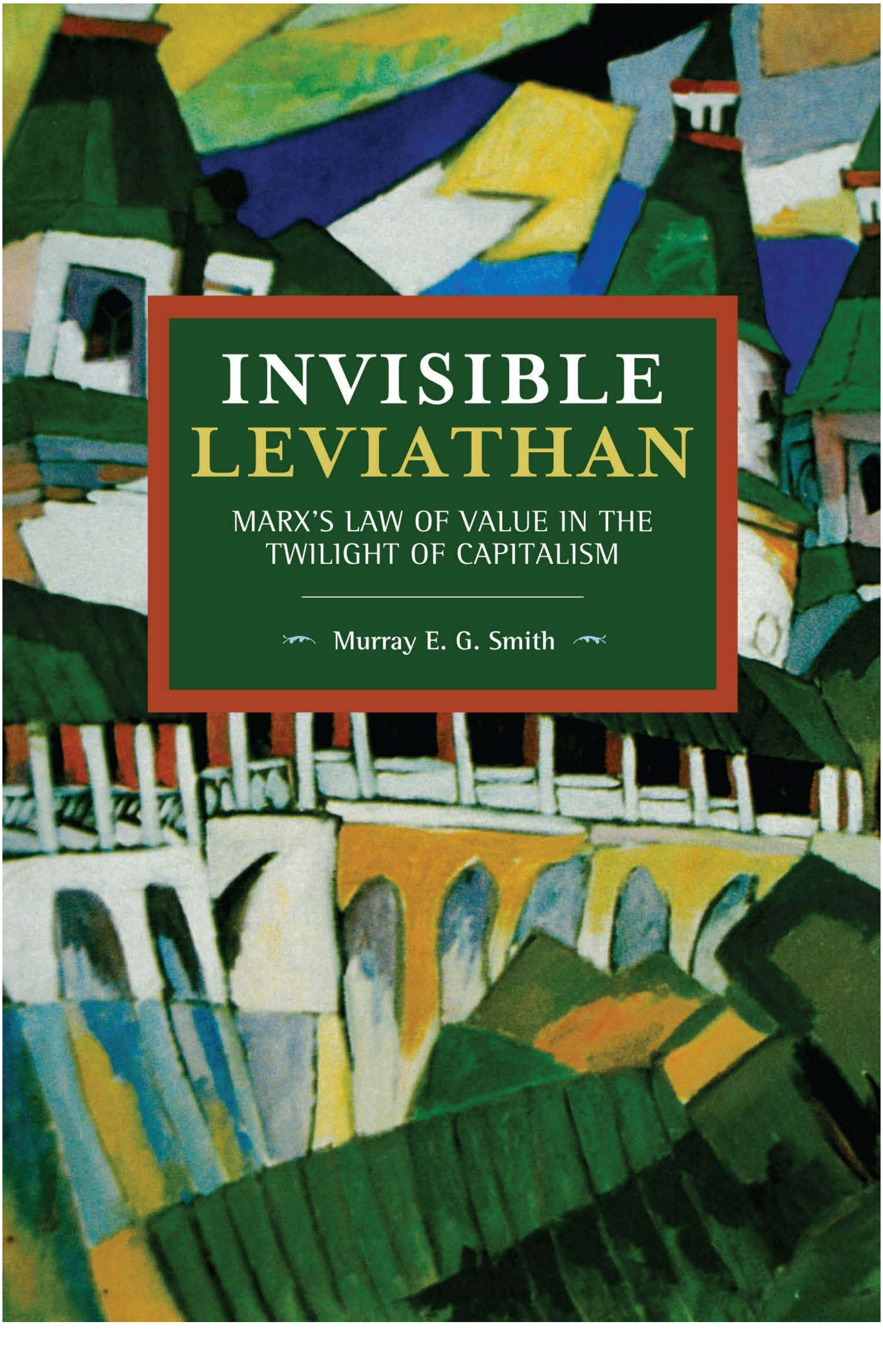

INVISIBLE LEVIATHAN

MARX'S LAW OF VALUE IN THE TWILIGHT OF CAPITALISM

Murray E. G. Smith

Invisible Leviathan

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By

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Foreword

The message of Murray Smith's book is aptly portrayed by its title, *Invisible Leviathan*. The book sets out to explain why Marx's law of value lurks invisibly behind the movement of markets in modern capitalism and yet ultimately explains the disruptive and regular recurrence of crises in production and investment that so damage the livelihoods (and lives) of the many globally.

This book is a profound defence (both theoretically and empirically) of Marx's law of value and its corollary, Marx's law of the tendency of the rate of profit to fall, against the criticisms of bourgeois, 'mainstream' economics, the sophistry of 'academic' Marxists, and the epigones of the classical school of David Ricardo and Adam Smith. As the author points out, even the great majority of 'left' commentators concur that the causes of the 'Great Recession' of 2007–09 and the ensuing global slump are not to be found in Marx's theories, but rather in the excessive greed of corporate and financial elites, in Keynes's theory of deficient effective demand, or in Minksy's theory of financial fragility. When acknowledged at all, Marx's value theory and his law of profitability are attacked, marginalised or dismissed as irrelevant.

None of this should be surprising given the main *political* implication of Marx's laws: namely, that there can be no permanent policy solutions to economic crises that involve preserving the capitalist mode of production. I am reminded of the debate at the 2016 annual meeting of the American Economics Association between some Marxists (including myself) and leading Keynesian Brad DeLong, who seemed to characterise us as 'waiting for Godot' – that is to say, as passive utopians, waiting for collapse and revolution – while he stood for 'doing something now' about the deplorable state of capitalism. But as Smith explains so well, it is the 'practical' Keynesians who are the real utopians in imagining that actually existing, twenty-first-century capitalism – characterised by crises, war and 'the avarice and irresponsibility of the rich' – can still be given a more human and progressive face.

Against the many variants of 'practical' economics, Smith's book sets out to:

> uphold Marx's original analysis of capitalism, not only as the most fruitfully scientific framework for understanding contemporary economic problems and trends, but also as the indispensable basis for sustaining a revolutionary socialist political project in our time. It does so by examining the crisis-inducing dynamics and deepening irrationality of the capitalist system through the lens of Marx's 'value theory' – which, despite

> the many unfounded claims of its detractors, has never been effectively 'refuted' and which continues to generate insights into the pathologies of capitalism unmatched by any other critical theory.

Marxian value theory has been subject to ridicule, distortion and incessant rebuttal ever since it was first expounded by Marx 150 years ago. And the simple reason for this is that value theory is *necessarily* at the core of any truly effective indictment of capitalism – and essential to refuting its apologists. What truly motivates the 'Marx critique' of the bourgeois mainstream is graphically confirmed by the (in)famous argument of Paul Samuelson (the leading exponent of the 'neoclassical synthesis' in mainstream economics after World War II) according to which Marx's value theory is 'redundant' as an explanation of the movement of prices in markets. The market, you see, reveals prices, and that is really all we need to know.

It is instructive to note that, shortly after Samuelson's 1971 broadside against Marx, the (recently deceased) neoclassical economist William Baumol offered a trenchant response to Samuelson's 'crude propaganda'. In a paper from 1974, Baumol pointed out quite correctly that Samuelson had entirely misunderstood Marx's purpose in his discussion of the so-called transformation of values into prices. Marx did not want to show that market prices were related directly to values measured in labour time. Quite the contrary:

> The aim was to show that capitalism was a mode of production for profit and profits came from the exploitation of labour; but this fact was obscured by the market where things seemed to be exchanged on the basis of an equality of supply and demand. Profit first comes from the exploitation of labour and then is redistributed (transformed) among the branches of capital through competition and the market into prices of production.

The whole process reveals the 'Invisible Leviathan' at work.

Unfortunately, it is not just mainstream economics that has tried to rubbish Marx's value theory. 'Post-Keynesians' like Joan Robinson and neo-Ricardian Marxists like Piero Sraffa and Ian Steedman have also done so. Like Samuelson, they resort to the argument that Marx's value magnitude analysis is redundant, unnecessary and above all fallacious. As an alternative, Sraffa claimed that prices in capitalist markets can be derived directly from physical output.

Murray Smith demolishes these critiques and revisions, standing firmly on what he calls a 'fundamentalist' position that involves a return to *both* aspects of Marx's fundamental theoretical programme: the analysis of the form and the magnitude of value, as well as a concern with the relationship of each to the *social substance* of value: abstract labour. I join him under this banner.

According to Smith:

> Marx's theory of value yields two postulates that are central to his critical analysis of capitalism: 1) living labour is the sole source of all new value (including surplus-value), and 2) value exists as a definite quantitative magnitude that establishes parametric limits on prices, profits, wages and all other expressions of the 'money-form'. From this flows Marx's fundamental law of capitalist accumulation: that the tendency of the social capital to increase its organic composition (that is, to replace 'living labour' with the 'dead labour' embodied in an increasingly sophisticated productive apparatus) must exert a downward pressure on the rate of profit, the decisive regulator of capitalist accumulation.

The book's theory of capitalist crises rests firmly on Marx's law of profitability. But, as Smith insists,

> Marx's law of value is merely a 'necessary presupposition' of this law of profitability, not a *sufficient* one. Yet, there is a sense in which the latter stands as a corollary to the former, even if not a theoretically ineluctable one. For capitalism is a mode of production in which the goal of 'economic activity' is only incidentally the production of particular things to satisfy particular human needs or wants, while its real, overriding goal is the reproduction of capitalist social relations through the production of *value*, that 'social substance' which is the flesh and blood of Adam Smith's powerful yet also fallible 'invisible hand' – of our 'Invisible Leviathan'.

And so:

> [T]hese laws provide a compelling basis for the conclusion that capitalism is, at bottom, an 'irrational' and historically limited system, one that digs its own grave by seeking to assert its 'independence' from living labour even while remaining decisively dependent upon the exploitation of living wage-labour for the production of its very life-blood: the surplus-value that is the social substance of private profit.

Smith is by no means content with a purely theoretical defence of Marx's analysis of capitalism's Invisible Leviathan; he moves on to empirical verification of the 'economic law of motion' of capital as postulated by Marx. I share his view that this is essential. The contrary opinion of certain Marxists is that it is simply impossible to verify Marx's laws, as the latter are about labour values and official bourgeois data can only detect movements in prices, not values. Moreover, according to this line of thought, statistical verification of Marx's value-theoretic hypotheses is unnecessary, as the regular recurrence of crises under capitalism is a self-evident fact revealing its obsolescence.

But this is passing the buck. Any authentically scientific socialism demands rigorous scientific analysis and empirical evidence to verify or falsify its theoretical foundations; and Marx himself was the first Marxist to look at data in an effort to confirm his theories. In this connection, Smith writes:

> Marxist analysis of the historical dynamics of the capitalist world economy ought not to dispense with serious attempts to measure such fundamental Marxian (value-theoretic) ratios as the average rate of profit, the rate of surplus-value, and the organic composition of capital. To be sure, such attempts can never offer much more than rough approximations. Even so, they are vitally important to charting and comprehending essential *trends* in the [capitalist mode of production] – trends that can usefully inform, if only in a very general sense, the political-programmatic perspectives and tasks of Marxist socialists in relation to the broader working-class movement.

Murray Smith's own empirical analysis is original and somewhat controversial. He revives the approach of Shane Mage, whose pioneering empirical work of 1963 on the rate of profit treated the wages of 'socially necessary unproductive labour' (SNUL) as a systemic 'overhead' cost that should not be regarded as a 'non-profit' component of (or absolute 'deduction' from) the surplus-value created by productive labour, but rather as a special form of constant capital. In Smith's view,

> by conceptualising SNUL as a necessary systemic overhead cost, the constant-capital approach emphasises that capital's room for manoeuvre with respect to [persistent problems of valorisation and profitability] is quite limited, giving Marx's proposition that 'the true barrier to capitalist production is capital itself' a somewhat new twist.

And indeed, his analysis of the US capitalist economy (from 1950 to 2013) does reveal a long-term fall in the average rate of profit that is significantly correlated with a secular rise in the organic composition of capital, entirely in accordance with Marx's view. This hugely important result has been replicated by many other Marxist studies in the last 20 years, several of which appear alongside Smith's in *The World in Crisis*, a volume edited by Guglielmo Carchedi and myself. Many are also referenced in my own recent book *The Long Depression*.[1] (It is noteworthy that Smith's initial empirical study of Marx's law of the tendency of the rate of profit to fall, employing data on the postwar Canadian economy, was first published in 1991, with an updated version appearing in 1996. The results of those studies, along with some others, are also to be found in the present volume.)

Theory and evidence should lead to practice – which means *not* 'waiting for Godot'. At the end of the book, Smith refuses to evade the *practical* upshot of his theoretical and empirical investigations:

> The essential programmatic conclusion emerging from Marx's analysis is that capitalism is constitutionally incapable of a 'progressive', 'crisis-free' evolution that would render the socialist project 'unnecessary', and furthermore, that a socialist transformation cannot be brought about through a process of gradual, incremental reform. Capitalism must be destroyed root and branch before there can be any hope of social reconstruction on fundamentally different foundations – and such a reconstruction is vitally necessary to ensuring further human progress.

In this bicentennial year of his birth, I can't help thinking Marx would be pleased. The enemies of his transformative, socialist vision will no doubt be disgruntled.

