc. Much more central for Marx's labor theory is labor itself—the form it takes, and the political consequences for the development of labor.” As we saw, “Tinker's analysis . . . follow[s] . . . the analysis of such notable radical economists as Dobb, Meek, Robinson, Sraffa and Sweezy” (Cooper 1980, 164), who all accepted that Marx's theory of value was inconsistent. Tinker (1999, 657–59) clarified his support, in effect, for the market-centered ‘value form’ interpretation of Marx's ‘value theory,’ that money value appeared only in the form of realized market price (Kliman 2011; Bryer 2017, 93–94), rejecting production-centered ‘economic’ interpretations. According to the value form interpretation, as Tinker puts it, “At the surface level, value is reflected (but not without ambiguity) in a commodity's money price,” which was ambiguous because below the surface was unobservable value, and below that unobservable abstract labor (1999, 657). Rather than a “definitive investigation of capitalism,” a theory of value that explained its phenomenal forms, Tinker (1999, 643, 656–59) argued, the foundation of Marxism is “dialectical materialism,” that Marx's legacy was a “flexible dialectical methodology” allowing investigation of the value forms of the commodity—use value, price and value—as changing social categories. As, according to this view, “the most fundamental level in Marx's notion of value” is “labor,” this “revised conception of value” calls itself the “value theory of labor” (Tinker 1999, 658–59), using Marx's value forms to explore the commodification of all forms of labor.

Broad church supporters of interdisciplinary perspectives welcomed Tinker's efforts to “put the record straight on an interpretation of Marx” (Laughlin 1999, 75) because, compared to the “Mickey Mouse” “caricature” that “tended to concentrate on a limited economic interpretation,” Tinker's “re-reading . . . indicates a theoretical approach which recognises the multi-dimensionality of social life” (Laughlin 1999, 74). Looking back, analyzing the “intellectual roots” of critical accounting, Cooper (2014, 289) warned of the “danger of divisive approaches to accounting, where quantitative methods are regarded as an opponent of qualitative approaches, and the economic realm is seen as separate from social and political dimensions.” This is a valid criticism of neoclassical economic accounting. However, it is not a valid criticism of Marx for whom interrelating the qualitative and quantitative was central to his investigations, and the ‘economic realm’ is the mode of production, founded on a calculative mentality expressed in the social relations of production that, in a process of class conflict, determine the stabilizing superstructure with social and political dimensions, including accounting.

There is therefore no need, as Cooper argues there is, to “extend classic Marxism by making cultural and social regulatory processes integral to understanding capitalist organization and processes of accumulation, in

general, and accounting and audit regulation in particular” (2014, 290). “Classic Marxism,” according to the accounting interpretation, already offers a “theoretical approach that places accounting in a wider context, where capitalism is understood as having economic and cultural dimensions” (Cooper 2014, 290), Marx’s historical materialism that, unlike Tinker’s dialectical materialism is not a “Theory of Everything” (Eagleton 2016, 8).

By the late 1980s, there was “a growing body of . . . research—often critical of the theoretical orthodoxy—. . . frequently informed by sociology and political theory” (Cooper and Hopper 1987, 407), some of which used Marxist concepts, but not his theory of value. Cooper and Hopper (1987) highlighted Armstrong (1987), who used Carchedi’s (1977) concept of the “global functions of capital”—“capital accumulation” through the “extraction,” “realization,” and “allocation” of “surplus value”—to explain the “prominence” of UK accounting compared to German and Japanese accounting. There was no necessary connection between capitalism and the significance of accounting, Armstrong (1987) concluded, and from his sociological perspective “of course there was no inexorable logic that led to accounting’s comparative pre-eminence in the UK” (Cooper and Hopper 1987, 408–9). The failure of European-style banking to provide long-term loans in the UK in the mid-nineteenth century necessarily meant, Armstrong (1987, 415, 417) argued, the development of the UK stock market, which “exaggerated” the importance of companies, their liquidation, and, eventually, their audit, which gave UK accountants important roles, which caused the “prominence” of UK accounting. By implication, without this particular history, although equally capitalist, German and Japanese accounting was not “prominent,” whereas according to the accounting interpretation the prominence of UK accounting is evidence of more advanced capitalism.

Armstrong, by contrast, assumed that despite their different histories, the UK, Germany, and Japan were all equally ‘capitalist’—albeit in different ways, with different emphases on the importance of accounting, all accumulated capital through the extraction, realization and distribution of ‘surplus value.’ He argued for “a commitment to understanding accounting in a historical and cultural context” (Cooper and Hopper 1987, 409), but because he did not define ‘capitalist,’ or the links between ‘surplus value’ and ‘accounting,’ with ‘capitalism’ assumed constant the focus was not the historical links between accounting and the development of capitalism, but the comparative sociology of accounting. As Cooper and Hopper (1987, 409) put it, “The inference from Armstrong’s comparative historical analysis of German and U.K. accounting is that there is no inevitability about accounting’s significance in a capitalist economy. Instead of there being any systematic strategy by accountants to achieve prominence, the significance of accounting in the U.K. is the outcome of several, more or less independent,

processes.” Armstrong’s explanation of the influence of capital’s interests in extracting, realizing and allocating surplus value on accounting, Cooper and Hopper (1987, 412) accepted, did not depend on any “crude functionalist imperative” because he allowed the historical and cultural determination of capital’s “global function,” in other words, in Marx’s terms, he allowed the superstructure to determine the economic base.

“Fundamentally,” as Armstrong argued, the “extraction of surplus value . . . is a question of ensuring that the value added to the product or service by the collective worker exceeds the amount paid out in wages” (1987, 417). Because “value added” is profit plus wages, extraction of surplus value means producing and realizing a ‘profit.’ Armstrong (1987), however, did not discuss Marx’s theory of value or define the ‘profit’ element of value added, but made clear in later work that from his sociological perspective accounting profit is subjective. Hopper and Armstrong disputed the relevance of a “realist” concern with one of its determinants, “the ‘accuracy’ of costs’ . . . [i]f management is taken to be about the control of labour” (1991, 410). Critical researchers, Armstrong (1991, 20) argued, should understand “the [capitalist] agency relationship as constituted by social action, rather than as constructed from ‘objective’ accounting,” but how capitalists control agents if accounting is subjective he left unclear. To explain this, other critical accountants also turned to sociology, as we will see.

If accounting is subjective, the relevance of “International comparisons indicat[ing] that the relative prominence of accounting controls in the administrative apparatus for extracting surplus value from the labour process in Britain is not an inevitable feature of the development of capitalism” (Armstrong 1987, 431) is unclear because the meaning of “capitalism” is unclear. Armstrong pointed to the fact that “German and Japanese manufacturing companies are highly successful in competitive terms without the comparative dominance of accounting controls characteristic of Anglo Saxon capitalism” (1987, 416), but this confuses ‘competitiveness,’ lower costs, with the level of capitalist development, how far the real subordination of labor had progressed. By accounting being “prominent” in the UK, Armstrong meant the common banking and accountancy educational background of British directors, the use of American forms of organization and management accounting techniques that, according to the accounting interpretation, is evidence of advanced capitalism (Bryer 2013a). The ‘sophisticated’ American management accounting that developed during the early twentieth century, Armstrong (1987, 425) accepted, was “not different in principle from the methods of historical cost accounting developed well before the First World War,” in the United Kingdom and United States. He accepted, “Albeit in a less formalised fashion than standard costs, historical costing still represents a potentially formidable technique for rationalizing the extraction of surplus value” (Armstrong 1987, 425).

There were, and remain, historical and cultural differences in the education of business leaders internationally, but to a rapidly diminishing extent in the formality and detail of their systems of accounting control. For Japan, for example, as Okano and Suzuki found, “the more we study the details of Japanese management accounting, the more we find close connections with the West. Indeed, according to the Japanese-language literature, the import of accounting techniques from the West has been a well-established area of management research in Japan” (2007, 1121). The same is true of all developed capitalist nations.

Armstrong (1987) did not explain how accounting was relevant for controlling extraction of surplus value, a gap he addressed in 1991 (see below). In this respect, as Cooper and Hopper (1987, 409) said, “Armstrong’s analysis of the role of accounting in the extraction and realisation of surplus value is augmented by that of Hopper, Storey and Willmott [1987].” They, however, emphasized that “accounting plays a role in the ways in which managers and other employees interpret, accommodate and resist the so-called ‘logic of capitalism’” (Cooper and Hopper 1987, 409), not how accounting controls the agent. They and others accepted, “a concern to assess the significance of accounting both as a set of practices and everyday and theoretical discourses is central to critical studies in accounting” (Cooper and Hopper 1987, 411), but most were skeptical that accounting’s significance was predominantly as an economic ‘discourse,’ ‘logic,’ or ‘set of practices.’ Critical accounting required, Cooper and Hopper argued, “commitment to analysing accounting in its social context, as a part of a set of other social economic and political institutions and practices” (1987, 411). It studied accounting as a “set of cultural as well as economic practices” and found, like Armstrong, that “the significance of accounting varies with specific historic and institutional conditions” (Cooper and Hopper 1987, 411). The ‘cultural’ focus meant, however, that while “radical accounting often identifies the interests of capitalists and workers and . . . either exposes how these interests are served or seeks to create new accountings that serve the interests of the workers” (Cooper and Hopper 1987, 412), neglecting Marx’s theory of value, the following section concludes from analyzing a well-known example, limited its impact.