Michael Roberts
London
January 2018

1 Roberts 2016.

Preface to the Second Edition

This edition of *Invisible Leviathan* appears twenty five years after the publication of the original in 1994. For the most part, the contents of that first edition (including its preface, a major portion of which is reprinted below) have withstood the test of time remarkably well. Several chapters have required little in the way of revision or updating, although they have, I hope, benefitted from my efforts to improve their literary quality. Approximately half the chapters have been supplemented by new theoretical and empirical materials that have significantly strengthened the core arguments of the book. A new chapter on 'Socially Necessary Unproductive Labour, Valorisation and Crisis' has been added, and an old one, the original Chapter 11 on 'Modernity, Postmodernism, and the Law of Value', removed. The original Chapter 8, entitled 'Respecifying Marx's Value Categories: An Empirical Study of the Law of the Falling Rate of Profit', has been replaced by the new Chapter 10, entitled '"Testing Marx" in the Twilight of Capitalism: Marxian Value Categories, National Income Accounts and the Crisis of Valorisation'.

The different subtitles of the two editions speak not only to the revisions that the book has undergone, but also to the very different times in which they were produced. The subtitle of the first edition – 'The Marxist Critique of Market Despotism Beyond Postmodernism' – suggested that the book was both a defence of Marx's critical analysis of capitalism (above all, his theory of labour value) and a rebuke to 'postmodernist' intellectual fashions that were flourishing in the early 1990s, in good part owing to the widespread belief that the demise of Soviet-bloc Stalinism signified the definitive 'death of Marxism'. Replying in 1998 to what still stands as the most substantial commentary on the first edition (a lengthy and ostensibly appreciative article by Noel Castree entitled '*Invisible Leviathan*: Speculations on Marx, Spivak and the Question of Value'), I observed that 'Marx's theory of value provides some important keys to resolving a number of long-standing problems that postmodernist thought has exploited in order to advance a mode of theorizing and a politics that is fundamentally counterposed to Marxian socialism', adding that 'it was for this reason that I (somewhat reluctantly) agreed, at the urging of my publisher, to include a reference to postmodernism in the book's subtitle'.[1]

The subtitle of the first edition may have succeeded in attracting the attention of a small number of left intellectuals interested in furthering the project of

1 Smith 1998; reprinted in Smith 2014, pp. 189, 188.

what Castree called an 'ambivalent modern/postmodern Marxism', but a definite price was also paid for using it. In a generally favourable review, the Marxist economist Alfredo Saad Filho noted quite correctly that 'very little space is given to the Marxist critique of postmodernism, in spite of the title'.[2] My somewhat plaintive response, recorded in my reply to Castree, was to insist that my intention had not been to 'develop a full-blown critique of postmodernism, but to demonstrate the continuing relevance of Marx's critique of capitalism "beyond" the assumptions, preoccupations, and shibboleths of postmodernist thinking', and that an 'extended *explicit* engagement with postmodernist theory was not at all necessary to such an undertaking'.[3]

The extent to which its subtitle might have dampened interest in the first edition of *Invisible Leviathan* is arguable. The timing of its publication was in any case less than auspicious. Interest in Marxism, and in Marx's theory of value (the main subject matter of the book), was at an all-time low. The rapid ascendancy of neoliberal and postmodernist ideas testified that Marxism, if not yet dead, was at the very least in precipitous decline as an intellectual and political force. Early in the 2000s, the book's publisher, the University of Toronto Press, announced that *Invisible Leviathan* was officially 'out of print' – just as the proverbial Zeitgeist was making ready to change course.

The new millennium saw an explosion of 'anti-corporate globalisation' protests as well as massive, worldwide demonstrations against the Bush-Blair drive to war with Iraq. 'Anti-capitalism' was making a comeback as a new generation awakened to the reality that 'the defeat of Communism' and the end of the Cold War, far from conferring a 'peace dividend' of real value upon the popular masses, had actually emboldened the capitalist rulers to aggressively contain the intensifying crisis tendencies of twenty-first-century capitalism at the expense of the poor, the working class and ever-widening segments of the (always ill-defined) 'middle class'. The slogan 'Another World is Possible' came to be embraced by millions of young people repelled by the neoliberal fallacy (first formulated by British Prime Minister Margaret Thatcher) that 'There is No Alternative'.

The Great Recession of 2008–09, the inaugural moment of what Anwar Shaikh has called 'the First Great Depression of the Twenty-First Century', definitively dispelled the long pall cast by the Death of Communism propaganda machine. Marx was back, and Marxist analysis was once again finding an audience. Several portions of *Invisible Leviathan* were resurrected for inclu-

2 Quoted in Smith 2014, p. 202, n. 2.
3 Smith 2014, p. 202, n. 2.

sion in my 2010 book *Global Capitalism in Crisis: Karl Marx and the Decay of the Profit System*, which became the subject of a 2011 review symposium for the online journal *Global Discourse*. In 2012, one of the more directly political arguments of that book was republished under the title 'Vertical' in *Adbusters*, the iconoclastic publication credited with instigating the Occupy movement.

In 2014, my book *Marxist Phoenix: Studies in Historical Materialism and Marxist Socialism* was published as something of a companion volume to *Global Capitalism in Crisis*. In its preface, I described the two works as 'joint sequels' to *Invisible Leviathan*, but I was nevertheless acutely aware that their availability failed to compensate for the latter's out-of-print status. Hence, when Sebastian Budgen encouraged me to submit a publication proposal to the *Historical Materialism* book series for a new edition of *Invisible Leviathan*, I was only too happy to comply – and not least because it afforded the opportunity to attach to the book a more fitting subtitle than the one with which it had been saddled in 1994.

In light of the revisions and additions I decided to make to the book, the criteria for a new subtitle came quickly. First, it needed to eliminate entirely any reference to postmodernism, consistent with my decision to excise the last chapter of the first edition on 'Modernity, Postmodernism, and the Law of Value'.[4] Second, I wanted it to resonate with a major theme of *Marxist Phoenix* as signalled in the latter's introduction:

> … the theoretical interests and preoccupations displayed here are *not* dominated by questions pertaining to how the capitalist state might be incrementally 'democratized,' or how the capitalist economy might be made more 'stable' and its distribution of income more 'just,' or how the phenomena of racial and gender oppression within particular wealthy nations might be mitigated while leaving intact the structures of capitalism, imperialism, and oppression on a world scale. Rather they are shaped by my intention to make the case that a mass socialist workers' movement must be built – and built soon! – to rescue humanity, once and for all, from the perils and increasingly onerous burdens of a rapidly decaying capitalist order.[5]

Finally, the subtitle needed to speak to how the 'invisible leviathan' (that is to say, *the capitalist law of value*, as analysed by Marx) had run its course in pro-

4 This chapter can be accessed at my website: www.murraysmith.org.
5 Smith 2014, p. 9.

moting human development, and how its malignant presence now threatens the survival of its host: human civilisation itself. 'Marx's Law of Value in the Twilight of Capitalism' fit the bill perfectly. Indeed, the preface to the first edition (reprinted below) could easily have been written with this subtitle in mind.

The French Marxist philosopher and sociologist Henri Lefebvre formulated our contemporary conundrum very well as long ago as the 1960s:

> ... there is acute conflict today between the quantitative (growth) and the qualitative (development). It is accompanied by mounting complexity in social relations, which is masked and counteracted by opposed elements. Control over external nature is increasing, while man's appropriation of his own nature is stagnating or regressing. The former falls primarily under the head of growth, the latter of development.[6]

Real human development requires a *qualitative leap* beyond capitalism, beyond a system dominated by the imperative of mindless *quantitative growth* – of markets, profits, capital, and GDP, and increasingly of debt, weaponry, waste and destitution. It requires a leap into *socialism*, a global civilisation in which 'the condition for the free development of each is the free development of all',[7] and upon which a rational and sustainable relationship between humanity and the natural world can be founded.

Marx's theory of value provides us with the indispensable intellectual tools needed to expose the madness of the prevailing capitalist 'world disorder', to demonstrate that this sorry state of affairs is by no means 'inevitable', and to inspire a vision of a new and far superior civilisation that is within our grasp if we can only muster the intelligence and the will to fight for it. The stakes surrounding the 'value controversy' could not be higher. And that is why this book has been republished at a time when the potential audience for it should, at long last, be burgeoning.

In addition to those mentioned in the preface to the first edition, I wish to thank the following individuals for the support and advice they have given me in the writing and production of this new edition: Sebastian Budgen, Adam Hanieh, Danny Hayward, and Simon Mussell (all four associated with *Histor-*

6 Lefebvre 1969, p. 197.
7 Marx and Engels 1998 [1948], p. 41.

ical Materialism); the two anonymous peer reviewers enlisted by the editors of the *Historical Materialism* book series; the production team at Brill; Michael Roberts for contributing a foreword to the volume; Josh Dumont and Takuya Sato for their commentary on various parts of the manuscript as it progressed; and Jonah Butovsky for his contributions to Chapter 10, a good portion of which is based on work I co-authored with him. All remaining errors and shortcomings are, of course, my responsibility alone.

Niagara Falls, Ontario
April 2018

Preface to the First (1994) Edition (Excerpts)

This book is unified by a concern to reassert the pivotal importance of Marx's theory of labour value – 'the labour theory of value' as it is more commonly known – to an understanding of our social world and its historical development. The broad picture that I draw challenges the idea, more hegemonic in the early 1990s than at any time since the First World War, that 'free-market economics' (a euphemism for the set of socio-economic relations that form the basis of capitalism) are better suited to meeting human needs than any conceivable alternative. It does this by building a case for the proposition that the capitalist market economy has substantially exhausted its potential to further human progress, notwithstanding the collapse of 'socialism' in the former Soviet bloc and in spite of the triumphalist declarations of Francis Fukuyama and his ilk that liberal-democratic capitalism now stands at the 'end of history'.

In brief, the principal thesis proposed here is that, while 'value relations' have played a role of paramount importance in the development of human society, the point has been reached where these relations need to be superseded by a new set of social arrangements that must, at a minimum, provide for a qualitative increase in the degree to which human social and economic affairs are governed by *conscious* decision-making at the level of the human collectivity as a whole. The individualistic rationality of Adam Smith's fabled 'invisible hand', linked to the idea that the clash of economic interests individually pursued will produce the greatest amount of wealth and well-being for the largest number of people, must be definitively supplanted by a form of rationality that takes the social whole as its starting point and the 'all-round development' of each and every human being as its goal.

A secondary theme of the book, intimately linked with the latter point, is the book's defence of Marx's *dialectical reason* against both the 'subjective reason' invoked by the currently fashionable school of so-called Analytical Marxism and the 'cynical reason' promoted by poststructuralism and conservative postmodernism. Today, more than ever, a reassertion of the claims of Marx's dialectical reason is indispensable to sustaining belief in humanity's continuing potential for social progress and therefore to a worldview informed by 'historical optimism', an outlook that has been in rather pronounced decline in recent years.

In making these arguments I realise that I am swimming against some very powerful currents. The recent dismantling of the Stalinist administrative-command systems in Eastern Europe has strengthened the claims of neoliberals and neoconservatives that 'planned economies' are neither workable nor desirable. Yet the case against planned economies – while ideologically vital to legitimating policies that give freer reign to capital and that erode social gains previously won by working people in the West (in the 'shadow' of 'actually existing socialism') – is insubstantial and based to a considerable extent on impressionistic analysis, myopic ideology, and selective memory-loss. Impressionistic analysis because it attributes the failure of the administrative-command system to the 'planning principle' rather than to the real and intensifying contradictions of an order that was constitutively incapable of stimulating and harnessing the consciousness, creativity and intersubjectivity necessary for a *rationally planned* economy. Myopic ideology because it assumes that the 'free-market economies' of the West are not themselves characterised by significant elements of economic planning: for example, the 'military Keynesianism' of the Reagan White House and the large-scale planning of those few hundred corporate giants that accounted recently for some 70 percent of the industrial output of the global capitalist economy. And selective memory-loss because it 'forgets' that Soviet planning, for all its contradictions and irrationalities, permitted a rate of economic growth over a period of several decades that was well above that of the capitalist West.

The debate between proponents of socialist planning and corporate capitalism (tendentiously peddled as 'free-market economics') is far from over, despite the defeat that has been inflicted on a decrepit travesty of socialism beaten black and blue by a world capitalist order commanding many times its resources. Indeed, the endemic inability of world capitalism to satisfy even the basic needs of the great majority of the world's population ensures that this debate will not only be re-engaged in scholarly discourse but will eventually be joined to a struggle of living social forces on a scale never before seen.

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The greater part of this book represents a substantially revised version of certain sections of my doctoral dissertation 'The Value Controversy and Social Theory: An Inquiry into Marx's Labour Theory of Value' (Department of Anthropology and Sociology, University of British Columbia, 1989). The dissertation was written under the guidance of an advisory committee composed of David Schweitzer (supervisor), Bob Ratner, and Blanca Muratorio, all of whose criticism, good counsel, and insistence upon clarity helped me to hone arguments on a theoretical terrain somewhat remote from their own areas of specialisation. I can only now fully appreciate how rare a privilege it was to have been allowed the intellectual latitude and freedom afforded to me by this committee. They, and I, had the good fortune to rely on the specialised knowledge

of Bob Chernomas of the Department of Economics at the University of Manitoba. Professor Chernomas's conscientious critical review of several chapters pertaining to value theory, capitalist crisis, and the history of political economy – performed, it should be said, on an entirely unofficial and voluntary basis – contributed greatly both to a theoretical strengthening of the dissertation and to the peace of mind of the members of my advisory committee. I thank all four of these colleagues for their advice and friendship. Thanks are also due to Graham Johnson and Derek Sayer for their roles in the final examination of the dissertation. Professor Sayer, in particular, made several valuable suggestions that have been duly incorporated into the present work.