The challenge for critical accountants was, as Armstrong (1991, 19) put it, to provide “an empirical and historical analysis of the development of the role of accounting within the capitalist agency relationship, informed by the theoretical framework of contradiction and crisis.” Critical accountants had highlighted “contradiction” and “crisis” as important themes, but they had not “theorise[d] the penetration of the power of capital itself into capitalist enterprise” (Armstrong 1991, 9). That is, they had not shown how accounting institutionalizes the subordination of labor in production. Critical accountants avoided this question because they agreed with the naturalists that accounting

has no ‘social core,’ does not measure a socially objective reality (Bryer 2006a). Instead, they saw accounting as a “language [that] serves and legitimates sectional interests” (Hopper et al. 1987, table 2, 446). Most agreed with Hopwood (1983, 290), “notions of cost, profit and other indices of financial performance may not be seen as being unproblematic.” They were “problematic,” Roberts and Scapens (1985, 448) argued, because although “the accounting categories of cost, profit, contribution, return on investment serve as a structure of meanings which are drawn upon by organizational members . . . [t]hese meanings . . . are neither frozen nor unambiguous.” Tinker agreed, “accounting is no more than a social artefact, act[ing] to resolve conflict in exactly the same way as, for example, the mystics” (1985, 106). It was, therefore, inevitable that “although accounting conventions and practices may sometimes produce unambiguous exchange values, in many situations they are ambiguous and arbitrary . . . [for example] the amount of profit earned for the shareholders during a period” (Tinker 1985, 106). Hopper et al. (1986, 110) took issue with accounting’s “presumed neutrality and objectivity,” emphasized its “ideological aspects . . . , its relationship to particular interests” and concluded, “what is ‘profit’ and what is ‘loss’ is contestable.”

Cooper’s and Tinker’s (1980) invitation to abolish ‘ideology’ in accounting research by engaging in sociology, also proposed by others (particularly, Burchell et al. 1980), was widely taken up (Roslender and Dillard 2003). Tony Tinker and David Cooper became co-founding joint editors of *Critical Perspectives on Accounting* in 1990. Their journal did not explicitly adopt any particular intellectual tradition or school, but the title echoed the ‘critical theory’ of the Frankfurt School, sometimes called ‘cultural Marxism,’ that drew on Marx among others, but without his theories of history and value, seeking to transcend the limitations of positivism, materialism, and determinism in social theory (Dillard 1991). By the end of the 1990s, the editors’ message was conventional wisdom among critical accountants, that “contrary to public perception, accounting is not a static reflection of economic reality, but rather is a highly partisan activity” (Baker and Bettner 1997, 293). That accounting has the “capacity to create and control social reality [which] translates into empowerment for those who use it”; “Such power resides in organizations where it is used to mask conflict and promote self-perpetuating social orders” (Baker and Bettner 1997, 307). It remains critical accounting’s “aim . . . to demystify accounting to reveal its partisan and biased character, its role in the processes of domination and social reproduction, and in so doing, to better explain the mechanisms that might promote emancipation” (Morales and Sponem 2017, 153).

Not distinguishing traditional capitalist accounting from neoclassical economic theory, for most critical accountants there is no ‘economic reality’ for accounting to reflect, which makes it an essentially partisan, ‘ideological’

activity. Unsurprisingly, ‘mainstream’ accounting academics, those who accept the neoclassical theory of value, ignore critical accounting. However, in their relatively rare interventions in economic and political conflicts where accounting was a major issue, critical accountants have also had little success in convincing relevant parties—the decision makers (corporations, governments, etc.), those immediately affected (workers, etc.) who resisted the decision, or the general public—of the importance of a ‘critical’ understanding of accounting. An important reason, what follows argues, is that they had no alternative theory of value.

Critical Interventions

Without a theory of value, the function of capitalist accounting and, therefore, the tasks of critical accounting are unclear. Marx’s theory of value explains the traditional stewardship objective (Bryer 2017, chapter 2). It is true, “the overall purpose of accounting and the appropriate means of investigating the roles of accounting in society remain enduring concerns” to critical accountants (Cooper 2014, 289), and they reject neoclassical economics theory, but in practice they often accept that the objective of accounting is decision making, economically ‘rational’ or not. Dillard, for example, defines accounting as “a technology directed towards converting, or translating, economic activity into quantifiable representations to be used as decision inputs,” but a “socially determined technology,” seeing “accounting [as] fundamentally directed towards preserving and enhancing the capitalist’s control over the means of production” (1991, 9, 10), toward decisions in capitalists’ interests, failing to distinguish decision making from stewardship.

Reflecting on an influential critical intervention (discussed below), Cooper and Hopper found that “financial information, and particularly that produced by professional accountants . . . was seen to be neutral, objective, and to identify the economic ‘facts of life,’” particularly “profitability” (1988, 16). To Cooper and Hopper, however, “one of the surprising characteristics of financial calculations is that whilst the final figure appears objective and hard, the process of production is extraordinarily malleable . . . [because it] involves estimates of the future (for example about demand and the life of equipment), alternative methods of measurement and . . . planning horizon[s]” (1988, 16–17). Rather than impartially determining decisions, financial information may, Cooper and Hopper emphasize, be “produced to . . . influence the decision-making process,” which assumes that the aim of the “financial calculations” is decision making, whether or not the “orderly and rational process depicted in the textbooks” (1988, 15–16), not accountability. Profitability is malleable if the aim is decision-usefulness because different forecasts are possible, but it is not malleable according to the accounting

interpretation—without willful distortion—if the aim is stewardship and the basis is Marx’s theory of value (Bryer 2017). Managers can manipulate or distort traditional accounts, but to contest this, we will see, requires a theory of ‘true’ or ‘correct’ accounts based on a theory of value.

Neu, Cooper, and Everett’s (2001) reflections on their experiences in two “critical accounting interventions” illustrate the problems that arise without a theory of value. These interventions were in the UK miners’ strike of 1984–85 and participating in debates about provincial debt and deficits in Canada in the mid-1990s. The UK’s National Coal Board (NCB) and Canadian politicians used accounting numbers to justify decisions that those negatively affected opposed, numbers and their interpretation that critical accountants publicly questioned. In both interventions, the critical accountants judged the decision maker’s “rhetorical strategy of emphasizing bottom-line numbers is an effective one, especially if the audience for these numbers is unaware that the final number is the result of a series of calculations that have no intrinsic relationship to a particular underlying economic reality” (Neu, Cooper, and Everett 2001, 748). To make them aware, “both interventions . . . attempted to challenge commonsense interpretations by highlighting the *problematic nature of accounting* calculations” (Neu, Cooper, and Everett 2001, 756, emphasis added).

The critical accountants highlighted distortions and errors in the use of accounting data and, more fundamentally, challenged the ‘common sense’ realist interpretation laid on it by the protagonist decision makers and their supporters. Following Tinker (1991; 1999), as Neu, Cooper, and Everett (2001, 738, 745) put it, they rejected “appeals to the ‘commonsense,’ and calls to be ‘practical’ (Solomons 1991),” the view “that the interpretive pairing between the accounting signifier and the underlying economic reality was unproblematic—that accounting numbers directly and unproblematically mapped the underlying economic reality” (cf. Solomons 1991; Tinker 1991). For Marx, *Accounting for Value* argued, the link between accounting numbers and economic reality was ‘problematic,’ but he solved the problem by explaining how his law of value determined the phenomenal forms in production, through the commodity markets, the capital market, and accounting calculations (Bryer 2017). He agreed with an “emphasis on ‘bottom-line’ numbers [that] appeals to notions of a ‘true income’ whereby a single accounting number represents a single underlying economic reality (cf. Solomons 1991)” (Neu, Cooper, and Everett 2001, 747), so long as this “true income” measures surplus value in the form of profit, the underlying “economic reality,” according to traditional principles and practices. In this sense, for Marx, “accounting numbers are assumed to provide a realist account of the state of affairs (cf. Solomons 1991)” (Neu, Cooper, and Everett 2001, 756).

What follows focuses on the UK miners' strike (1984–85) because accounting calculations were at the heart of an extended political conflict and debate in the context of an often-violent confrontation between unionized workers and a capitalist state, but the analysis and conclusion will be general. As Neu, Cooper, and Everett say, "while the role and functioning of accounting within these episodes is undoubtedly context-specific, such struggles are commonplace in that the industrialized world continues to experience a series of 'crises' characterized by intense debate over the roles of the individual, state and marketplace" (2001, 737). They note several other similar interventions in the 1980s and 1990s (Neu, Cooper, and Everett 2001, 736), and similar issues had arisen when American unions used accounts during the 1930s and 1940s in their fight for a living wage, epitomized by the UAW's demand in 1945 that General Motors 'open the books' (Bryer 2016). For obvious reasons, the following ignores Neu, Cooper, and Everett's advice to those embarking on a critical accounting "odyssey" to remember that "the flowery meadow of the Sirens is littered with the skeletons of those who fail to ignore the Sirens' tendency to label alternatives in terms of ideological affiliations (e.g. . . . 'Marxist inspired')" (2001, 738).

UK Miners' Strike

Having prepared its ground by stockpiling coal and giving additional resources to the police, the UK's Thatcher government demanded widespread, large-scale pit closures, repeatedly emphasizing the need to reduce large government 'subsidies' by closing what they persistently described as 'uneconomic,' 'unprofitable' pits, provoking a year-long national strike (Adeney and Lloyd 1986). Six months into the strike, there were critical accounting interventions by "an economics professor and a group of accounting professors independently of each other," who "attempted to disrupt commonsense interpretations by emphasizing the complexity of the issues, the incompleteness of the data, and the invisible assumptions underlying government calculations" (Neu, Cooper, and Everett 2001, 742, 749).

The accounting professors published a widely discussed article (Berry et al. 1985) which "call[ed] into question the assertions that 'unprofitable' is synonymous with 'uneconomic' and that historical absorption cost financial statements tell us anything about the incremental current and future profitability of individual collieries" (Neu, Cooper, and Everett 2001, 749). It was a clear misrepresentation, they complained, "when accounting reports are treated as objective and truthful," because "the truth is constructed according to a set of accounting conventions, many of which have little connection with economic concepts of profit" (Cooper and Hopper 1988, 3), by which they meant concepts based on marginal costs and revenues, and PV. Berry et al.

(1985) criticized the NCB's "use of cost and profit figures for individual collieries as the basis for deciding whether individual pits were 'economic' or not" (Cooper and Hopper 1988, 5). Impartial accountants would agree with their criticisms of "the arbitrary, and indeed manipulable, nature of both the proceeds and costs side of the pit accounting statements," as the basis for decision making:

The price . . . is a transfer price negotiated with other nationalised industries; an individual pit's proceeds depends heavily on its production budget and on the mix of coal types. On the cost side, important items are arbitrarily allocated between pits; historic cost depreciation and other overheads which would not be saved by pit closure are irrelevant to decisions about whether pits should be kept open. Finally, . . . decisions should be based, not on past results, but on predications about the future, when mining conditions might be completely different. (Cooper and Hopper 1988, 5–6)

Rather than accounts, Berry et al argued, "an adequate basis for informed management decisions . . . [was] to identify the changes in expected future cash flows consequent upon particular pit closures" (1988, 95). While incontestable if the aim is decision making, this response overlooked that the NCB's accounts, just like those routinely produced by capitalist enterprises, through which it held its managers and workers accountable, and was itself accountable to the government as its capitalist owner, could have played an alternative accountability role. Berry et al noted, "the standard accounting statement for pits—the F23," a profit and loss account, "is . . . a major budgeting, control and accountability document," but dismissed it because, "constructed as it is on accounting conventions," particularly absorption costing and depreciation, "it is not an adequate basis for an analysis of the consequences of economic decisions" (1988, 95–96, 98, 104). Berry et al were clearly right that their decision-making problematic "demonstrates how difficult it is for an informed public debate to take place" (1988, 104). They noted in a postscript, "in a sense the Prime Minister's [Thatcher's] dismissal of the[ir] article in parliamentary questions in December 1985, by stating that accounting is done by mirrors and can therefore be made to prove anything, came close to the spirit of the article" (Cooper and Hopper 1988, 105).

To many, Berry et al. (1985) "is a prime example of the potential role of critical accountants in public policy and has been drawn on as an exemplar in discussing the responsibilities of academics and the social role of research" (Cooper 2014, 290). It is therefore important to understand the limits of its strategy of problematizing the relevance of the NCB's accounts for decision making. Berry et al. could instead have built on the accounts' primary accountability function, and the calculations of the social surpluses from not closing mines by Glyn (1988, discussed below), to help the miners,

their communities, unions and public fight for the miners' ownership of UK coalmines as a workers' cooperative accountable to the miners and society. Instead, the conflict was seen as between "the Thatcher government's visions of privatization, rationalization and individualism versus Arthur Scargill's and the NUM's vision of collectivism and their insistence that the state had responsibilities to communities" (Neu, Cooper, and Everett 2001, 742). Scargill was a self-declared Marxist, for whom 'collectivism' meant state control. He dismissed workers' control as "the apologists' alternative to socialism" (quoted by Adeney and Lloyd 1986, 35), ruling out any role for accounting in holding management accountable to the miners and coalfield communities. As Scargill explained in an interview for *New Left Review*,

Now I'm a strange trade-union leader, I don't conform in many respects to the standard progressive or left-wing leader in that I'm totally opposed to workers' control. Totally, because I believe that workers' control is a recipe for collaboration. *I believe that once you start talking about workers' control under capitalism, what you are saying is that we establish a system where we open the books and we take charge of 51 per cent of the Board and all this sort of thing. That's not workers' power.* Workers' power is to take into the hands of the working people all the means of producing wealth, distribution and exchange and it's not this argument put forward by the academics that we ought to have some kind of worker participation, workers' control within industry. This is a measure, in my opinion, that is designed to frustrate the real aspirations of the working class and I don't believe it has anything in common with Marxist philosophy. I believe that the only way you're going to get workers' control in the real sense is to take into control society itself. (Scargill 1975, 25–26, emphasis added)

Some Marxists had argued for "some kind of worker participation," but none for workers' cooperative ownership and their control of management through accounting. Given Marxists' neglect of accounting, Scargill's skepticism about 'workers' control' was understandable. He worried that "workers will become confused" (Scargill 1975, 26). Workers with management responsibility would "start to become management oriented, they start to become capitalist oriented," because "they're looking at balance sheets, at statistics, at computerized data instead of human beings. But what they are also doing is this: they are putting themselves into a position where they cannot protect the man they are supposed to defend" (Scargill 1975, 26–27). In short, according to Scargill, 'worker control' means that workers become managers, and simply by using accounts would inevitably become "capitalist oriented," ideologically dominated, whereas according to the accounting interpretation in Marx's concept of socialism workers become owners who understand the social relations underlying balance sheets.

From Marx's perspective Scargill was right, "the issue is a very simple one: it is *them* and it is *us*. I will never accept that it is anything else because it is a class battle, it is a class war (1975, 26)," but it is important to understand that the war is between workers and capitalists, not with managers per se. Scargill apparently knew that Walter Reuther's 'open the books' strategy during the UAW workers struggles with General Motors in the 1940s and 1950s had failed, but he did not know that Reuther had fallen into the 'accounting-is-decision-making' trap set by General Motors (Bryer 2016). An accountability strategy would have sidestepped the major 'political' issue, "the core issue" settled by the UK miner's strike, managements' "right to manage" (Adeney and Lloyd 1986, 4), because management would continue to manage, but be accountable to the miners and society, in their interests. The demand for accountability would, of course, probably also have failed against a well-prepared capitalist-controlled government, media, and hired prizefighters portrayed as "financial experts," (Neu, Cooper, and Everett 2001, 743). However, arguing that the purpose of the NCB's accounts was accountability for capital, and that the miners as owners could use them to hold management accountable to them, and be accountable to society, would have avoided the dilemma that inevitably arises from seeing the aim of the intervention as problematizing the role of accounts in decision making.

Nobody could disagree "that winning consent requires the deployment of discourses that address the real and lived experiences and contradictions of people" (Neu, Cooper, and Everett 2001, 756). The dilemma is that if critical accountants intervene as the de facto (putative or surrogate) decision maker for the "consumers" of the intervention, as Neu, Cooper, and Everett (2001, 756) put it, "how is it possible to challenge the presumed unproblematic nature of accounting numbers without retreating further into technical issues which are beyond the lived experiences of people?" They found, "As the cases illustrate, technical challenges can always be countered by references to 'ivory tower academics' who are out of touch with the 'real world'—the effect being to reinforce the commonsense nature of the status quo" (Neu, Cooper, and Everett 2001, 756). Academic accountants may be unfairly marginalized by accusations of being "out of touch with the practice of accounting in the 'real world'" (Neu, Cooper, and Everett 2001, 753), but they *are* out of touch with the 'real world' in that they are unlikely to appear to workers, the public, or themselves, as superior, potential successor management decision makers. The same is true of union leaders like Arthur Scargill who portrayed himself as the miners' decision maker, but because he could not command the support of a majority, ducked a national ballot on strike action, making it an often-violent conflict between those miners 'for' Scargill and his strategy, and those 'against' (Adeney and Lloyd 1986, 28–29, 82–83, 95). Marx's strategy, chapter 8 argued, was not the state as the supreme decision maker, but the vast association of

workers using their education and lived experiences and, initially, accounts of value, to hold management accountable for the results of its decisions.

Berry et al. (1985) exposed the “simplicity of ‘bottom-line’ accounting numbers” for decision making (Neu, Cooper, and Everett 2001, 750–51). However, it is questionable whether it was “the technical nature of the arguments,” that is, arguments about the methods (PV and marginal cost), that “makes it more difficult to echo and enlist other popular discourses—discourses which themselves are grounded in ‘simple’ arguments” (Neu, Cooper, and Everett 2001, 750–51). Whereas the techniques of financial decision making are easily taught, the ‘technical issues’ of enterprise or government decision making, of being a manager, politician, or government official, are beyond the ‘lived experiences’ of most workers and union officials, but most know the experiences of need, work, and being accountable, very well. Neu, Cooper, and Everett argue against dumbing down, for sticking rigorously to the highest standards of the “producer” intellectual community. No-one could disagree, “if it is a choice between producing for the consumers versus the producers, our sympathies fall on the producer side of this dichotomy” (Neu, Cooper, and Everett 2001, 756), but Marx’s theory of value and the ideas of traditional capitalist accountability, its accounting principles and practices, are ‘simple.’ Neu, Cooper, and Everett “encourage critical accountants to reintegrate the theoretical and praxis components of accounting scholarship through interventions in the public sphere” (2001, 737), but it is important to be clear which theoretical components. Without a theory of value, critical accountants cannot isolate which elements of accounting calculations are ‘problematic’ or propose social accountability strategies. With a theory of value as the foundation, however, they might convince workers, the public and even decision makers, that they should understand capitalist accounts in their economic, historical, social, and political context.