My dissertation and this work grew out of an intensive study of Marx's critique of political economy that began in 1980. Since then I have been fortunate to receive fellowship support from the University of Manitoba, the University of British Columbia, and the Social Sciences and Humanities Research Council of Canada; to each I express my gratitude. I owe my thanks as well to the many teachers, colleagues, and friends who have assisted me in my research, influenced my thinking, and critically reviewed my literary production since 1980. In addition to those already cited, I would like to mention Wayne Taylor, Mikhail Vitkin, Ken Campbell, John McAmmond, Ken Waldhauser, Don Forgay, Roy Turner, David Mole, Michael Lebowtiz, David Laibman, Grant Amyot, Gregory Albo, Leo Panitch, and two anonymous readers of the manuscript originally submitted to the University of Toronto Press. While few of the above are likely to be fully comfortable with all of the arguments developed in this book, I gratefully acknowledge that each has contributed something of importance to its general lineaments. I should also like to extend special thanks to Virgil Duff, the executive editor of the University of Toronto Press, for his advice and encouragement over the past two years; and to my family, for suffering with good humour the frequent petulance of a distracted academic author who has been juggling too many workloads for rather too long a time.

St. Catharines, Ontario
January 1994

Acknowledgements

Chapter 2 is based, with only minor changes and additions, on my article of the same title that appeared in *Science & Society*, 56, no. 3 (1992).

Chapters 4, 5 and 6 contain several passages from my article 'Understanding Marx's Theory of Value: An Assessment of a Controversy', which appeared in the *Canadian Review of Sociology and Anthropology*, 28, no. 3 (1991).

Chapter 6 contains several passages from two articles: 'Alienation, Exploitation and Abstract Labor: A Humanist Defense of Marx's Theory of Value', which appeared in the *Review of Radical Political Economics*, 26, no. 1 (1994), and 'Against Dualism: Marxism and the Necessity of Dialectical Monism', which appeared in *Science & Society*, 79, no. 3 (2009).

Chapter 8 is substantially based on my article 'Productivity, Valorization and Crisis: Socially Necessary Unproductive Labor in Contemporary Capitalism', which appeared in *Science & Society*, 57, no. 3 (1993). Passages from it are also included in Chapter 10.

Chapter 10 incorporates parts of my article 'Respecifying Marx's Value Categories: A Theoretical and Empirical Reconsideration of the Law of the Falling Rate of Profit', which appeared in *Studies in Political Economy: A Socialist Review*, 35 (1991); my article (co-authored by K.W. Taylor) entitled 'Profitability Crisis and the Erosion of Popular Prosperity: The Canadian Economy, 1947–1991', which appeared in *Studies in Political Economy*, 49 (1996); and my chapter (co-authored by Jonah Butovsky) entitled 'Roots of the Global Crisis: Marx's Law of Falling Profitability and the US Economy, 1950–2013', which appeared in G. Carchedi and M. Roberts (eds), *The World in Crisis* (Haymarket, 2018). An earlier version of the latter piece ('Profitability and the Roots of the Global Crisis: Marx's "Law of the Tendency of the Rate of Profit to Fall" and the US Economy, 1950–2007') appeared in *Historical Materialism*, 20, no. 4 (2012).

Chapter 11 incorporates passages from my books *Global Capitalism in Crisis: Karl Marx and the Decay of the Profit System* (Fernwood, 2010) and *Marxist Phoenix: Studies in Historical Materialism and Marxist Socialism* (Canadian Scholars Press, 2014).

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Figures, Charts and Tables

Figures

Charts

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CHAPTER 1

Invisible Leviathan: Marx's Law of Value in the Twilight of Capitalism

> I authorise and give up my right of governing myself, to this man, or to this assembly of men, on this condition, that thou give up thy right to him, and authorise all his actions in like manner. This done, the multitude so united in one person is called a COMMONWEALTH, in Latin CIVITAS. This is the generation of that great LEVIATHAN, or rather, to speak more reverently, of that mortal god, to which we owe under the immortal God, our peace and defense.
>
> – THOMAS HOBBES, *Leviathan* (1651)

•••

> [Every individual generally] neither intends to promote the public interest, nor knows how much he is promoting it … [H]e is in this case, as in many cases, led by an invisible hand to promote an end which was no part of his intention.
>
> – ADAM SMITH, *The Wealth of Nations* (1776)

•••

> 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 … [A] socialist programme cannot allow such bourgeois phrases to pass over in silence the conditions that alone give them meaning.
>
> – KARL MARX, *Critique of the Gotha Programme* (1875)

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1 Reflections on Wealth, Human Development and the 'Triumph' of Capitalism

Shortly before the dissolution of the Soviet Union and the consolidation of Boris Yeltsin's capitalist-restorationist regime in Russia in late 1991, the Italian political economist and sociologist Giovanni Arrighi published an article in *New Left Review* entitled 'World Income Inequalities and the Future of Socialism'. Marshalling empirical evidence for a 'world-system' twist on the theme that the rich get richer and the poor get poorer, it argued that the global spread of 'free market' economic forms in the twentieth century had produced a dramatically widening gap in average living standards (as measured by Gross National Product per capita) between the rich and the poor countries of the capitalist world economy. In this connection, Arrighi declared:

> The wealth of the West cannot be generalised because it is based on relational processes of exploitation and relational processes of exclusion that presuppose the continually reproduced relative deprivation of the majority of the world population … Processes of exploitation provide wealthy states and their agents with the means to initiate and sustain processes of exclusion. And processes of exclusion generate the poverty necessary to induce the rulers and subjects of comparatively poor states to continually seek re-entry into the world division of labour on conditions favourable to wealthy states.[1]

Despite this historical verdict, the post-Communist states of the former Soviet bloc, with widespread though hardly unanimous support from their populations, had just opted for the most massive and abrupt 're-entries' in history – their new rulers promising democracy and eventual prosperity through a difficult yet purportedly 'necessary' transition to a capitalist economy.

Far from welcoming these moves with a new 'Marshall Plan' of significant aid to these converts to free market economics, the major capitalist powers adopted a posture of benign neglect, as if to confirm that the original Marshall Plan, following World War II, had been motivated pre-eminently by Washington's geo-political determination to 'save' Western Europe from the possibility of continental socialist revolution. No doubt, by the early 1990s, Washington, and the capitalist West in general, considered such a massive economic assistance package as not only well beyond their fiscal means but also quite unnecessary

1 Arrighi 1991, pp. 58–9.

to prevent a sharp left-turn and socialist outcome to the fluid and still-volatile events that were unfolding in the post-Communist countries.

Complementing all this nicely was an article by Canadian sociologist Francois Moreau for the inaugural issue of *Socialist Alternatives* in the fall of 1991. Reprising some of Arrighi's themes as well as Immanuel Wallerstein's argument that the process of 'absolute immiseration of the working class' was operating on a world scale, if not in the advanced capitalist societies,[2] Moreau analysed the Human Development Index (HDI) data of the United Nations Development Programme and showed that the claims then being made for capitalism's unique capacity to generate human well-being and 'development' were altogether vacuous.[3] While core capitalist countries like the US, the UK, and Canada ranked high on the HDI, peripheral capitalist countries like India, Nigeria, and Bangladesh ranked very low. Somewhat more surprisingly perhaps, the 'transitional' (Communist-ruled) countries – as of 1987, when they were still nominally socialist – ranked *well above* the average HDI for the rest of the world.[4] The capitalist world's average HDI (inclusive of both its core and periphery) was just 629, while the average HDI for Eastern European and third-world transitional societies (the 'Communist world' as a whole) stood at 764. What's more, the Eastern-European transitional countries on their own averaged an HDI score of 916, not far below the 970 boasted by the advanced capitalist core. Summing up, Moreau commented:

> What the UNDP analysis shows, no doubt without consciously intending to do so, is that transitional societies have actually achieved a higher level of 'human development' for a given level of economic development than capitalist countries ... [M]uch of the third world could indeed achieve a significantly higher level of 'human development' with a different socio-economic system.[5]

In light of these findings, it was to be expected that the return of the Eastern European countries to the capitalist fold would produce results precisely

2 Wallerstein 1983.

3 The United Nations Human Development Index takes into consideration three indicators of development in computing a country's comprehensive index: per capita national income, average life expectancy, and the literacy rate.

4 Moreau acknowledged that in using this terminology he was following Trotsky's (1936) characterisation of the USSR as a 'transitional society' somewhere between capitalism and socialism, and capable of moving in either direction.

5 Moreau 1991, pp. 141–2. Li 2013 expands upon and updates this thesis very usefully.

opposite to those anticipated by the 'free market' fideists. Capitalist restoration, Moreau predicted, would result in *falling* HDIS – an outcome anticipated by Arrighi's thesis concerning the oligarchic and concentrated character of 'wealth' in the capitalist world system. 'To see what the condition of the working class is like under capitalism, and what awaits Eastern European countries if they turn capitalist', averred Moreau, 'one should indeed turn, not to Sweden or Austria, but rather to "newly industrialised" countries such as Mexico. With an estimated GDP per capita of 4,624$, adjusted for purchasing power, this country actually stands very close to the world average for capitalism as a whole, as computed by the UNDP'.[6] This 'average' capitalist country, then in the vanguard of third-world trends toward trade liberalisation and privatisation, had experienced a cumulative decline in real wages of about 60 percent between 1976 and the early 1990s, considerably worse than the 10 to 15 percent loss suffered by US and Canadian wage earners over the same period.

Moreau's dire prediction for the former Soviet-bloc countries soon proved accurate, and particularly so for the former republics of the Soviet Union, where severe economic contractions and dismantled social infrastructures resulted in skyrocketing mortality rates and 'excess deaths' numbering over ten million between 1991 and 1997. As a layer of new capitalist 'kleptocrats' emerged and amassed huge fortunes in such newly independent countries as Russia, Ukraine, Uzbekistan and Kazakhstan, living standards for the great mass of their populations fell drastically – and they have remained substantially below their Soviet-era levels well into the new millennium.

Fast-forward a quarter of a century. In 2014, the present author observed:

> By almost any measure, the record of world capitalism in the post-Soviet era has been an abysmal one. It is a record of burgeoning economic inequality and social malaise, an alarming resurgence of neo-colonialist adventurism and militarism, the productive torpor and escalating hubris of the sole remaining 'superpower', and the steady erosion of average living standards and democratic rights in many of the richest capitalist countries.

Pointing to a 'disturbing paradox' in the way that many intelligent, purportedly well-educated people living in the 'developed world' were thinking about the state of humanity, I wrote:

6 Moreau 1991, p. 142.

> On the one hand, there is a strong and quite realistic sense that we are sliding into a global era of ever-worsening social, economic and environmental conditions – an era that could end with the extinction of our species either through high-tech wars or an accumulation of ecological catastrophes. On the other hand, there remains a persistent and remarkably pervasive unwillingness to assign the blame for this perilous situation to the operations of capitalism, the globally dominant socio-economic system, and a still greater unwillingness to seek a solution to it through fundamental systemic change.[7]

Despite a notable upsurge in vaguely 'anti-capitalist' and 'pro-socialist' popular sentiment in the new millennium, contemporary political discourse remains safely within the confines of respectful acquiescence to the twin institutional pillars of capitalist society: private property in the means of production and the allocation of the lion's share of economic resources via market mechanisms. The spectre of communism that Marx and Engels evoked in their *Communist Manifesto* of 1848 and that haunted capitalism throughout most of the twentieth century seems to have been all but exorcised from our world. And yet the contradictions and crisis tendencies endemic to capitalism, analysed so well by the founders of Marxist socialism, remain very much with us. Indeed, they have intensified considerably over the past 25 years.

By early 2016, Oxfam International was reporting that global inequality had risen to the point that the 62 richest individuals in the world commanded as much wealth as the poorest half of humanity, whose share of global wealth had fallen by 38 percent – about one trillion dollars – since 2010.[8] Meanwhile, global economic growth remained slow in the aftermath of the most severe crisis since the Great Depression of the 1930s – and the possibility of a new, more devastating financial crisis was looming large in an increasingly debt-burdened and 'financialised' world economy. The 'death of communism' and the 'triumph of capitalism' – long trumpeted by the capitalists and their well-paid retinue of politicians, ideologues, and publicists – had created a world careening toward a succession of mutually reinforcing catastrophes: globalised economic slump, rapid climate change, growing tensions between the US superpower and its 'great power' rivals (China and Russia) – tensions threatening to explode into direct military conflicts, and a rising tide of right-wing populism and ultranationalism in response to the biggest refugee crisis since World War II. Here was the fruit of world capitalism's 'victory over Communism' – a world in which

7 Smith 2014, p. 1, p. 13.
8 https://www.oxfam.org/en/research/economy-1.

youth unemployment was reaching record levels; in which imperialist hubris and militarism were instigating small wars and threatening larger ones, stoking communalist and nationalist violence from Libya and Syria to Nigeria and Ukraine; in which irrationalist and paranoid moods were casting a pall over rich and poor countries alike; in which would-be 'progressives', preoccupied with marginal issues, averted their gaze from world-shattering crises unfolding in plain view – a world in which few, it seemed, held out much hope for the future.