WITHOUT MARX’S THEORY OF HISTORY

Arguing against “realist” or “positivist” philosophy, Tinker, Merino, and Neimark were the first critical accountants to suggest, “historical materialism offers a more plausible basis for accounting theorizing” (1982, 168). They argued for using “Historical Materialism . . . together with a historical review of the concept of value to illustrate . . . the partisan role played by theories and theoreticians in questions concerning social control, social conflict and social order” (1982, 167). They aimed to strip away “the social allegiances and biases of accounting [that] are rarely apparent, usually they are ‘masked’ by pretensions of objectivity and independence,” again those promoted by neoclassical economics (Tinker, Merino, and Neimark 1982, 167). Rather

than positivism, they argued, the “alternative philosophy” of “Historical Materialism offers a more plausible basis for accounting theorizing” because it makes no pretence of being transhistorically “value free or neutral” (Tinker, Merino, and Neimark 1982, 167, 168).

They argue, “Value Theory has . . . been central to the development of accounting” (Tinker, Merino and Neimark 1982, 174). However, the basis for this claim is the history of political economy, not accounting, which they argue shows “the concept of value has developed along two competing themes—value based on socially necessary labor (i.e. production side valuation) versus value based on subjective utility (i.e. demand side valuation)” (Tinker, Merino, and Neimark 1982, 175), labor versus market value concepts. They offer no evidence that throughout capitalism’s history market value concepts competed with labor concepts in accounting, something that arguably occurred exceptionally in America in the twentieth century (Bryer 2013b, 2019b). Today, as they conclude, “it is impossible for accounting to avoid aligning itself with one brand of Value Theory or another. The real question is which one to choose” (Tinker, Merino, and Neimark 1982, 174).

Tinker, Merino, and Neimark support labor concepts because, anticipating Tinker’s later market-centered interpretation of Marx, they argue, “‘value’ is ultimately a social relation because it is concerned with the exchange of the life experiences of people whose labor is bound-up in the products” (1982, 179). Therefore, they conclude, “accountants and economists who advise and guide participation in market transactions are essentially adjudicating in social relations and in the transfer (and appropriation) of labor time” (Tinker, Merino, and Neimark 1982, 179). However, they left the nature of these social relationships and the links between accounting and labor time unexplored, sending the reader, as we saw, to the Marxist literature.

Without the theory of value, the implications of historical materialism for critical accountants are unclear. Tinker, Merino, and Neimark (1982, 181) rightly highlighted that “the causes of different income distributions were the centerpiece of Marx’s contribution . . . where he showed that social history was the history of the struggle between social classes over the social product and that distribution of income was a manifestation of the exploitation of one class by another.” They agree with Marx that “capitalism may be defined and distinguished from other social formations (such as slavery and feudalism) in terms of its unique relations between social members (laborers, capitalists and landowners) and their relations to Nature and property” (Tinker, Merino, and Neimark 1982, 181). World accounting history supports their conclusion that “Historical Materialism shows that theories emerge and decline, not merely in the context of social struggles but as inextricable parts of them” (Tinker, Merino, and Neimark 1982, 186). That “the recurring lesson from the history of Value Theory” was “social theorizing is subordinated, not to a quest for absolute truth, but to materialist conditions that require a continual

molding and remolding of the social consciousness for the purpose of social order and control” (Tinker, Merino, and Neimark 1982, 186). In particular, earlier chapters have shown, “Theoretical categories such as capital, rent, profit and wages are not universal to all wealth producing societies; they are (socially) specific to capitalism and therefore to its social relations because, in the final analysis, it is the social relations of capitalism that distinguish it from other social systems” (Tinker, Merino and Neimark 1982, 176). Tinker, Merino, and Neimark, however, do not explain the distinctions, or their “materialist conditions,” and contradictorily “recognize that accounting theories form part of social ideology and as an ideology are always changing and changeable” (1982, 186).

As Arnold says, their approach uses “political economy’s concept of ideology—loosely defined as ideas in the service of power—to examine the role that accounting practices and accounting research play in legitimizing existing relations of power and distributional transfers of wealth by cloaking them in the guise of seemingly neutral and objective techniques” (2009, 805). Chapter 7 argued, by contrast, that for Marx traditional capitalist accounting was not “part of social ideology,” always changing and changeable, but the core of capitalist ideology, the key element in its superstructure controlling the social relations of production. Without a theory of history, Marx’s theory of ideology appears economically deterministic. Without a theory of value, it is impossible to grasp traditional capitalist accounting itself as ideology, which we will see creates insuperable difficulties for critical accountants in countering accounting’s apparently unbreakable ideological grip.

Conflict between the Forces and Relations

Fundamental to Marx’s historical materialism, Tinker, Merino, and Neimark (1982, fn.39, 187) note, was that “a class structure . . . eventually impedes further development of productive forces. The dynamic contradiction or antagonism between the social structure and the development of the productive forces is the fundamental dialectic in Historical Materialism: it is exhibited in the overthrow of slavery by feudalism and the eventual deposal of feudalism by capitalism.” However, they do not explain this “fundamental dialectic,” the conflict between the forces and relations of production, or explore its relevance to the tasks of critical accounting, particularly the task of calculating the surpluses foregone by capitalist relations fettering the development of the forces, and later critical accountants have, we will see, also neglected it.

Marx’s forces of production include not just technology and the number of workers, but their vitality, knowledge, and skills. This means that capitalist social relations fetter the development of the forces and increased social surpluses when they prevent full employment, limit educational opportunities, limit life expectancy, or limit the direct production of equal social value of

labor time. Marxist economists therefore reveal conflict between the forces and relations of production when, for example, they calculate the social costs of closing car plants, steelworks, coal-pits, and so on, in a situation of mass long-term unemployment.

A notable example is Andrew Glyn's intervention in the UK miners' strike of 1984–85. The government's use of the reported 'operating loss' of the UK's National Coal Board (NCB) of £358 million for 1983/4 to justify closures of 'uneconomic' pits was misleading, Glyn pointed out, because in important respects it was inconsistent with what he called "economic categories" (1988, table 4.1, 60). What he meant, in effect, was that the NCB's accounts were contrary to traditional capitalist accounting principles. The NCB's accounts had incorrectly and misleadingly charged the pensions paid to retired miners, social costs (redundancy, etc.), and the costs of the dispute, and had charged subsistence costs unrelated to current operations (Glyn 1988, 58–61). The NCB had no equity. The government's largely notional interest charge of £467 million (£400 million paid by government grants), equivalent to 6.3 percent of the RC of its capital employed, was 50 percent more than the equivalent private sector dividend payout, and twice the rate of payout of other nationalized industries (Glyn 1988, 59). As a publicly owned, but worker-controlled cooperative, the NCB would have no debt and face no pressure from investors to pay dividends. Glyn's (1988, 60, 61) version of the NCB's accounts, "adjusted to economic categories," correctly according to Marxian accounting, including a "proper level of depreciation," charged at replacement cost (rather than the NCB's lower historical cost charge), showed that the UK's coal industry was not, as the management and UK government claimed, very unprofitable (see table 9.1).

Table 9.1 Correcting the NCB's Profit or Loss Account 1983/4

	<i>Actual NCB accounts</i>		<i>Corrected to economic categories</i>	
	£m	£m	£m	£m
Turnover		4,660		4,660
Raw materials and stores	947		947	
Employee costs	2,430		2,430	
Other costs ^{a)}	1,283		746	
Depreciation ^{b)}	358		633	
Operating costs		5,018		4,756
Operating profit (loss)		-358		-96
Interest ^{c)}		-467		-
Net profit (loss)		-825		-96

Notes:

^{a)}The adjusted figure deducts provisions for future subsistence and the costs of the dispute.

^{b)}The adjusted figure deducts replacement cost depreciation.

^{c)}The NCB accounts charged interest equivalent to 6.3 percent on the RC of capital employed.

Source: Created by the author based on Glyn 1988 (59, table 4.1, 60).

Glyn's corrections reduced the NCB's operating and net loss to £96 million (1988, table 4.1, 60). The NCB's capital employed at replacement cost was some £7.4 billion [$\pounds 467\text{m}/0.063$] (Glynn 1988, 59), so this loss represented a small negative rate of return of around 1.3 percent [$\pounds 96\text{m}/\pounds 7,400\text{m}$] in difficult economic circumstances. The government claimed its subsidy to the NCB showed that the industry was 'insolvent,' but Glyn's calculations showed, to the contrary, that before the dispute its production (in 1983/84) "covered its underlying costs . . . and financed the industry's investment" (1988, 57, table 4.1, 60). Almost all the government's 'subsidy' covered past or exceptional items (Glyn 1988, 59).

Glyn's (1988, 57) "basic case" against pit closures was that from society's viewpoint even large operating losses do not justify closure unless the resources employed can produce more value elsewhere. His calculations showed that "far from benefiting the rest of society this leads to higher taxation and lower living standards as a result of the loss of production involved," because he predicted it was very unlikely that miners and other workers made redundant would find equivalent work (Glyn 1988, 57), which proved correct. Many prize fighters attacked his case against closures (see Cooper and Hopper 1988), but Glyn *agreed* with the "most frequent objection . . . that the arguments . . . could apply to any other industry as well as coal," although he disagreed that "to support loss-making industries . . . would be a recipe for a backward economy" (1988, 75). In a situation of mass unemployment, which was to last many years, he made a "general argument that it is better to have the workers produce something of value rather than contribute nothing to the economy" (Glyn 1988, 75).

Glyn supported the miners because his calculations showed they were "attempting to fight the logic of the market for which 'unprofitable' means 'uneconomic'" (1988, 75), in other words, because they were engaged in a socially worthwhile conflict between the forces and relations of production. Glyn's calculations showed, in effect, that society would make larger surpluses (smaller losses) by replacing capitalist relations of production, which were fettering the development of the forces—the mines, the miners, and their communities—with socialist relations. Just accounting for the 12 so-called highest-cost pits, on which depended the jobs of 75,000 miners and support workers.

Whilst the government would have 'saved' £275m subsidy if the pits had been closed, it would have lost some £480m in lost tax revenue and through having to pay dole to the unemployed. So closing the so-called 'unprofitable' pits, whilst perfectly in tune with the NCB's task of increasing profitability, would have imposed substantial losses on society as well as on the miners concerned. In no sense, then, can these 'unprofitable' pits be labelled 'uneconomic' from the point of view of society. (Glyn 1988, 62)

Overall, Glyn calculated, “there are no pits whatsoever whose closure would benefit government revenue,” which meant, in addition to the economic and social benefits to the miners and support workers from keeping their jobs, that society also benefited (1988, 66). Glyn (1988, 66) concluded, understandably, that his calculations were “devastating” to the government’s case for closures. However, bent on imposing strict capitalist relations throughout the nationalized industries, the Thatcher government was ideologically impervious to any such calculations. Defeated on the picket lines, losing public support, impoverished by the strike, disaffected with ‘nationalization,’ and with no democratic socialist alternative on offer, the miners understandably abandoned their strike and the government unnecessarily, Glyn calculated, threw many of them and other workers on the dole, degrading their standard of life, destroying their communities, and imposing unnecessary costs on society.

Ideological Hegemony and Revolutionary Potential

Without Marx’s theory of history, critical accountants have struggled to find accounting’s “revolutionary potential” (Cooper 1995, 175). To seek it, Cooper “explores how and why accounting tends to close off ‘productive’ critiques of advanced capitalism,” using “the Marxist economic base/statist superstructure relationship,” but recognized “one of the major issues surrounding this rather simplified model concerns the dynamic relationship between its components” (1995, 175). Consistent with the accounting interpretation, “if,” as Cooper put it, “in the final analysis, it is the economic which determines everything (including accounting), then it could clearly be argued that accounting cannot change society, only a change in the economic base (system) could change accounting” (1995, 175). Marx’s ‘economic base,’ the social relations of production and their way of extracting surplus labor, determines the form of accounting, its methods of calculation and control, which is a key element of the superstructure, of ideology, determined by the phenomenal forms, which for capitalism Marx explained by his theory of value. The economic base determines accounting, but according to the accounting interpretation critical accountants can nevertheless work to change the economic base by using Marx’s theory of value to explain capitalist accounting, and the proletariat can use capitalist accounting to establish socialism on Day 1.

From a “broadly cultural Marxist perspective,” by contrast, using Antonio Gramsci’s concept of ideological hegemony, wishing to leave theoretical space for accounting’s “revolutionary potential,” unconvinced that it is “the economic which determines everything (including accounting),” Cooper’s “position” is that there is a “dialectical relation between the economic base of a society and its superstructure” (1995, 175). The question then “is whether or

not accounting can be used to provide a politically productive way of seeing or whether it always produces a closure around other ways of signification rendering accounting wholly reactionary” (Cooper 1995, 175; see also Dillard 1991, 24–25). In short, “can accounting act on the base in a revolutionary manner” (Cooper 1995, 176)?

Because Cooper sees capitalist ideology as a “semiotic or discursive phenomenon,” which works consensually through the effects of accounting’s language, its “cultural leadership,” the answer is that “there is probably only the remotest possibility that accounting could have any revolutionary potential” (Cooper 1995, 175–76, 205). This is because accounting’s language gives “certain signifiers an authoritative position in terms of helping us understand the world, and at the same time, to silently exclude other ways” (Cooper 1995, 176). Its language excludes because, as Cooper says, “many of the central postulates underlying accounting are conceived as being *natural* and *transhistorical* rather than the products of a very specific historical development” (1995, 176), but sees this as a history of discourse, whereas according to the accounting interpretation accounting’s postulates appear natural because they represent capitalism’s historically produced phenomenal forms.

If ideology is language, “the acquisition of accounting language is an important influence on the construction of our subjectivity,” which ceases placing us in a “discursive straight-jacket” only if another discourse, or a contradiction between expectations in outcomes, creates a “dual consciousness” (Cooper 1995, 181–82). The equation of ideology and language is, however, questionable. Cooper (1995, 180–81) relies on poststructural philosophy, based in part on Saussure’s theory of language, that argues words (signs) “gained their meaning not through their positive reference to real things in the world but through their structured relationship within language to other signs” (Blackledge 2006, 7). Cooper (1995, 181) also cites the Marxist Russian language theorist Volosniou, but as Blackledge (2006, 9) points out, he “argued that Saussure’s prioritisation of *langue* over *parole* effectively rids language of its human content,” and concluded, language “is best understood as the practical activity of people speaking.” As a ‘language of real life,’ accounting language is not necessarily a discursive straightjacket, as it inevitably is for poststructuralists.

With no alternative discourse available, the problem for poststructuralist critical accountants is that accounting “as a signifier often appears natural and coterminous with reality,” and there appears no counter to the fact that “profit announcements are widespread, seemingly assuming that there is such a metaphysical thing as profit” (Cooper 1995, 183). Whereas according to Marx’s theory of value profit is the phenomenal form of appearance of surplus value, poststructuralists have no answer to “commonsense,” or to

“Accounting discourse [that] draws strongly from the discourse of neo-classical economics . . . and its common sense claims to being neutral, objective, relevant and reliable . . . [which] make it an extremely powerful signifier. This renders accounting arguments extremely difficult to counter” (Cooper 1995, 184). Accounting language is therefore “ideologically authoritative,” and alternative languages “using terms outside the dominant discourse fail to win credibility and are often viewed through the spectacles of common sense as being illogical, irrational, or are not even considered” (Cooper 1995, 202). To break the ideological grip of accounting, Cooper concludes, requires “hegemonic leadership” (1995, 175). The only possibility is “organic intellectuals and their support in discovering new ways of seeing which destroy the power of metalanguages such as accounting,” which is “crucial” (Cooper 1995, 186, 203), but these intellectuals and their new ways of seeing are not evident.

Cooper (1995, 204, 205) noted the editor’s (David Cooper) comment that this conclusion “left ‘a strong sense of hopelessness,’” but responded, “this paper is not pessimistic. . . . The value of studying accounting is that it can give us a unique view of the ideological underpinnings and workings of the capitalist system An understanding of the practical workings of capitalist ideology contains the *potential* for a contribution to our liberation,” which is true, but how is unclear. Seeking this understanding through poststructural “Re-readings of Marx’s concept of ideology,” which “emphasized the political importance of the concept of ideology whilst distancing themselves from more economic interpretations of Marxism” (Cooper 1995, 180), presumes that we cannot explain the phenomenal forms in traditional capitalist accounting as ideology using Marx’s theory of value, a theory of its underlying social essence.

Cooper inevitably, therefore, *did* pessimistically conclude, “it seems that a financial consciousness which is unconsciously derived from capitalist ideology will serve to uphold the status quo” (1995, 203). The accounting interpretation, by contrast, optimistically draws on the implication of Marx’s explanation of capitalist ideology as the unconscious product of the phenomenal forms of accounting. If the phenomenal forms are the distorting mirror of capitalist relations that Marx’s theory of value shatters by explaining them, we could change a financial consciousness unconsciously derived from capitalist ideology by bringing it to consciousness, by explaining the phenomenal forms.

Criticizing Social Accounting

‘Social accounting’ appeared in the 1960s, reports prepared and published by independent pressure groups critical of business and government practices

and their social consequences, which in the hands of professional and academic accountants has today become 'Social and Environmental Accounting' (SEA). Also rejecting the hegemony of neoclassical economics, SEA seeks to go beyond financial accounts to create 'socially responsible' capitalist and other enterprises by reporting their environmental impacts, energy efficiency, gender balance, racial equality, health and safety, and so on, to their 'stakeholders' and society, to make enterprises 'accountable.' Cooper et al. (2005, 951–52) deployed a "Marxist theoretical framework" to criticize this literature, and propose an alternative, "to add to the various streams of Social and Environmental Accounting and perhaps to point it in a slightly different direction." Social accounts should, as they say, "be produced independently of the management of organizations," and importantly, "in order to disrupt current ideological understandings they should be theoretically driven" (Cooper et al. 2005, 951), but it matters what theory because, according to the accounting interpretation, by contrast, SEA accounting needs thoroughly overhauling.

SEA literature, Cooper et al. accepted, "has a kind of progressive edge to it in the sense that it sees the production of SEAs as having the potential to create a fairer more just society" (2005, 952). However, they questioned "the idea that individual company information (albeit in the form of a company SEA) can be used to make socially efficient decisions," because it obviously "neglects to acknowledge the power relations in society and consequently fails to challenge them" (Cooper et al. 2005, 952). The most important power relation according to "the Marxist dialectical understanding [is] that society is animated by the incommensurable interests between capital and labour. This means that capital needs to pay the lowest achievable wages and try to maintain the maximum output from its workforce while labour wishes to try to earn the maximum wages possible" (Cooper et al. 2005, 952). Recognizing this power relation, Cooper et al. argue, could "enable Social and Environmental Accounts to participate fully in social struggles" (2005, 953), which is why they support the "early Social Audits which were used in the Marxist sense of exposing some of the worse excesses of capitalism" (2005, 953).