Remote from any serious programme of fundamental social transformation to meet the manifold threats to humanity's survival, the official workers movement and 'the left' – including elements of the nominally communist or revolutionary socialist left – have been engaged (ostensibly at least) in a fight to curb the worst 'excesses of neoliberalism', while pursuing the dream of a more equitable capitalist economy, a more perfect liberal democracy … and, of course, more places for themselves in administering the capitalist state. The experience of Greece during 2015–16 illustrates this perfectly. Having won election on an anti-neoliberal, anti-austerity platform, in the midst of an unfolding social and economic catastrophe, Syriza – Greece's 'Coalition of the Radical Left' – immediately entered into an alliance with a small right-wing party to secure a majority in parliament and capture the reins of government. The 'neoliberal excesses' of the previous New Democracy (conservative) administration were soon to be surpassed by this 'broad-left' government. After organising and winning a referendum to obtain a popular mandate to reject a draconian ultimatum from the International Monetary Fund, the European Central Bank, and the European Commission (the 'Troika'), the Syriza-led government moved swiftly to impose still greater austerity on the beleaguered Greek population – a new and harsher set of Troika conditions to secure yet another phony 'bailout'. In doing this, Prime Minister Alexis Tsipras signalled not only his surrender to the demands of international finance capital, but more fundamentally his allegiance to an irrational and morally depraved economic order that was openly admitting it had nothing to offer Greek working people but a menu of despair.

Not a few commentators have suggested that what Greece is today, the rest will be tomorrow.

2 The Triple Crisis of the Twenty-First Century

Global capitalism, with humanity in tow, is now facing a triple crisis: 1) a deepening structural contradiction of the capitalist mode of production, one manifested as a multi-dimensional crisis of 'valorisation' – that is to say, a crisis in the production of 'surplus-value', the very lifeblood of the profit system; 2) an acute crisis in international relations stemming from the fact that the global productive forces are bursting the confines of the nation-state system, whose individual units continue to address their gravest problems in primarily 'national' ways; and 3) a growing 'metabolic rift' between human civilisation and what Marx called the 'natural conditions of production' – the ecological foundations of human sustainability. Together, these interrelated crises suggest that we have now entered a 'twilight era' of capitalism – one in which humanity will either find the means to create a higher and more rational order of social and economic organisation, or in which decaying capitalism will bring about the destruction of human civilisation.

Very few on what passes for 'the left' wish to consider, much less accept, this assessment. To the contrary, most would-be progressives cling desperately to the notion that 'neoliberal capitalism' is but the ugly mutation of a set of short-sighted policies that the capitalist ruling class may prefer but might also be pressured to abandon in favour of a more humane, just, and equitable species of capitalism. For this reason, the established, 'reform'-oriented left is loath to characterise neoliberalism for what it is: *a predictable and inevitable strategic response* on the part of capital and the state to a deepening crisis of the capitalist profit system – *a crisis that has been unfolding now for several decades*. Even many who describe themselves as Marxist socialists often deny – or at least downplay – the extent to which economic trends have served to confirm Marx's major predictions regarding capital's 'laws of motion', above all 'the law of the falling rate of profit', and his related observation that 'the real barrier to capital is capital itself'.[9]

In the last analysis, such attitudes reflect the still hegemonic view that capitalism is – or can be made to be – a 'rational' system. To be sure, given the power of the capitalist class to shape the dominant ideology of capitalist society, this view has always been difficult to combat, despite the growing weight of evidence against it. All the same, it has only gathered renewed strength with the disappearance of Soviet-style 'actually existing socialism', as well as the turn toward a 'socialist market economy' (with pronounced 'capitalist characteristics') in China.[10] Rational or not, most have concluded, capitalism is here to stay, and escaping from it simply impossible.

9 Marx 1981b, p. 358.

10 The Chinese Communist leadership's own official designation for the economic model originally launched by Deng Xiaoping in the 1980s is of course 'socialism with Chinese characteristics'.

This fatalistic outlook has a clear elective affinity with the fading hope that capitalism might still be reformed in progressive ways – and that it may not be as irredeemably irrational as Marx thought. For the more complacent segments of the left intelligentsia, Marx's analysis of capitalism's 'economic law of motion' strikes an inconvenient blow to that hope, and is, in any case, too uncompromisingly radical in what it calls for by way of remedial action. On those grounds alone, according to the reformist argument, it must be dismissed! Not exactly a scientific attitude, to be sure, but one that is plainly comforting to many would-be progressives, especially if reassurances are forthcoming from a host of left intellectuals that the status of Marx's own 'science' is suspect.

All the same, more than blind faith in capitalist rationality has been involved in deterring interest in Marx's scientific critique of capitalism and its relevance to explaining our contemporary troubles. Undoubtedly, some specific features of the financial crisis that erupted in 2007–08 have encouraged a revival of interest in non-Marxist (and certain 'neo-Marxist') theories that emphasise the long-term impact of growing inequality, stagnant or declining real wages, and consumer indebtedness as the 'fundamental cause' of capitalist crisis. Many avowed liberals and non-socialist 'progressives' have called for a return to classical Keynesian policy nostrums to stimulate aggregate demand, along with measures to rein in financial capital. High-profile academics and journalists like Paul Krugman, Thomas Piketty, Robert Reich, Joseph Stiglitz, and Martin Wolf have been especially prominent in this chorus.[11]

In my book *Marxist Phoenix* (2014), I commented on this development as follows:

> Virtually all such commentators agreed that the cause of the 'Great Recession' of 2007–09 was to be found in the excessive greed of corporate and financial elites. For a generation or more, they argued, capital had succeeded in claiming ever-larger shares of national income at the expense of labour. Concurrently, the deregulation of financial institutions and markets had freed up the big banks to engage in ever-riskier practices that had allowed the rate of profit in the financial sector to soar to unprecedented heights. In view of these undeniable trends, it was by no means obvious that Marx's 'law of the tendency of the rate of profit to fall' had very much relevance. In contrast, Keynes, with his theory of 'deficient effect-

11 See for example Krugman 2012, Piketty 2014, Reich 2011, Stiglitz 2012, and Wolf 2014.

> ive demand', and Minsky, with his notions of financial fragility, surprise events, and debt deflation, seemed to have anticipated the principal contours of the first great recession of the twenty-first century. What's more, Keynes and Minsky had offered seemingly 'practical' solutions to the crisis – a redistribution of national income in favour of labour, increased taxation on the rich, stimulation of aggregate demand through increased government spending, and more stringent regulation of banks and financial markets – solutions that were aimed at stabilising and 'saving the economy' (read, *the capitalist system itself*) from the avarice and irresponsibility of the rich. Even many ostensible Marxists joined the bandwagon, petitioning the U.S. Congress to adopt a left-Keynesian economic policy and 're-regulate' the banks.[12]

It is worth noting here, in anticipation of arguments developed later in this book, that among the ostensible Marxists or 'neo-Marxists' avidly supporting a turn by the US federal government toward such policies are many proponents of the notion that capitalist crises stem from 'underconsumption' or 'problems in realising surplus-value' – and not, as Marx insisted, from *inadequate production of surplus-value* (the 'problems of valorisation' to which I alluded earlier). It should also be noted that such policies have found scant support in ruling-class circles and political elites; their main function being, it seems, to keep alive the hope that 'capitalism with a human face' is at least a *theoretical* possibility, the better to discourage interest in socialism as an alternative amongst workers, youth, and left-leaning intellectuals.

3 The Necessity of Marx's Value Theory in the Twilight of Capitalism

Against the current of all such ostensibly 'progressive' thought, the purpose of this book is to uphold Marx's original analysis of capitalism, not only as the most fruitfully scientific framework for understanding contemporary economic problems and trends, but also as the indispensable basis for sustaining a revolutionary socialist political project in our time. It does so by examining the crisis-inducing dynamics and deepening irrationality of the capitalist system through the lens of Marx's 'value theory' – which, despite the unfounded claims of its detractors, has never been effectively 'refuted' and which

12 Smith 2014, pp. 35–6. See also the excellent, detailed critiques of various Keynesian and post-Keynesian accounts of capitalist economic crises in Carchedi 2011 and Roberts 2016.

continues to generate insights into the pathologies of capitalism unmatched by any other critical theory.

Capitalism, Marx insisted, is above all a *class-antagonistic mode of production* with several characteristics that are peculiar to it. But as with all previous modes of production founded on class exploitation, it faces definite *historical limits* rooted in a conflict of material interests between its major social classes: the wage-earning working class and the capitalist class. 'At a certain stage of development', Marx wrote, '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 which they have operated hitherto. From forms of development of the productive forces these relations turn into their fetters. Then begins an era of social revolution'.[13]

To assert that capitalism has reached its twilight phase is to say that it has *long since* reached a stage where the conflict between its forces and its relations of production has become acute. The relations of production are constraining the development of the creative and productive capacities of humankind in crisis-inducing ways, and those already well-developed capacities are in turn disrupting the social imperatives and 'logic' of a society that remains divided into antagonistic classes.[14] The result is *a historical-structural crisis* that only Marxism can illuminate: for only Marxism offers the necessary theoretical framework for grasping the contradictory, irrational, and increasingly dangerous trajectory of the capitalist mode of production – an ensemble of social relations and human capacities, of technology and societal organisation that, more than ever, demands to be understood in a global context and that, no less than in the past, remains in the grip of a law that its own property relations and institutional forms imperiously necessitate: *the capitalist law of labour value*.

The terms of our discussion to this point – development, growth, capital, labour, wages, value, wealth, profitability, wealth concentration, inequality, exploitation, competition – are all part of the vocabulary of Marxian 'value-

13 Marx 1970a [1859], p. 21.

14 The specific ways in which the forces of production are being constrained include the massive growth of 'relative surplus population' on a global scale; the highly uneven diffusion of productive technology within the global division of labour; and the allocation of greater and greater material resources to activities that help to sustain the social relations and institutional structures of capitalism without a corresponding deployment of resources for the satisfaction of pressing social needs or the resolution of the manifold threats to ecological sustainability and peaceful relations between nations. I am obviously not making the claim that capitalism is no longer capable of generating rapid and significant technical innovation or improvements in the productivity of labour at the level of individual business enterprises.

theoretic' analysis: they are the concepts that capture both the objective presuppositions of the capitalist law of value and its real effects. Most of them play some role in non-Marxian accounts of capitalist economy as well, although 'inequality' and 'exploitation' are infrequent players in the discourse of neoclassical economic theory and its progeny. To be sure, the theoretical weight given to these latter concepts depends entirely on the weight one attributes to them as elements of objective social reality. Apologists for capitalism typically view them as aberrations from some ideal capitalist 'norm'. Yet this imagined 'capitalist norm' – first formulated by Adam Smith in the mid-eighteenth century, and entertained by the true believers in liberal democracy and 'free enterprise' ever since – has now had over two centuries to materialise.[15] Despite its undoubted contributions to promoting human productive capacities, however, 'actually existing capitalism' has revealed itself, in the fullness of time, to be constitutively inimical to the general well being of humanity and conducive only to rising levels of exploitation and oppression, monstrous disparities of wealth, and a truly maniacal subordination of the requirements of ecological sustainability to the profit motive.

Ardent believers in capitalist 'free market economics' have long contended that, in principle, the crisis tendencies bred by capitalism can be significantly mitigated and eventually fully contained, once the right 'mix' of state economic policies is formulated. But again, the history of 'actually existing capitalism' suggests otherwise. Despite the confidence expressed by mainstream economists during the 1950s and 1960s that world capitalism would never again experience a severe depression, the period from 1974 to 2009 saw four of the most severe global recessions/depressions of the past century, and the world economy remains today in the grip of a malaise that shows little sign of lifting. To reiterate, Marx's theory of labour value remains the *indispensable* foundation for explaining economic phenomena that non-Marxist economic thought (whether in its classical, neoclassical, Keynesian, post-Keynesian, monetarist/ neoliberal or institutionalist variants) has manifestly failed to explain or even to anticipate. Why has capitalism been unable to 'outgrow' its tendencies toward severe economic crisis? Why is capitalism so capable on the one hand of stimulating progress in science, technology, and labour productivity and so incapable on the other of translating this progress into enduring gains in living

15 In *The Theory of Moral Sentiments*, Smith wrote: '[The rich] are led by an invisible hand to make nearly the same distribution of the necessities of life, which would have been made, had the earth been divided into equal portions among all its inhabitants, and thus without knowing it, without intending it, advance the interest of the society, and afford means to the multiplication of the species' (1986 [1759], pp. 184–5).

standards for the great majority of the working population? Why are positive rates of growth in productivity on a world scale accompanied by declining average rates of profit for productive capital? And why has capitalism, as a world system, ceased to contribute to the progressive development of the 'productive forces' of humankind – most obviously by chronically underutilising the talents and energies of billions of people around the world now relegated to the status of 'precariat' or, more accurately, 'surplus population'?[16]

For those who grasp the essential theses of Marx's theory of value, surplus-value and capital, the answers to these questions are in clear focus. The anomalies and the irrationalities of capitalist reality are to be explained fundamentally by the fact that this reality encompasses four tendentially contradictory principles of social organisation, four interpenetrated yet distinguishable 'relations of production and reproduction': the relation of *formal equality* existing between economic actors and the products of labour within capitalist markets; the *exploitative* relation existing between those who monopolise the ownership of the means of production and those who must sell their labour power for wages or salaries in order to secure a livelihood; the *competitive* relation existing between all economic actors in markets but above all between the owners of capital; and the *co-operative* (objectively socialised) relation existing between producers in a global division of labour that has become ever-more detailed, elaborate and interdependent. While the co-existence and interpenetration of these social relations would seem to be quite problematic, historically their interaction within the totality that is the capitalist socio-economic system has been a source of great dynamism in extending human productive capacities. All the same, Marx insisted that this dynamism was destined to become ever more one-sided and that, in due course, capitalism would substantially exhaust its (always contradictory) role in promoting human progress and development. Accordingly, Marx rested his indictment against capitalism not simply on the claim that the system was 'unjust', but centrally on its growing tendency to generate waste, to block the development of human capacities, and to divert human energies (both physical and mental) into non-productive and increasingly destructive pursuits.