To take power relations into account, from a "broader societal perspective," because "decisions made by individual companies have unregulated social effects that cannot be encompassed by an individual company SEAs," it is necessary, they argue, to adopt "the Marxist dialectical position that society is shaped by contradictory material [*sic*] forces" (Cooper et al. 2005, 953). This, however, does not mean historical materialism's contradiction between the forces and relations of production, as we will see, and its removal by democratic socialism. To expose the "worst excesses," Cooper et al. propose, "the production of something akin to early social audits aligned to contemporary social struggles and action groups (e.g. trade unions) would promote

the potential to create a more equitable society” (2005, 951). However, the “worst excesses” of capitalism, according to the accounting interpretation, are its social relations limiting surpluses and fettering the development of the forces of production, whereas seeking ways to reduce workers’ pay to the means of subsistence, or avoiding the costs of environmental and social degradation, are the rule, not the excesses of capitalism.

Critical accountants have faced the challenge, “it is easier to criticize Social Accounting than come up with alternatives” (Cooper et al. 2005, 959). Mathews, for example, concluded, “In the evolution versus revolution debate, revolution does not suggest how we might proceed” (1997, 14). However, from Marx’s perspective, in capitalism where organizations are accountable for the rate of profit to shareholders, “evolution” within SEA is impossible. The idea that enterprises might accept a lower rate of profit to pursue social and environmental objectives is therefore a fantasy. Because “the generation of profits . . . is incommensurable with fulfilling diverse social needs,” as Cooper et al. put it, “even if organizations produce the finest sets of Social and Environmental Accounts, these accounts will fail to reflect the *social effects* of organizations’ private economic transactions and therefore fail in their purpose of rendering organizations more socially or environmentally accountable” (2005, 955). However, from Marx’s perspective it is not simply because capitalist organizations pursue profit, surplus labor in the form of surplus value, which is against the public interest. On Day 1 of socialism, chapter 8 argued, worker controlled cooperatives would consciously pursue target surplus value. Profit seeking is against the public interest in capitalism because, being accountable to shareholders, private capitalist organizations do not pursue surplus labor in workers’ interests with the interim aim of directly producing equal social value for each labor hour by increasing the forces of production. Eliminating environmental and social degradation are state enforced goals of all socialist enterprises within Marx’s concept because this increases the forces of production.

Rather than accountability for value, Cooper et al. in effect see the objective of capitalist accounting as decision making. It is true “that capitalism directs investment decisions according to the criterion of profitability,” and “certainly the case that accounting has never been able to fulfil its technicist claims that it can provide coherent, “rational,” “information” for this purpose” (Cooper et al. 2005, 955). It is undeniable that “however flawed the accounting calculus, capitalist production decisions are shaped by those goods which are *expected* to provide the highest rate of return” (Cooper et al. 2005, 955), but according to the accounting interpretation this is not accounting’s primary function. It is unarguable that “the structure and rate of investment are determined by Capital’s assessment of the potential profit of various investment projects,” and that “democratic public discussion of

these issues in Western democracy is deemed to be (increasingly) irrelevant since investment and production decisions have been ‘delegated’ to the market place” (Cooper et al. 2005, 955). However, according to the accounting interpretation, the capital market (total social capital) delegates decisions to managers who are accountable for the rate of profit (Bryer 2017). If, by contrast, organizations produce objective accounts of value to a vast association of the world, they fulfill a “social accountability function” by abolishing the difference between “private” and “social” interests. Then class division does not corrupt the notion of the “public interest” (Cooper et al. 2005, 954).

Clearly, individual company SEAs that “do not make connections with the rest of the social totality will be flawed in terms of their usefulness in making socially effective and efficient decisions” (Cooper et al. 2005, 957), but the alternative Cooper et al. apparently envisage is state planning. It is true that “because they produce unregulated and unplanned social effects, capitalist markets create enormous social inefficiencies” (Cooper et al. 2005, 956), but they do not distinguish markets for commodities and services from labor power and capital markets. While “Proletarianization and intensified exploitation are . . . inherent in all market processes where labour-power exists as a commodity on a significant scale” (Cooper et al. 2005, 958), socialism abolishes this market, along with its twin, the capital market. Cooper et al. also reject markets because “ideology . . . was unleashed,” because the “workings of the market make capitalism appear as free, fair and just—as well as inevitable and free of class distinctions” (2005, 958–59), an ideological inversion that Marx claimed his theory of value would dispel.

Cooper et al. highlight the importance in a “Marxist materialist analysis” of the “forces and relations of production,” but rather than their historic contradiction they mean only the everyday conflict between workers and capitalists, the “clear contradiction in the relationship between workers and business” (2005, 957). The contradiction that “workers . . . struggle to maximise wages and capitalists to minimise wages” to maximize their profits: “The ‘contradictory material forces’ alluded to earlier concern the antagonisms between social classes in the commodity production process” (Cooper et al. 2005, 957, 958). This implicitly sees only those “forces” and “antagonisms” that determine the rate of exploitation, but not that this is a concept that exists only in Marx’s theory of value.

“Radical accounting,” critical accountants have long argued, “seeks to create new accountings that serve the interests of the workers (perhaps in the form of social or public interest accounting)” (Cooper and Hopper 1987, 412), but they have not discussed how workers could use capitalist accounts in a historic fight for socialism (cf. Bryer 2016). Clearly, “accounts alone cannot bring about social change. Social movements are required for that” (Cooper et al. 2005, 955). According to the accounting interpretation,

however, workers will support progressive industrial conflicts and social movements only if they share a calculated vision of socialism, of belonging to a vast association, holding enterprises accountable for the production and distribution of value from Day 1 with socially objective accounts, based on empirically verified theories of history and value.

MARXIAN ACCOUNTING

Without a theory of value, critical accounting research has not fulfilled the promise “that [it] will develop a maturity which may lead to a better set of accounts” (Cooper and Hopper 1990, 10) from the perspective of society. Neu, Cooper, and Everett accept, “While critical accounting scholars have illuminated the partisan functioning of accounting, we have been less successful in ‘transforming accounting (and social) practices’” (2001, 736), which remains a key task of Marxian accounting. Critical accountants reject neoclassical economics, but say little about its practical consequences, and nothing about the alternatives. Tinker, Merino, and Neimark asked, “What kinds of accounting are suggested by labor-based theories of value,” and “How might they differ from the accounting which has grown-up in the shadow of utility-based value theory” (1982, 176), but few critical accountants responded.⁶ Neu, Cooper, and Everett’s critical accounting interventions “might have involved the issuance of alternative accounting, auditing and ethical standards” (2001, 756), but did not.

Marx would have scorned the idea that neoclassical economics could provide an adequate theory of accounting because its foundation, the mentality of money capital, seeing capital as the movement of money (M) to more money (M'), M-M', was “a mystification of capital in its most flagrant form” (1998, 390). Marx accepted, as we saw in chapter 7, that it was nevertheless rational for property owners to capitalize rent, and for money capitalists to capitalize interest and repayments. However, he assumed that the foundation of the industrial capitalist’s accounts was realized revenue and cost-price, gross profit, that overrode this “enchanted and perverted world” because, *Accounting for Value* argued, such bookkeeping ensured “the actual process of production as a means of extracting surplus labour . . . impresses itself upon . . . the capitalists themselves, and remains in their consciousness” (Marx 1998, 814). Based on the phenomenal forms, although ‘inverted,’ because their invisible foundation was value, the accounts impressed on the capitalist’s consciousness that production was the source of surplus labor in the form of gross profit, and were therefore functional. By contrast, “Monsieur le Capital,” a “very mystic being since all of labour’s social productive forces appear to be due to capital, rather than labour as such, and seem to issue from

the womb of capital itself,” “this religion of everyday life,” was “shallow pompousness” (Marx 1998, 814, 817).

Marx would therefore have been surprised that the vulgar interpretation of the Trinity Formula, from which Irving Fisher (1906, 1930) derived his influential economic theory of accounting (Bryer 2013b), has infiltrated first American and then global financial accounts as the general theory of accounting to which potentially all accounting standards should conform. The infiltration, which has been, and remains, highly controversial, has grown in the last twenty or so years, but is so far limited in its impact on financial accounts, and has not reached management accounts, so it does not contradict Marx’s theory that the social relations determine the superstructure of control. Neoclassical accounting is an acceptable form of capitalist ideology that does not directly threaten the social relations. However, it has arguably weakened shareholder control of top management, with potentially destabilizing consequences, such as the 2007 global financial crisis, discussed briefly below.

Transitions to capitalism, Marx accepted, could be by various routes, and according to its accounting history America made an exceptional transition from a society of simple commodity producers and semi-capitalists from the 1880s, catching up with the British form of advanced capitalism by the 1920s, and Fisher’s theory was the product (Bryer 2012, 2013a, 2013b). Fisher responded to the crisis the transition generated, a rising tide of populist protest and the threat of socialism against ‘big business’ in the late nineteenth and early twentieth centuries, with his theory of accounting, designed as a critique of Marx’s theory of value, that influenced contemporary economists, politicians, big business, accounting teachers and leading accounting theorists (Bryer 2013b, 592–612). Through them, it ultimately provided the intellectual foundation for the FASB’s conceptual framework (Bryer 2019b). Although surprised, Marx would have seen neoclassical accounting as an opportunity to engage in necessary science to dispel the radical distortions of capitalism’s phenomenal forms introduced by Fisher’s theory.