16 Guy Standing's (2011) fashionable thesis of the emergence of 'the precariat' as a 'new dangerous class', somehow unanticipated by and damaging to Marxist class theory and politics, has been critiqued effectively by Bryan Palmer: 'The suggestion that class, its composition and strategic importance, has somehow changed in the recent past, because work is no longer secure, represents a retreat into fragmentation, rather than a creative response to it. It is also a fundamentally ahistorical argument, for work has never been anything but a precarious foundation of life lived on the razor's edge of dispossession' (2013, p. 44).

Marx's theory of labour value is at the very core of this indictment against capitalism. At bottom it is an account of what might be described (with apologies to neither Thomas Hobbes nor Adam Smith) as an *Invisible Leviathan* – a structure of socio-economic relations that has usurped from conscious humanity effective control over the socio-economic life process and imposed a set of socially grounded laws that are both very powerful and deeply hidden from view. Its crowning law, the capitalist law of value, compels humanity perforce to apply a single yardstick in the measurement of 'wealth': the yardstick of 'value', of *abstract socially necessary labour time*.

Within a society founded upon capitalist social relations of production and reproduction, the measurement of social wealth in these terms is 'unconscious', in that it is effected through impersonal market mechanisms, and yet decisive to the developmental trajectory of the economy and the division of labour as a whole. Accordingly, certain forms of activity will be recognised as 'wealth-generating' (regardless of how socially destructive they may be – for instance, the production of armaments or supermarket tabloids), while other forms will not enter the economic calculus at all, despite their socially valuable character (for example, voluntary care-giving of children and the elderly). As capitalist production as a whole meets the demand generated by aggregate 'purchasing power' with a range of goods requiring less and less labour input, the material wealth of society in physical terms may expand even as its measurement in terms of labour-time suggests, rather perversely, that society is becoming 'poorer'. This is because the measurement of material wealth in terms of social labour-time (whose phenomenal economic expression is *money*) means that, under conditions of labour-saving and labour-displacing technical innovation, capitalist society tends toward a zero-sum situation in which any gains in income or real wealth must come at the expense of other economic agents, and in which it is quite possible for aggregate purchasing power to decline (as it does under conditions of economic contraction). In other words, social 'wealth' is measured by criteria informed by the *socially antagonistic* (exploitative and competitive) character of capitalist production and exchange.

At bottom, Marx's theory of labour value states that the sole source of 'value' within a capitalist society is living human labour and that the sole source of 'surplus-value' (the social substance of profit) is the surplus labour performed by workers in excess of the necessary labour required to produce the value represented by their wages. To the great majority of the population who rely for their livelihood on the sale of their labour power (whether for a wage or a salary) these propositions should require little proof, a point that I have underscored elsewhere:

> In a capitalist society, the material output of the economy-wide division of labour is distributed and consumed in accordance with people's ability to purchase it with money – which serves not only as a means of exchange but, above all, as a claim on abstract social labour. Marx's proposition that money is the necessary 'form of appearance' of abstract social labour may not seem immediately obvious. But consider this: apart from those who subsist on state-funded social assistance or private charity, people possess money for two basic reasons – they either earn it through the performance of labour or they obtain it by virtue of their ownership of property. The vast majority of the population immediately sees the connection between their labour and the value represented by the money in their possession. At the same time, however, the origin of the money income of those who do not labour and have never laboured for a living seems more obscure. Even so, it's not difficult to understand that those few who hold significant property assets 'earn' their money primarily by getting others to perform labour on their behalf. There can be no money profit, money rents, money dividends or any other form of money income for those who own factories, mines, land, apartment blocks, retail stores or banks unless there are people labouring to create the value that finds expression in corporate profits, ground rent, interest and wages. To put the matter starkly, the class of big capitalist property owners can earn income only by exploiting those who labour for a living – that is to say, by paying workers far less than the total 'new value' created through the performance of their labour and by appropriating the difference as 'surplus-value'.[17]

The fact that, in the face of these rather obvious realities, 'proof' for the labour theory of value can still be demanded by the capitalists and their ideological apologists attests to the remarkable ability of capital to represent itself as an 'independent' source of 'value' and to confuse the categories of value, money, and wealth. The point of Marx's theory is precisely to establish that the economic category of 'value' – together with those of wages, profit, interest, and so on – is bound up with the existence of the social relations of production/reproduction characteristic of a 'commodity economy', that of capitalism. *Value and wealth are therefore by no means synonymous*. Indeed, implicit in Marx's theory is the notion that the measurement of wealth in terms of

17 Smith 2010, p. 5. Of course, this argument abstracts from the issue of 'credit money', an issue explored later in Chapter 10 in connection with the 'temporal modes' of value.

'value' (abstract, socially necessary labour-time) at first stimulates but eventually impedes the production of wealth (useful physical output to satisfy human needs and desires). This is the burden of Marx's 'law of the tendency of the rate of profit to fall': capitalism simultaneously promotes improvements in the productivity of labour, through labour-saving and labour-displacing technological innovation, while continuously measuring material wealth ('use-values') in terms of money representing abstract social labour. A diminishing volume of newly created 'value' relative to the money capital invested means lower profitability, in spite of rising productivity! This perverse state of affairs – *falling profit rates associated with rising labour productivity* – points to the fundamental irrationality of capitalism and reveals starkly why profit must always be inimical to the satisfaction of human needs. But this irrationality is not at all inherent in the human condition, for 'the productive forces developing within bourgeois society create also the material conditions for the solution of this antagonism'[18] – highly advanced technology, very high levels of labour productivity, and a workforce capable of reorganising society along socialist lines.

Thus, while Marx would doubtless solidarise with the intent of Giovanni Arrighi's critique of the inequalities and 'oligarchic wealth' that continue to define contemporary capitalism, he would also wish to make the point that wealth (understood as the useful things and services that define people's living standards and their ability to continuously meet their needs) can indeed be 'generalised' to all of the world's people once it ceases to be measured in socially antagonistic ways – 'relationally', to be sure, but above all in terms of 'abstract socially necessary labour'.

This is a revolutionary suggestion. Yet it flows quite logically from a theory with an excellent track record in charting the course of capitalist development. As such it deserves to be considered with the utmost seriousness, particularly when it is appreciated that, decade over decade, the rate of growth of the global economy has fallen since the 1960s (see Table 1) and that, so long as capitalism exists, *higher* growth rates for all sectors of the world economy are needed to provide for growing populations and to mitigate practices contributing to ecological degradation.[19] For if Marx's forecasts are indeed confirmed for our

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18 Marx 1970a [1859].

19 See the World Commission on Environment and Development (1987). The proposals for 'sustainable development' contained in this now-dated report understated the danger of anthropogenic climate change and fully accepted the framework of capitalism, a system utterly indifferent to the 'composition' of economic output and insistent upon measuring 'economic development' in conventional, monetary terms. Truly sustainable development

TABLE 1 Average annual growth rates of global GDP by decade

1960s	1970s	1980s	1990s	2000s
4.90%	3.93%	2.95%	2.70%	2.58%

SOURCE: WORLD BANK

time, if the capitalist law of value *has* exhausted its potential to contribute to the creation of real wealth and to meeting human needs on a global scale, then it becomes incumbent upon us to seek out a new form of socio-economic organisation, one that can transcend this obsolescent law while also subsuming under itself the tremendous developmental potential of the science, technology, and world division of labour that capital has fashioned over the past few centuries.

I am well aware that the objection will be made that Marx's own prescription for this new social form has been found wanting 'in practice'. Although the principal purpose of this book is not to refute this now tiresome argument, a few comments are perhaps in order.[20] In my view, Marx's own vision of the transition to a socialist society presupposes several conditions that have been largely absent from all of the 'experiments in socialist construction' over the past century: a revolutionary working-class movement, pursuing its emancipatory project on a global scale; a functioning democracy of the associated producers and consumers; a highly developed level of productivity; the availability of ample 'free time' permitting the full involvement of working people in political, cultural, and civic activities; and a well-articulated socialist international division of labour. Lacking in these conditions, the transitional, Stalinist-ruled societies of the East registered many impressive accomplishments – though at a human cost exceeded only by Western capitalism in its era of industrialisation and worldwide expansion. They were not, however, able to reach the critical threshold of truly socialist relations of production. In my opinion, the responsibility for this failure is one that ultimately falls most heavily on those ostensibly socialist and working-class leaders in the advanced capitalist world who retreated from the programme of social transformation and who justified

can only be achieved in a rationally planned global socialist economy in which the metrics for 'growth' will be completely revolutionised. See also Li 2013.

20 This is discussed at greater length in the Chapter 11. See also Smith 1996/97, reprinted in Smith 2014, Chapter 8.

this retreat in good part by denying the validity of Marx's value-theoretical critique of capitalism – almost always without having ever bothered to study or understand it.

Let us speak plainly. The rhetoric of 'free market economics' is the euphemistic ideological mantle of a despotism that has most of humanity in its grip, capitalists and workers alike: the despotism of Adam Smith's 'invisible hand', of market forces operating behind the back of the human collectivity whose destiny they shape. This despotism has decreed that the economic life of human beings, the basis upon which all modes of life depend, is to be governed by the capitalist law of labour value, whether or not its subjects consciously understand this, and whether or not it serves the collective needs of humanity. To defeat this despotic power will require an uncompromising revolutionary will to break free from the fetters imposed by capitalist social relations and to subject the processes of production and reproduction to the *conscious* decision-making of working people collectively organised. Such revolutionary resolve, however, must be nurtured by a hard-won prior recognition – that the capitalist law of value is by no means an eternal feature of human society and that it can indeed be transcended.

Of course, the question remains: can this historically bounded law be transcended in such a way as to enable humanity to deal with our most pressing socio-economic, cultural, and ecological problems? The record of 'the transitional societies' – for all their manifest shortcomings – provides us with many indications that it can. Yet something of a leap of faith may still be needed, one requiring a rehabilitation of the good name of Human Nature and a rebirth of 'socialist imagination' – something that has been in desperately short supply since erstwhile Communists and capitalists joined hands in proclaiming the insidious identity of Stalinism and socialism/communism. It is precisely this sort of imagination that Marx's theory of labour value can serve to stimulate by challenging the bogus 'inevitability' of value relations and by reaffirming the capacity of human beings to radically alter their socio-economic relations.

Arguing in a similar vein, Fredric Jameson has written:

> The market is … Leviathan in sheep's clothing: its function is not to encourage and perpetuate freedom (let alone freedom of a political variety), but rather to repress it … Market ideology assures us that human beings make a mess of it when they try to control their destinies ('socialism is impossible'), and that we are fortunate in possessing an interpersonal mechanism – the market – which can substitute for human hubris and planning and replace human decisions altogether. We only need to

> keep it clean and well oiled; it now – like the monarch so many centuries ago – will see to us and keep us in line.[21]

The notion that the market – and the Invisible Leviathan of capitalist value relations that forms its real basis – will ‘see to us’ grows thinner and thinner with the passage of time. But it can ‘keep us in line’ only so long as we fail to understand and expose its most precious secret: that it has *already* overstayed its historical welcome as a means to furthering the material wealth, the social and cultural development, and the general well-being of humankind.

21 Jameson 1990, p. 106.

CHAPTER 2

The Value Abstraction and the Dialectic of Social Development

The idea that history displays a pattern of development rooted in a human propensity toward technical, labour-saving forms of rationality is fundamental to Marx's materialist conception of history. Yet the 'dialectic of forces and relations of production' as traditionally conceived in historical-materialist discourses has found only weak expressions in social formations dominated by pre-capitalist modes of production. In this chapter, I advance the hypothesis that simple commodity production and exchange, and therefore rudimentary 'commodity-value relations', may have been of decisive importance to the historic emergence of cognitive faculties capable of giving a systematic impulse to the development of science and technology, and therefore to a pre-capitalist forces-relations dialectic. This permits a new way of appreciating Marx's ranking of the Asiatic, ancient, feudal, and capitalist modes of production as 'progressive epochs' in the development of human society, while illuminating the socio-historical provenance (and sources of variability) of the categories of human thought. More generally, the chapter offers a philosophical and historical framework for conceptualising the historically specific – and limited – contributions of value relations to human progress.