Following the vulgar Trinity Formula, Fisher abolished the idea of ‘capital’ and ‘gross profit’ as categories of economics and accounting, and with them Marx’s theory of value, switching the focus to ‘income,’ expected future cash flows, and ‘capital value’ as their PV when discounted by investors’ rate of ‘time preference.’ In Fisher’s theory, the viewpoint of money capital, ‘income’ is the rate of interest, the change in the PV of expected cash flows through time, and the aim of accounting is ‘decision-usefulness,’ helping individual investors value their shares and bonds. Whereas for Marx, and in practice accountants, interest is a pre-emptive share of surplus value, for Fisher interest reflects “time preference,” the demanded “price of capital,” the required rate of “value-return,” the “premium on the goods of one year

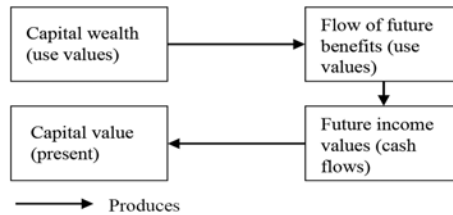


Figure 9.1 Fisher's Theory of Income and Capital. *Source:* Created by the author based on Fisher (1912, 108).

compared with those of the year following” (1906, 200–1). Given this rate, “the basic problem of time valuation which Nature sets us is always that of translating the future into the present, that is, the problem of ascertaining the capital value of future income. The value of capital must be computed from the value of its estimated future net income, not vice versa” (Fisher 1986 [1930], 52) (see figure 9.1).

Fisher admitted his idea that *future* income determines the *present* value of capital “may at first seem puzzling, for we usually think of causes and effects as running forward not backward in time. It would seem then that income must be derived from capital; and, in a sense this is true” (1930, 52). His answer was, while “Income is derived from capital goods . . . , the *value* of the income is not derived from the *value* of the capital goods. On the contrary, the value of the capital is derived from the value of the income. Valuation is a human process in which foresight enters. Coming events cast their shadows before. Our valuations are always anticipations” (Fisher 1930, 52). From the money capitalist’s perspective, seeing only future cash flows, “only *future* costs can enter into the valuation of any good,” “Past costs can have no *direct* influence on value” (Fisher 1930, 53). This, the opposite of traditional accounting practice and the TSSI, certainly puzzled accountants who think of cause and effect in the normal way, running forward in time, from cause to effect, and therefore measure the use of capital at cost.

Fisher’s theory became the unacknowledged foundation of the FASB’s ‘conceptual framework’ of financial reporting from 1978 (Bryer 2019b), which from 1989 the IASB adopted. At its heart are management judgment and the possibility and encouragement to exercise it in valuing and recognizing assets and liabilities. Marx would have criticized and opposed this development because, chapter 8 argued, socialism requires transparent and objective accounts of value, global accounting standards based on his theory of value and focused on stewardship. Decision-useful financial reporting undermines the accountability of big business to capitalists and governments, but more importantly, by not simply inverting the phenomenal forms but radically distorting them, it makes accounts an even more impenetrable

ideological barrier to socialism that critical Marxist accountants should tear down.

Many observers agree that an increasing number of US and international accounting standards based on the FASB's conceptual framework have introduced subjective judgment, reduced transparency, and undermined management's accountability to shareholders and governments. Like Marx, "neoclassical economic theory tries to explain . . . profit of capital . . . within a framework of exchange of equivalents" (Foley 1986, 47), and this is the foundation of modern financial reporting. The difference is that whereas neoclassical accounting, focused on cash flows, "sees goods and services as equivalents from the subjective point of view of the consumer; Marx sees them as equivalents in the objective sense that they carry a certain part of the social labour time of the society" (Foley 1986, 47–48). This socially objective value, according to the accounting interpretation, is what Marxists should campaign for as the foundation of "better" corporate accounts. The appearance of decision-useful accounting presents many opportunities to critical Marxist accountants. For example, the role of Fisherian accounting theory in the global financial crisis that began in 2007.

Marxian Accounting For SPEs

What role did accounting play in the global financial crisis? Many professionals and scholars have debated the impact of 'fair value' accounting in producing the 'credit crunch,' but arguably the more important problem was American accounting rules for SPEs, which encouraged risky lending. As Arnold (2009, 804) says, "financial reporting rules governing off-balance sheet structured investment vehicles (SIVs), including rules on special purpose entities (SPEs), qualified special purpose entities (QSPEs) and variable interest entities are equally if not more important" in the crisis, but does not go into technical details. 'Fair value' accounting for financial instruments at 'exit' or selling prices allowed banks to inflate balance sheets, which allowed increased real borrowing and the reporting of unrealized profits in a bull market, which encouraged over-expansion. Fair value accounting follows from applying Fisher's theory to the problem of accounting measurement, its theory of value. His theory also underlay US rules for consolidations and SPEs (Bryer 2019b).

Arnold blamed critical accounting's failure to anticipate the global financial crisis "in part" on its "a turn away from the analysis of politics and economics in favor of cultural explanations of accounting's role in organizations and society . . . away from political economy and its critique of capitalism" (2009, 805). However, we saw that PEA stressed the sociological and 'cultural' dimensions of accounting, did not develop an accounting critique

of capitalism, and declined to go into technical details. Technical details are important because, as Cooper says, “Although accounting information is important since it is part of the legitimating structures of society, it is more than just ideological—it is a technology” (2015, 74). To understand the failure in accounting technology that produced the global financial crisis, and how Marxian accounting could have avoided it, we must be clear about the technical details, but particularly the starting point that financial accounting’s primary function for capitalism, according to the accounting interpretation, is stewardship, not decision-usefulness.

A general failure to recognize the stewardship function of capitalist accounting could explain why “academic accounting research generally failed to anticipate the crisis, or mount a substantive critique of accounting’s contribution to systemic financial instability and/or accounting firms’ involvement in securitization and structured finance” (Arnold 2009, 804). Arnold pertinently raises the question, “If we recognize that financial markets do not allocate capital efficiently, what then is the role of financial reporting in the capital markets?” (2009, 805), but does not consider if it could be stewardship for capital. The key question, as Arnold says, is “Why did US accounting standard setters allow banks to move banking operations off their balance sheets in the 1980s?” (2009, 804, 806), but does not consider their dismissal of stewardship. Rather, Arnold asks whether the “obviously flawed rule” came from the “domination of finance over industrial capital,” or finance’s capture of standard setters, but does not explain why the rule was “obviously flawed,” and why it “has been modified several times since the 1980s, but never satisfactorily” (2009, 804, 806).

Arnold doubts whether any rules would work, whether “financial accounting [was] ever up to the task of providing transparency to capital markets within the hyper financialized economy of the 1990s and 2000s” (2009, 807), suggesting the “illusion” that it would create regulatory complacency that caused the crisis. The problem, from this perspective, was “the combination of uncontrolled financial innovation, complex financial instruments, deregulation, moral hazard, and the consolidation of economic and political power within the financial sector [that] rendered the financial system increasingly ungovernable” (Arnold 2009, 807), not the accounting rules. Seeing no accounting solution, Arnold asks whether “the illusion that financial reporting standards and auditing surveillance could substitute for more stringent forms of oversight and/or restrictions on speculative capital flows contribute[d] to the current crisis” and, if it did, whether “a reconfiguration of political and economic power, is a solution to [preventing] the crisis” (2009, 807).

An alternative question is whether Marxian accounting theory could provide financial reporting standards allowing the obviously needed social

“oversight” (Arnold 2009, 807). Cooper cautions, “Although Marxist theory provides some interesting ideas about how to improve accounting standards, it is not the role of Marxist theory to solve the problems of capitalism, but rather to enable a deeper understanding of it” (2015, 79). However, according to chapter 8, solving the “problems of capitalism” through Marxian accounting is necessary preparation for socialism, for developing and proposing standards that hold management accountable, initially for the generation and distribution of value, to workers and society. Capitalists may or may not accept Marxian proposals, but they could never accept the theory of value that underlies them. Critical accountants deploying Marx’s theory of value should highlight deviations from it as ‘fictitious’ misrepresentations. As Cooper says of the debates around fair value accounting following the 2007 global crisis, they “totally miss the point that the value of claims to future cash flows are in Marxist terms *fictitious*” (2015, 80, emphasis added).

Accounting for fictitious capital, valuing assets by their expected cash inflows, at ‘exit’ (selling) prices or PV rather than RC, means management is not accountable for real capital, for the value of the capital it actually controls. For the same reason, failure to account for capital that it does control is fictitious, for example, the failure of American accounting rules for SPEs based on Fisher’s accounting theory that kept them off bank’s balance sheets. Marxists are aware that the crisis involved “obscure accounting rules, off-balance-sheet items and special-purpose entities” (Blackburn 2011, 36), but Blackburn (2008), for example, explained it as the product of a “historico-structural movement” (Mann 2009, 121).

Other Marxists suggested “historically ‘proximate causes’: various financial practices, instruments, institutions, and the aspects of ‘market psychology’ that ‘enabled’ the asset-price bubble and make the ‘crunch’ so uncomfortable” (Mann 2009, 121). Mann criticizes the Marxist “analytical energy [that] has been focused on the technical mechanics of the crisis, on the assumption that this is where the problem lies” (2009, 121), but none of it focused on the “technical mechanics” of accounting for SPEs. Mann admits, “This is not to say that these mechanics are unimportant” (2009, 121). However, by this he means, “elaborate packaging of asset-backed securities and creative evasion of liquidity requirements . . . [by] investment banks (and, increasingly, commercial banks) . . . ; the processes of ‘securitization’ through which finance capital ‘originates’ creditbacked securities involve mystifications so marvellous Marx would have been bug-eyed” (Mann 2009, 121), which seems unlikely. Mann is certainly right, “Finance capital does not imagine . . . values into existence; securities, as values, are as real as any value ever is” (2009, 122), but its ideology can imagine accounting in which the real capital beneath them disappears from the bank’s balance sheet that created them. As Marx did for changes in the value of constant capital,

fixed capital, inventories, and so on (Bryer 2017), we can use his theory of capitalist control, grounded in his theory of value, to produce Marxian accounting rules for SPEs, to evaluate FASB and IASB standards, and to assess their consequences.

Briefly, SPE accounting falls within the general area of consolidated accounting for groups of entities. The key issue is ‘control,’ which from Fisher’s ‘economic entity perspective’ means the ability to supervise use values with an expected PV for benefit, whereas from Marx’s ‘proprietary perspective’ (Bryer 2017) control of another entity requires legal results control, the right to set financial targets, control governance procedures, and withdraw profit (Bryer 2019b). In Fisher’s sense banks could claim they did not ‘control’ the SPEs they created to buy the mortgages, and so on, they originated, because they were on ‘autopilot,’ governed by legal rules specifying their functioning, requiring no supervision, but from Marx’s perspective the banks retained results control, and therefore the SPE’s assets and liabilities should have appeared on their consolidated balance sheets. The banks created SPEs as legal entities to raise capital and use it to buy the loans the banks had made, and they wrote the detailed legal rules by which SPEs functioned. They usually retained the right to terminate SPEs and to take any residual surplus. From Marx’s perspective, the banks had legal results control. Not consolidating SPEs meant banks could book immediate ‘profits’ in their accounts by making and selling loans without increasing their reported debt, which fuelled a credit boom. Marxian rules requiring consolidation of SPEs would have removed the accounting cause of the boom and the global financial crisis that followed and would, therefore, have been ‘better’ for society than the rules produced by Fisher’s neoclassical theory (Bryer 2019b).

CONCLUDING COMMENTS

My aim in writing *Accounting for Value* and *Accounting for History* has been to persuade Marxists to take accounting and its history seriously. Accounting barely appears in their theoretical discussions and empirical research, whereas to understand and test Marx’s theories, I have argued, we must not see him simply as a political economist, historian, philosopher, and sociologist, but also as a theorist of world accounting history, as the original critical accountant.

Only when Marxists have demonstrated the empirical validity of Marx’s theories of history and value can they use them to change the world. They have so far failed, I have argued, in part because accounting is the ‘invisible hand’ in Marx’s theory of capitalism, how it controls the production of

surplus value, which is missing from their understanding of his theory of value, and because accounting is the ‘missing link’ in their understanding of his theory of history and its end in socialism. The critical overlooked importance of accounting history, *Accounting for History* has argued, lies in showing that capitalism is the product of history in Marx’s sense, an evolution from feudalism and slavery, themselves qualitatively different earlier forms of society, which refutes the Giddens critique and leaves open the possibility that history could change it.

There is much for Marxist accounting historians to do. *Accounting for History* supported Marx’s historical materialism, by defending it against the criticisms of some historians and philosophers, by testing it empirically against a ‘world’ accounting history, and by arguing, contrary to some standard Marxist interpretations, that accounting is integral to his mature concept of democratic socialism. There is clearly a need for broader debate between accountants, historians, and Marxists, but particularly for accounting historians to produce a truly world accounting history, deepening, broadening, and extending the necessarily limited history attempted here. We need more detailed accounting histories of ancient and medieval societies, to include evidence from beyond the geography of the Roman Empire, broadening them to encompass Africa, China, Russia, South America, and so on, and extending them to include transitions to capitalism and claimed implementations of Marx’s socialism.

Accounting history allows us to test the implication of chapter 8’s conclusion that accounting is integral to Marx’s concept of socialism, critical to its success, by exploring accounting’s role in historical attempts at implementing it in practice (e.g., Bryer 2016). Although beyond the scope of this book to explore, evidence from the most important example, the October 1917 Russian Revolution, is consistent with the hypothesis that Lenin’s ignorance of capitalist accounting, and of Marx’s explanation of its function, played a vital role in the revolution’s evolution into central planning and totalitarianism (Bryer 2019a). Russian revolutionaries usually ignored accounting, but Lenin, who was a serious student of Marx and Engels, uniquely stressed its vital importance, that it was “nine-tenths of socialism,” that “socialism is above all else a matter of accounting” (Lenin 1964, 106; Keep 1979, 81). However, Lenin’s failure to understand capitalist accounting, seeing it as simple budgeting, meant that he misunderstood Marx’s concept of socialism, confusing Day 1 with the interim aim, which initially led him to support central planning and ‘workers’ control.’ Lenin admitted his policy mistakes in 1921 when he had understood, intuitively at least, the accountability function of capitalist accounts, which underlay his ‘New Economic Policy’ in 1921, and his outline vision of a socialist society built from cooperatives in 1923, ideas that Stalin quickly dropped after Lenin’s death in early 1924 (Bryer 2019a).

The accounting interpretation of Marx's concept of socialism and the accounting history of the Russian Revolution supports Marxists who disown the Stalinist central planning and totalitarianism that developed, and answers the influential criticism by Mises (1935) and Hayek (1935) which Russian experience evoked, that without a capital market 'rational economic calculation' was impossible. In the 1930s, with the 1929 stock market crash widely blamed for the Depression, socialists felt under little pressure to answer this criticism, and still have not answered. Could a socialist economy based on public ownership of the means of production, without a capital market, allocate resources 'rationally,' or are its capital valuation and allocation functions insurmountable barriers to the success of socialism? The brief answer is that the capital market's informational efficiency is debatable (e.g., Malkiel 2003), but its allocative efficiency depends on traditional accounting, whereas rational calculation under socialism would rely on the informational efficiency of competitive markets for products and services, and the allocative efficiency of accountability to workers and society for the production and distribution of value. Ignorant of capitalist accounting, the basis of Mises (1935) and Hayek's (1935) conclusion that society must rely on self-interest, the unconscious self-management of the economy by private property, was Fisher's theory that the foundation of capitalists' accounts is subjective calculations of PV. A Marxist accountant's answer to their criticism is, therefore, that the underlying foundation of traditional capitalist accounts is socially objective value, which socialist society can initially rely on for its conscious self-management (Bryer 2019a).

The beginning of a progressive accounting research and education program with radical intent exists today as critical accounting, but in light of the accounting interpretations of Marx's theories, it needs rebooting. There is much for critical accountants to do. *Accounting for Value* supported Marx's claim to have scientifically 'proved' his theory of value by using it to explain traditional capitalist accounting's fundamental principles, but applied it in detail only to the fundamental issues of accounting for fixed capital and inventories. The primary task is therefore to use Marx's theory to articulate a comprehensive set of Marxian accounting standards to demonstrate that worker and social control of the means of production through accounting for value is practical, and to articulate the details of accounting for the interim aim of equal social value for every labor hour. Second, critical accountants should use their Marxian accounting standards to engage in class conflict, by calculating social, sector, and individual enterprise rates of profit, explaining them by rates of exploitation, value compositions, and turnovers of capital, and by calculating the surpluses foregone by capitalist relations fettering the forces of production. Third, critical accountants should rise to the challenges and opportunities posed by modern financial reporting.

Marxists can justifiably claim that nobody listens. A focus on financial reporting would give them a public forum and a ready-made captive audience. A consequence of the exceptional history of American financial reporting, particularly the battle between management and the accounting profession from the 1930s to the 1960s over the control of accounts (Bryer 2019b), is that setting accounting standards is a public system of ‘due process.’ In this process, the FASB and IASB publish ‘discussion papers’ and ‘exposure drafts’ on proposed rules inviting public comments, which the boards are bound to consider in their deliberations. Critical accountants should engage with this process. They should write books, articles, and particularly comment letters to the FASB and IASB, arguing for transparent and objective accounting for value, which would be sure to at least get public exposure of the fact that a Marxian accounting theory exists that claims to explain capitalist accounting, its history, and its future, scientifically.

NOTES

1. See, for example, the aims of the *Accounting, Auditing and Accountability Journal*, *Accounting, Organizations and Society*, and particularly *Critical Perspectives on Accounting*.

2. I estimate that approximately 8 percent of articles published by *Critical Perspectives on Accounting* from 1990 to 2018 refer to Marx.

3. Knowing that Marx’s theory of value was ‘controversial’ among Marxists (e.g., Tinker, Merino, and Neimark 1982), but being unconvinced by their criticisms, yet also ignorant of how alternative interpretations addressed them, my strategy was to treat it as a maintained hypothesis and explore whether it could help to explain capitalist accounting and its history (see Bryer 2017).

4. The chapter does not discuss critical accounting’s many “significant achievements,” particularly, in my view, by creating “new definitions of relevance in accounting research” (Morales and Sponem 2017, 161), which it takes for granted.

5. Cooper (1995) and Cooper et al. (2005) (below) refer to Christine Cooper, not David Cooper (e.g., Cooper 1980).

6. See Bryer (1995; 1999a; 1999b) for Marxist critiques of UK goodwill accounting and the FASB’s conceptual framework.

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