My starting point involves three basic premises that I take to be central to Marx's materialist conception of history. The first of these is the *monistic* proposition that the reality confronted by human beings is an *ontologically unified* ensemble or totality, embracing natural, social, and 'ideal' (conscious activity) aspects. This premise is consistent with the basic philosophical-materialist tenet that matter has ontological primacy as the 'substance' of reality, but breaks from traditional philosophical materialism in its insistence that material reality is subject not only to natural law but to the transformative influences of *human practice* as well: that is to say, the influences of (historically and geographically variable) social relations and conscious activity. In my view, this is the fundamental theme of the 'new' materialism announced in Marx's *Theses on Feuerbach* (1845).

The second premise is that the 'subject' of history is the 'real living individuals' referred to by Marx and Engels in *The German Ideology*: that is, human individuals whose actions are shaped by both natural and social imperatives and constraints. The historical subject, on this view, is most emphatically not

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a 'transcendental logos', a reified 'first principle', or a 'fixed human nature', but rather human beings seeking practical solutions to the natural, social and intellectual problems they confront … precisely through natural, social and intellectual means. The more complex the problems and the more varied the available means of recourse, the greater and more varied the creative responses of human beings are likely to be.

The third premise is that humans are driven to seek material security in the face of hostile natural and social forces. This is the basis for a certain duality within the elusive notion of 'human rationality'. Manifestations of 'technical rationality' are certainly distinguishable from various forms of 'sociological rationality', but *not* because of any ontological schism within reality of the type implied in the dualistic social ontologies that are so pervasive in (non-Marxist) modern and 'postmodern' social theories. They are distinguishable – and usefully distinguished within a dialectical-monistic social ontology – precisely because they can and do enter into complex and potentially contradictory relationships with one another. At the same time, their common ground should be clearly recognised: purposive human activity as founded upon the socially mediated transformation of nature, both human and non-human.[1]

Tendentious but ill-conceived inclinations to *privilege* technical rationality over forms of rationality rooted in antagonistic social relations, or vice versa, have motivated recurrent attempts to attribute deterministic 'primacy' to either the productive forces or the relations of production in the development of society. Indeed, the desire to accord 'primacy' to the productive forces (and, *inter alia*, a technical-instrumental form of rationality) may well have been the inspiration of Marx's most 'deterministic' historical-materialist text, the 1859 Preface to *A Contribution to the Critique of Political Economy*.

This text happens to contain one of the most controversial and enigmatic passages in Marx's entire corpus: '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'.[2] While my purpose here will not be to summarise or even identify the many debates that have sprung from the interpretation of this passage, a careful reading of it suggests that Marx is by no means positing, in rigid, dogmatic fashion, a theory of stages through which all societies are destined to pass, but rather *ranking* these modes of production with respect to their potential to engender 'pro-

1 For a critique of dualistic social ontologies and an argument concerning the 'necessity' of Marx's dialectical-materialist monism, see Smith 2009, reprinted in Smith 2014. See also Chapter 6 of this volume, which draws on the latter.

2 Marx 1970, p. 21.

gress'. In this sense, it calls attention to a pivotal Marxian idea that I *will* seek to defend, namely the notion of a 'universal human history' marked by a determinate, though by no means inexorable, developmental logic. The key that Marx provides to understanding this history is precisely the forces-relations dialectic as this unfolds in both pre-capitalist and capitalist eras.

A caveat is necessary here. Scepticism concerning the reality of a pre-capitalist, forces-relations dialectic contains an important grain of truth: the objective laws governing the historical movement of capitalist society are much stronger than those influencing the economic development of pre-capitalist social formations.[3] This is so because capitalism alone is under the sway of a fully reified 'law of value' – a law that becomes fully determinative only under conditions of market competition.[4] Capitalism's 'economic law of motion', moreover, is defined by the contradictory relationship of elements *internal* to its social production relations – relations that are at once equalitarian, exploitative, and competitive.[5] These features distinguish capitalism from all pre-capitalist societies quite decisively. At the same time, it is precisely the interplay of social production relations (and perhaps forms of rationality) belonging to different, yet coexistent, modes of production that appears to furnish a developmental dynamic conducive to the growth of the productive forces in pre-capitalist economic formations. This unique interplay is one aspect of David Laibman's important argument concerning the role of simple commodity production, during the European feudal era, in stimulating the development of the 'intensive' (labour-saving) capabilities of the productive forces and thereby creating an 'intensive surplus that enables commodity production to assume a new role, eventually moving to the center of the [production relations]'.[6]

I concur with Laibman in regarding simple commodity production as a critical, and much underestimated, element in the forces-relations dialectic of pre-capitalist history. To this extent, the argument I present below should be seen as complementary to his stress on the importance of an individually appropriated 'intensive surplus' to the development of the productive forces of Western European feudal societies. But I go beyond Laibman in suggesting that it is not only the competitive relations (and individual acquisitiveness) embryonic in simple commodity production that propel the growth of labour-saving technology, but the 'equalitarian' relations implicit in them as well. Indeed, it is precisely the equalitarian aspects of commodity value (impressively delineated

3 See, for example, Sweezy 1981 and Giddens 1981.
4 Amin 1985, p. 204.
5 Rubin 1973.
6 Laibman 1984, p. 275.

by Isaac Rubin in his essay on 'Equality of Commodity Producers and Equality of Commodities')[7] that I regard as fundamental to the specific contribution of the 'value abstraction' to the extension of human productive capacities during pre-capitalist eras.

Where I depart from Laibman (and perhaps from the Marx of the 1859 Preface) is in my rejection of the notion that human technical rationality *must* prevail over 'class-appropriative rationality', or indeed over other forms of 'sociological' rationality, in determining the course of history. No such presumption is, in my view, warranted on 'purely theoretical' grounds. In the end what must determine the outcome of the clash of these relatively distinct forms of rationality is the class struggle, and this can issue just as easily in the 'common ruin' of the contending classes as in the inauguration of a more progressive epoch.[8]

Marxism, of course, has no pretensions to being a 'pure theory'. It is defiantly a theoretically informed programme and a programmatically informed theory – a *practical* project embracing a specific vision of human history and the struggle for a better future. And for just this reason, it can be affirmed with confidence that even the 'late Marx' of the 1870s and 1880s – who faced something of an intellectual crossroads as he moved away from the still heavily Eurocentric standpoint of the 1859 Preface, who explored a far richer ethnography than he had previously imagined, and who even ruminated over the Russian peasant commune as a potential starting point for socialist development[9] – never wavered from the idea that human history is possessed of a 'meaning' to the extent that the rational human imperative to extend the productivity of labour can be said to hold sway in human history. The propensity of human beings toward labour-saving technical rationality of this sort was a fundamental premise of his philosophical anthropology – one that contained the promise of the eventual emergence of a mode of human existence in which, for the first time, *all* human individuals would have the chance to develop their many-sided talents and capabilities unconstrained by either material hardship or social antagonism. All ethnocentrisms and postmodern relativisms aside, this is surely an emancipatory vision worthy of all humanity – and one that is just as much a guiding thread of Marx's thought as any other that might be cited.

7 Rubin 1973, Chapter 10.

8 See the famous reference in *The Communist Manifesto* to the struggles waged throughout history between oppressor and oppressed classes, 'a fight that each time ended either in a revolutionary reconstitution of society at large, or in the common ruin of the contending classes'. Marx and Engels 1998 [1848], p. 2.

9 Vitkin 1981; Shanin 1983; Anderson 2010.

1 The Value Abstraction in Pre-capitalist History: Cognitive Faculties as Forces of Production

The proposition that Marx was committed to a definite concept of human progress linked to the propensity of the human species toward technical rationality has been most prominently associated in recent times with the influential work of Gerald A. Cohen. In *Karl Marx's Theory of History: A Defence* (1978), Cohen undertook to champion what he characterised as an 'old-fashioned historical materialism' according to which 'history is, fundamentally, the growth of human productive power, and forms of society rise and fall according as they enable or impede that growth'.[10] Cohen readily admitted to a 'technological interpretation' of human history, but was circumspect with respect to whether his account should be termed 'technological determinist'. No doubt this was because his argument was not so much that technology dominates other aspects of social life as that human beings tend to select those social forms that are most propitious to the extension of their productive powers given a certain level of development of technology and technical knowledge. Human history possesses a definite pattern because human beings can be expected, in the long run, to behave (collectively) in a technically rational fashion. Cohen's overall theoretic-methodological framework might therefore be described as a 'rational-choice functionalism' or as a 'functionalist praxeology'.

The issue of Cohen's functionalism is not a central concern of the present discussion, although it is certainly among the features that render his account of historical materialism both novel and contentious. Of greater concern is the 'analytically rigorous' fashion in which he insists upon interpreting the 'material-social' distinction in Marx's thought and in the 1859 Preface in particular. According to Cohen, the material aspects of human existence pertain strictly to the 'content' of human society (which is always a 'natural content') whereas the social aspects pertain just as strictly to the issue of 'form' (defined pre-eminently by social relationships of ownership and control of the means of production). On this basis he develops a somewhat 'non-traditional' understanding of the following famous passage from Marx's 1859 Preface:

> In the social production of their life, men enter into definite relations that are indispensable and independent of their will, relations of production that correspond to a definite stage of development of the material productive forces. The sum total of these relations of production constitutes

10 Cohen 1978, p. x.

> the economic structure of society, the real basis on which rises a legal and political superstructure, and to which correspond definite forms of social consciousness.[11]

The real novelty of Cohen's interpretation of this passage has to do with the way he specifies (a) the distinction between the forces and the relations of production, and (b) the distinction between the 'economic structure of society' and the 'legal and political superstructure'. On his account, the forces of production belong to the material side of the material-social distinction while the relations of production belong to the social side. Once this is recognised, Cohen claims, it becomes possible to specify with analytical precision those elements of reality that belong to the 'material forces of production' and those that belong to the 'social relations of production'. At the same time, according to this interpretation, the economic structure of society refers to the totality of social relations of production within a particular socio-economic formation and is not at all a synonym for 'mode of production'. That is to say, unlike Marx's concept of mode of production, the economic structure does *not* encompass the material forces of production; rather the material forces of production (together with the 'material relations of production' bearing on the physical organisation of the labour process) belong to a material substratum existing 'below' the economic structure.

While the material aspects of reality are conceptually excluded from the economic structure, the 'ideal' aspects of this same reality are just as resolutely excluded from his conception of the social superstructure. For Cohen, the latter is comprised exclusively of legal and political institutions that function to stabilise and reinforce the economic structure. Accordingly, the superstructure does not, strictly speaking, encompass ideas or consciousness and therefore does not refer to any 'ideal' sphere or level of reality.

There is much in Cohen's restatement of the basic concepts of the 1859 Preface that is highly moot, but to some limited extent he has admirably captured a key aspect of Marx's social ontology, one overlooked by many other commentators. For this self-described 'analytical-Marxist' philosopher has painstakingly demonstrated that the point of departure of Marx's historical sociology is not the sort of 'material-ideal' distinction that pervades the greater part of bourgeois social theory, but rather a 'material-social' distinction,[12] and that, related

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11 Quoted in Cohen 1978, p. vii.

12 In Smith 2009 and 2014, I have suggested that this is better understood as a 'natural-social' distinction, with the three fields of Marx's dialectical-monistic ontology (the natural, the social, and conscious activity) sharing the common ground of a unified but internally differentiated material reality. On this, see Chapter 6 of this volume.

to this, ideas and consciousness are not part of an independent realm but are always embedded in the social and material conditions and practices through which human beings make their own history. Hence, it is not only necessary to insist that many cultural phenomena cannot and need not be included in Marx's 'base-superstructure' metaphor; it is also necessary to underscore that 'productively relevant' ideas and knowledge are themselves *essential* elements of the material forces of production. On this view, tools, productive machinery, and even 'skilled labour power' (the perishable physical expressions of the productive forces) cannot be said to exist independently of such knowledge.

I wish to extend this latter argument still further by suggesting that the practical, technical knowledge embodied in the physical means of production is itself predicated upon the capacity of human beings to think in 'problem-solving' ways. Moreover, the premise of any *systematic* development of the 'productive powers' of human beings is the emergence of cognitive faculties favouring a technical-scientific form of rationality. Unlike Cohen, I do *not* claim that the human propensity toward technical rationality is explicable simply with reference to the human mammal's 'excellent brain'. The existence of such a brain is certainly a necessary corporeal condition for the development of technical rationality, but the former's mere existence, even in the context of perennial human struggles with the 'inclemencies of nature', cannot be regarded as a *sufficient* condition for the development of the latter.

My claim is that particular social forms have decisively mediated the relation between the 'excellent brain of human beings' and the human struggle with an inhospitable (non-human) nature, and that only certain social forms have encouraged the emergence of cognitive faculties capable of giving a *systematic* impetus to the development of technical-scientific rationality and labour productivity. These faculties may themselves be considered 'mental elements' of the productive forces at a certain stage of the latter's development.

The cognitive faculties in question refer to the categories of abstract reason to which the German idealist philosopher Immanuel Kant attributed a 'transcendental' origin. Yet any such idealist (non-)explanation of the provenance of the abstract intellect must encounter the same objection as Cohen's explanation of the origin of human technical rationality in the (unmediated) interaction of 'excellent brains' and 'the inclemencies of nature'. For Kant's theory too fails to account for the fact that across tens of thousands of years of human pre-history and several thousand years of early civilisation there is little evidence of the existence of an 'abstract intellect' or the systematic influence of the 'categories of pure reason' on human activity.[13]

13 This is not to say, of course, that 'symbolic thinking' was absent. The latter, which is closely associated with the human capacity for complex language, has been a distinguishing

All of this suggests that the categories identified by Kant must not only have a social provenance, as Durkheim following Marx suggested, but also definite *historical* origins. Yet it was only with the publication of Alfred Söhn-Rethel's Marxist 'critique of epistemology' in 1978 that a plausible historical-materialist account of the social-historical origins of these categories of reason was finally given. For Söhn-Rethel, the emergence of the cognitive faculties associated with classical Greek philosophy, mathematics, and modern natural science was directly connected with the emergence of the 'real abstraction of exchange' attendant to the appearance of commodity production and money.

The implications of Söhn-Rethel's insight are clearly immense with respect to the place of simple commodity production/exchange in defining a pre-capitalist forces-relations dialectic; for it is entirely reasonable to hypothesise that the development of simple 'value relations' (as sponsored by rudimentary forms of commodity production) might well have been the spark that ignited a veritable cognitive revolution, without which the development of capitalism would have been impossible. It is this cognitive revolution, I contend, that marks a profound epoch-making transition within pre-capitalist history.

In the classical Marxist tradition such a notion is most clearly foreshadowed in a passage from Engels's *The Origin of the Family, Private Property and the State*:

> The appearance of private property in herds of cattle and articles of luxury [among the ancient Greeks] led to exchange between individuals, to the transformation of products into commodities. Here lies the root of the entire revolution that followed … The Athenians were soon to learn … how quickly after individual exchange is established and products are converted into commodities, the product manifests its rule over the producer. With the production of commodities came the tilling of the soil by individual cultivators for their own account, soon followed by individual ownership of the land. Then came money, that universal commodity for which all others could be exchanged. But when men invented money they little suspected that they were creating a new social power, the one universal power to which the whole of society must bow.[14]

Most contemporary Marxists would agree that Engels overstates his case in this passage, according, as he does, a pre-eminence to this 'new social power' that

characteristic of *homo sapiens* since the earliest appearance of our species. But symbolic thought in general is by no means synonymous with the 'abstract intellect' under discussion here.

14 Marx and Engels 1970, Vol. III, p. 279.

it was unable to really acquire until the emergence of modern capitalism. For money to appear as the 'one universal power to which the whole of society must bow', commodity production had not only to exist; it had to be well on its way to being 'generalised' – to becoming the general social form of production. This was not the case in either Greek or Roman antiquity, despite the considerable extension of trade and commodity production that occurred during that epoch.

Even so, Engels's argument should not be wholly dismissed, nor indeed should his related thesis that the law of value has its historical origins in the value relations established over thousands of years of simple commodity production.[15] To be sure, such pre-capitalist value relations must be seen as *rudimentary* antecedents of the capitalist law of value; yet the existence of commodity production and exchange, even where it is decisively subordinated to other economic forms, still signifies the existence, if only in a rudimentary sense, of a trade-based division of labour and of a type of economic activity that is predicated upon the recognition of 'private property rights'. It need hardly be pointed out that such rights, which Söhn-Rethel quite properly defines in terms of the 'laws of the separation of exchange and use', can have no meaning except where market-exchange has become a significant social form of the process of production (as distinct, say, from the communal, familial or manorial forms that are so wide-spread in pre-capitalist formations). I wish to argue, however, that the impact of this social form and of the new 'social power' it represents may be greater in its nurturing of new cognitive faculties than in its direct influence upon economic intercourse *per se*. Not only might simple commodity production sponsor a 'law of value *sui generis*' that directly enters into the forces-relations dialectic of pre-capitalist history, it may well give rise to a modality of thought that is conducive to labour-saving technological innovation and the extension of the productive powers of humanity. The crucial historiographic issue then becomes: to what extent have particular pre-capitalist societies (a) 'permitted' the proliferation of simple commodity production/exchange, together with related social forms, and (b) 'tolerated' the technical-scientific consciousness arising from a trade-based division of labour?

An argument can easily be made that, of all the pre-capitalist modes of production identified by Marx, only the feudal mode of production possessed the specific features and the endogenous dynamic that could give a systematic impulse to both of these developments. Moreover, it is for just this reason that

15 On this, see Engels 1985 [1895].

capitalism grew out of (West European) feudalism and could not have grown directly out of the Asiatic, ancient or 'Germanic' modes of production (to say nothing of primeval forms of 'primitive communism').[16] Feudalism should be ranked higher among the 'epochs marking progress in the economic development of society' not only because it encouraged the growth of a trade-based division of labour, but because it erected fewer obstacles to the technical-scientific progress made possible by the unleashing of the abstract intellect.

To buttress the credibility of this argument we need only draw upon a few well-established (and relatively uncontroversial) theoretical and historiographic points pertaining to the specificity of Western European feudalism in relation to other pre-capitalist modes. The first is that feudalism is distinguished from 'despotic' or 'slave-owning' or other 'tributary' societies in its decentralised political structure – its 'dispersal of political power'.[17] The absence or weakness of a centralised political authority opens the way to a wide array of social forms, including those based upon the postulates of 'equalitarian' commodity exchange and individual surplus appropriation.

This leads to the second point. It is just such social forms, proliferating in the 'pores' of feudal society, that may be most responsible for the *intensive* development of the productive forces stressed by Laibman. The same point extends to Robert Brenner's important distinction between 'absolute' and 'relative' surpluses in the transition from feudalism to capitalism.[18] 'Pure' feudal relations are likely only to engender an absolute surplus; but feudal societies have a weak ability to maintain their 'purity' (and their ruling elements also appear to have little will to do so). Hence, over time, the stage is set under feudalism for simple commodity production and long-distance trade to stimulate the intensive (labour-saving) productive forces that make possible the appropriation of a growing relative or 'intensive' surplus.

The final point concerns the fact that 'productively relevant' knowledge tends to be less centralised and is more likely to be applied to production under feudal conditions than in other pre-capitalist, class-antagonistic contexts. This is not only because the incentive to use such knowledge is greater in feudal societies; it is also because 'despotic states' promote a radical division of intellectual and manual labour as between state functionaries and the direct producers. Non-feudal 'state-classes' are notorious 'hoarders' of knowledge,

16 On Marx's typology of several 'routes' leading out of primitive communism and toward socio-economic conditions favourable to the rise of capital, see Marx 1965b, including the introduction by Eric Hobsbawm. See also Mandel 1971, Chapter 8.

17 Amin 1985, p. 206; Anderson 1979.

18 Brenner 1977.

which they use primarily to reinforce and perpetuate the essential conditions of their own rule. What's more, such elites are apt to erect and sustain formidable ideological obstacles to the spread of technical-scientific forms of rationality.

An adequate specification of any 'pre-capitalist forces-relations dialectic' requires recognition of both the pivotal role played by simple commodity production in developing the forces of production and the limits imposed on this role by other, more dominant pre-capitalist forms. Fragile as it might have been in pre-capitalist eras, and incapable as it might have been of imposing its own norms and laws upon societies ruled by despots, slave-owners, or feudal lords, simple commodity production was nevertheless successful in sponsoring an extremely 'subversive' form of human consciousness – a mode of thinking and of problem-solving which itself must be ranked with land, labour power, and productively relevant knowledge as a major force of production. Its development, in tandem with other forces of production, could only eventuate in a challenge to the feudal relations that had (indirectly) nurtured it, particularly when the feudal mode of production itself entered, for numerous reasons, into protracted crisis.[19]

It should be underscored that the 'cognitive revolution' postulated here had an extremely uneven and historically discontinuous development. It began in antiquity, but could not possibly have triumphed in the ancient societies. It was unleashed to some limited extent wherever a trade-based division of labour took root, but was repeatedly suppressed by social forms as varied as the despotic state and the European guilds. Its ultimate triumph (in Western Europe) was predicated on the emergence of a particular 'balance' of social forms, as well as favourable geographical and historical circumstances. All of which could very easily suggest that this cognitive revolution and the growth of the forces of production that propelled capitalist development had a somewhat fortuitous character. This I take to be true. Yet this in no way contradicts the thesis, which I hold to be central to Marx's historical vision, that *human history possesses a pattern of development to the extent that it is guided by a growing propensity toward technical-scientific rationality*. There is no hint of a unilinear theory of human history here, still less of any speculative 'historico-philosophical theory' of the type berated in *The German Ideology*. Nor is there any evolutionary inevitablism or fatalism implicit in such a formulation. All that can be said is that history *has* unfolded in such a way as to unleash the productive power of technical rationality, that capitalism *has* emerged as the

19 For further discussion on this point, see Smith 1994b, reprinted in Smith 2014.

dominant mode of production on a planetary scale, and that this *has* created the potential for a global development toward the sort of socialist society envisaged by Marx and Engels.

It should be stressed once again that this interpretation of Marx's materialist conception of history is free of any idealist teleology of the sort that would claim that human history is unfolding according to some transcendental logic toward a preordained goal (communism) via a series of definite 'stages'. But it does insist upon the possibility that human history may assume a determinate developmental pattern if the balance of social forms comes to favour the full flowering of technical-scientific rationality. The reality that Marx was faced with, and that we continue to be faced with, is that in the course of human history such a development *did* occur. And it is only by virtue of this that we can now entertain ideas about the contemporary results and future prospects of a 'universal human history' that has materialised before the eyes of humanity over just the past few centuries.

While Marx never discussed these issues in precisely these terms I consider the argument set forth here as fully consistent with the fundamental concepts and premises of his historical materialism, particularly as these have been elucidated in recent years in relation to some basic principles of his social ontology and epistemology.

2 Cohen, Sayer and Söhn-Rethel on Historical Materialism

The argument presented above departs from Cohen's more traditional account of historical materialism in its stress upon contingency in the historical interplay of social forms and productive forces. At the same time, it is predicated upon a more radical break from the dualistic ontology from which Cohen only partially distances Marx. Central to Cohen's account is the role of human technical rationality in promoting the development of the material forces of production and in selecting the social relations of production historically suited to technological progress. Yet the human propensity toward technical rationality is never explicated adequately. Indeed, this propensity is posited *outside* of the material-social relation that Cohen identifies as key to historical materialism, seemingly springing from *a socially unmediated relation of human beings to 'nature'* that he associates with the 'material' or 'natural' content of society and that is posited as externally related to the social forms assumed and discarded by concrete societies. Thus, in defending the notion that Marx's theory of history highlights the material-social distinction and not a material-ideal opposition, Cohen has disclosed a necessary but not a sufficient basis for reasserting Marx's dialectical social ontology as against the claims of philosophical dualism. Indeed, in his handling of the form-content relation, Cohen has succumbed to the typically Kantian (dualist) habit of regarding this as an external relation, and in so doing has readmitted an ontological opposition between 'consciousness' (human rationality as embedded in 'content') and 'social being' (as rooted in the 'form' of society). It need only be assumed that content has ontological priority over form to conclude that human technical rationality must ultimately prevail over all forms of consciousness that are rooted in 'mere' social relations. Here, indeed, is where Cohen's interpretation of Marx finally sanctions a rather crude, and historically indefensible, technological determinism, one incapable of accounting for the historical viability and resilience of class-appropriative forms of rationality that have often proven inimical to technical rationality and human progress.

Cohen's incomplete break with a dualistic social ontology has theoretical consequences that have been most fully explored by Derek Sayer in *The Violence of Abstraction: The Analytic Foundations of Historical Materialism*, a work that represents a substantial advance over Cohen's in its grasp of Marx's historical sociology. Proceeding from an *internal-relations* perspective of the type elaborated by Bertell Ollman,[20] Sayer suggests that for Marx neither the material-social distinction nor the form-content distinction has any hard and fast character. Indeed Marx's dialectical social ontology enjoins us from drawing the sort of 'analytically precise' boundaries between such concepts as the forces of production and the relations of production that Cohen draws: 'we can no longer assume that terms like forces and relations of production, or base and superstructure, refer unambiguously or consistently to different, and mutually exclusive, bits of empirical reality as they would in an atomistic ontology … On the view argued here, the empirical referents of Marx's concepts may neither be mutually exclusive, nor consistent across space and time.' The upshot is that productive forces should not be treated as a 'set of things', but as 'attributes of human beings in association, their collective capacities', while the relations of production should be conceptualised as 'any and all social relations which are demonstrably entailed in a given mode of production, or "way in which [people] produce their means of subsistence" (Marx)'.[21] Such an approach makes it possible to see not only the internal relationship of social form and material content but also the social content of 'things'

20 Ollman 1976.

21 Sayer 1987, pp. 22, 27, 75.

and the 'material forms' assumed by social relations: an analytical agenda splendidly pursued by Marx in his analyses of commodity and capital fetishism.

Sayer's critique of 'traditional historical materialism' (including Cohen's) has the considerable virtue of emphasising Marx and Engels's seminal historical-materialist proposition that 'the production of life … appears as a double relationship: on the one hand as a natural, on the other as a social relationship'.[22] Thus, the *same* activities must be seen as having social and material (that is to say, *natural*) dimensions. This means that the forces of production have a social dimension as well as a material one, just as it means that the relations of production have both material and social expressions. It is only on this basis that one can explain Marx's repeated reference to such unmistakably social phenomena as the community, money, trade, and state activity as 'productive forces'. Equally, it is only on this basis that it becomes possible to give an adequate general definition of the concept of relations of production as one that encompasses, in different times and places, 'material relations of production' and 'superstructural relations', as well as Cohen's 'relations of ownership' or 'relations of effective power over persons and productive forces'.[23]

This already suggests a second major area of Sayer's critique of Cohen and of traditional historical materialism. For if a hard and fast distinction cannot be made between the material and the social, it is no less true that the distinction between the mode of production and the superstructure is necessarily a fluid one. This is particularly so when analysing pre-capitalist societies, where the organic unity of the human community admits no distinction between 'economy' and 'polity' as discrete spheres. In a very real sense the notion of a political and legal superstructure arising on the basis of the economic structure could only be conceptualised from the standpoint of capitalist society, and the transferability of this metaphor to pre-capitalist formations is therefore highly problematic. Yet Marx's notion of the superstructure involves something more. Despite the wording of the Preface, which Cohen takes all too literally, the superstructure is for Marx not so much an institutional sphere as 'the "ideal" form in which the totality of "material" relations which make up the "base" itself are manifested to consciousness'.[24] Marx's abundant references to 'ideal' and 'ideological' superstructures in many of his other works make this clear. For Sayer, the base-superstructure metaphor recapitulates Marx's long-held philo-

22 Marx and Engels 1968, p. 41.
23 Cohen 1978, pp. 29, 34 and 63.
24 Sayer 1987, p. 84.

sophical position that 'the ideal is nothing else than the material world reflected by the human mind, and translated into forms of thought'.[25]

Cohen's failure to grasp this aspect of Marx's philosophical perspective is of crucial importance: for it leads him in the direction of a dualistic epistemology in which ideological forms of consciousness are associated with 'social forms' while technical-scientific forms of consciousness are imbricated in the 'material content' of society (the socially unmediated relation of 'excellent brains' and non-human nature). Sayer insists against this that human consciousness, on Marx's view, must always be a projection of the 'double relationship' in which human beings are inescapably implicated: a material world governed by both natural and social relations. This in no way vitiates the necessary distinction between science and ideology, as elements of consciousness. But it should alert and sensitise us to the fuller meaning and contradictory implications of Marx's postulate that 'social being determines consciousness'.

At the same time, Sayer's interpretation of Marx's concepts closes the door to the proposition that the forces of production must enjoy 'primacy' over the relations of production in determining the course of history. Once the form-content relation is treated as an internal one, it is no longer meaningful to ponder the sort of question to which Cohen admits he has 'no good answer': namely, 'how productive forces select economic structures which promote their development'.[26] Once forms are regarded as immanent in contents this problem of 'selection' quite simply disappears. More problematically, however, Sayer suggests that so too does the problem of 'causality', at least insofar as we are speaking of the interrelationship of relations and forces. After a compelling critique of Cohen's primacy thesis, Sayer proceeds to dismantle the converse proposition that social relations of production dominate the productive forces: 'simply to reverse the line of causality between forces and relations obscures the important extent to which, for Marx, the growth of human productive power does remain the fundamental dynamic of historical progress'. Yet the point of Sayer's argument is *not* that an internal relations perspective absolves Marx or any theorist of the responsibility to specify the 'causal links' existing between phenomena; indeed, Sayer is explicit in associating Marx's method and ontology with a 'realist' position that requires that 'giving a causal explanation necessarily involves elaborating a theory of causal mechanisms'.[27] His point is that it is simply mistaken to establish a 'line of causality' between

25 Marx 1873, p. 19; quoted in Sayer 1987, p. 86.
26 Cohen 1983, p. 124.
27 Sayer 1987, pp. 35 and 125.

forces and relations understood as discrete and externally related 'categories'. For Sayer, the causal mechanisms identified by Marx 'lie ultimately in the actions of real individuals' and consequently 'the causal explanation of social phenomena must … be historical' rather than functional. In a related vein, he argues:

> Contrary to Cohen, Marx's concepts of forces and relations of production … do not then denote 'items' which are 'more basic than actions' … These 'items' are actions – forms of human relationship – and the whole point of Marx's critique is to unmask them as such. Behind the authorless theatre of fetishism lie 'real living individuals', for Marx the true and the only subjects of history.[28]

For Sayer the problem with 'traditional' historical materialism is that it has fetishised and reified Marx's categories of forces and relations of production in the process of theoretically reducing them to lists of empirical items. The all-too predictable result has been the positing of 'more or less implausible connections at the level of general theory' for which the indicated antidote is 'a minimum of *a priori* theory, and the use of empirically open general categories, which are analytically capable of letting the real world in'.[29]

Sayer's critique of Cohen is compelling and his proposed agenda for historical materialist inquiry attractive. Yet there is something not altogether satisfying about his plea for a more 'empirical' (if not empiricist) redefinition of the historical materialist project. A clue to the deficiency is to be found in his repeated insistence that the starting point of analysis must be 'the real, living individuals' invoked by Marx in *The German Ideology*. For Sayer gives insufficient weight to the ability of concrete, historically existing individuals, to create, through their activities, those 'reified structures' and 'economic laws' that come to dominate and constrain their existence. Human activity does indeed construct 'the theatre of fetishism', but once constructed this theatre has a way of transforming its builders into scripted actors who sustain the theatre's operations. No doubt, the operations of the law of value are 'ultimately' rooted in 'the actions of real individuals'. All the same, an adequate causal explanation of these operations must consider the real existence of such 'holistic' structural entities as 'abstract labour' and 'the world of commodities' – entities that arise as collective expressions of a multitude of individual actions. Oddly, much of

28 Sayer 1987, p. 136.
29 Sayer 1987, p. 147.

Sayer's argument leads away from this and lends itself to a methodologically individualist interpretation of Marx – one that is irreconcilable with his insistence upon Marx's opposition to 'atomist' ontologies.

A further problem with Sayer is that there is very little in his account of historical materialism that enables us to understand his claim that 'for Marx, the growth of human productive power does remain the fundamental dynamic of historical progress'.[30] If human productive power refers to social relations as well as 'material objectifications', what 'objective' criteria can be deployed to assess whether 'growth' and therefore 'historical progress' is occurring? In this connection it should be noted that in an earlier work, *For Mao*, Sayer expressed agreement with the ultra-voluntarist Maoist notion that even the poorest of societies (in material/ technological terms) can 'build socialism' provided the requisite social forms are in place.[31] This political perspective may also explain his interest in 'late' Marx's sympathy for Russian populism and for the proposition that the Russian peasant commune could be a base for socialist construction.[32] Yet there is no theoretical warrant to proceed from the recognition that the social phenomenon of 'co-operation' (as embodied in a detailed technical division of labour) ranks as *one* of the forces of production in the development of capitalism to the idea that social forms and mental attitudes are *all* that matter in the construction of socialism. As Sayer acknowledges (implicitly *against* Mao):

> The productive power of social labour may indeed, in the course of human development, increasingly become embodied in things – like machines – and undeniably it is through such embodiment that it is most enhanced. This is what is so revolutionary about modern industry; for Marx it represented a qualitative break, a veritable quantum leap in the unfolding of human productive potential comparable only perhaps with the Neolithic revolution. Human beings are, distinctively, creatures who purposefully objectify their collective capacities in the material world they create through transforming nature, and this is fundamental to Marx's sociology.[33]

Yet human beings are *also* creatures who may purposefully seek to shelter themselves, as individual entities, from the worst inclemencies of nature by

30 Sayer 1987, p. 35.
31 See Corrigan, Ramsay and Sayer 1979.
32 Sayer and Corrigan 1983.
33 Sayer 1987, p. 27.

turning their excellent brains to the enterprise of subjugating and exploiting their fellow humans. This is perhaps why the transformation of nature and the growth of human productive potential have been so painfully slow and discontinuous in the course of human history. For throughout this history, technical forms of rationality have had to wage a long battle against forms of 'appropriative rationality' rooted in *antagonistic social postulates* – postulates that find expression in modes of class exploitation and state forms.

This leads to a third critical observation concerning Sayer. Unlike Cohen, who is openly dismissive of Marx's law of value, Sayer regards Marx's value theory as a critically important component of his historical-materialist analysis of capitalist society. And yet, consistent with a fashion prevalent among many contemporary value theorists, Sayer fails to address the extent to which value relations might be said to have impacted on pre-capitalist societies.[34] Not surprisingly, in view of this, he also fails to address the issue of the impact of 'real abstractions' on pre-capitalist history. This is a crucial omission, for it must result in a failure to appreciate the cognitive revolution sponsored by simple commodity production and exchange.

It is here that a closer examination of Söhn-Rethel's argument becomes mandatory. As discussed earlier, Söhn-Rethel's fundamental thesis is that it is the historical appearance of a real abstraction – the commodity or value abstraction – that makes possible the development of those conceptual abstractions associated with classical philosophy, mathematics and modern nat-

34 This is rather more than a 'fashion' for certain Marxists. Some of the value theorists whom I characterise as 'neo-orthodox' in Chapter 5 argue that value, the law of value, and even 'commodity production' are categories that have no relevance to pre-capitalist social formations – a position seemingly foreshadowed by Rubin's (1973) critique of Engels's discussion of the 'historical transformation problem', that is, the problem of how the labour values associated with pre-capitalist 'simple commodity production' were transformed into the 'prices of production' of capitalist commodity production. For example, John Weeks (1981, p. 36) insists that value relations must always and everywhere be associated with the 'law of socially necessary labour time' and the 'law of the tendency of the rate of profit to equalise'. But if this is so, the historical *origin* of capitalist commodity production becomes a complete mystery, as Mandel (1977, p. 15) has noted. Few value theorists share Weeks's extreme view. Rubin would certainly disagree: 'We can say: labour-value (or commodity) is a historical "prius" in relation to production price (or capital). It existed in rudimentary form before capitalism, and only the development of the commodity economy prepared the basis for the emergence of the capitalist economy. But labour-value in its developed form exists only in capitalism' (1979, p. 256). This point is further developed by Ben Fine: 'Each commodity-producing society has a set of relations which determine both the conditions under which value is formed (what sort of value is produced) and the conditions which lead to a divergence of market price from value' (1986, p. 149). See also Marx 1977, pp. 1059–60.

ural science. In substantiating this thesis, Söhn-Rethel begins by pointing to the 'striking similarity' between the value abstraction and the thought abstractions of science:

> The economic concept of value [resulting from the commodity abstraction] is characterised by a complete absence of quality, a differentiation purely by quantity and by applicability to every kind of commodity and service that can occur on the market. These qualities of the economic value abstraction indeed display a striking similarity with fundamental categories of quantifying natural science without, admittedly, the slightest inner relationship between these heterogeneous spheres being as yet recognisable. While the concepts of natural science are thought abstractions, the economic concept of value is a real one. It exists nowhere other than in the human mind but it does not spring from it. Rather it is purely social in character, arising from the spatio-temporal sphere of human interrelations. It is not people who originate these abstractions but their actions. 'They do this without being aware of it' (Marx).[35]

It is important to be clear as to what Söhn-Rethel is saying here. The economic concept of value is a 'real abstraction' rather than a 'thought abstraction' because it derives from a real social process: that of commodity exchange (that is, *from activities rather than thoughts*). The 'reality' of the commodity abstraction, however, defies the standard (positivist) philosophical criterion for what is real as opposed to ideal: an empirically specifiable content. It is precisely the empirical emptiness of this abstraction that renders it 'abstract', just as its provenance in the socio-temporal sphere of actual human interactions, as founded upon definite social norms, renders it 'real'. The existence of such a real abstraction within the human mind suggests a social origin for the non-empirical concepts whose basis traditional philosophical materialism has never adequately explained, and whose undeniable importance has been key to the (only comparative) 'success' of philosophical idealism in accounting for the *duality* of the sources of knowledge ('pure reason' as well as 'sense perception'). Söhn-Rethel elaborates on this as follows:

> The entire exchange abstraction is founded upon social postulate and not upon fact. It is a postulate that the use of commodities must remain suspended until the exchange has taken place; it is a postulate that no phys-

35 Söhn-Rethel 1978, p. 20.

> ical change should occur in the commodities and this still applies even if the facts belie it; it is a postulate that the commodities in the exchange relation should count as equal despite their factual difference … None of these form-concepts imply statements of fact. They are all norms which commodity exchange has to obey to be possible and to enable anarchical society to survive by the rules of reification.[36]

The burden of Söhn-Rethel's argument is thus to establish that an 'inner relationship' does exist between the value abstraction and the thought abstractions of mathematics, philosophy and natural science, and that, in fact, 'the real abstraction operating in exchange engenders the ideal abstraction basic to Greek philosophy and to modern science'.[37] If any of the elements of the real abstraction of exchange are correctly identified within the human mind, the result must be the formation of concepts (thought abstractions) that are 'as non-empirical as the exchange abstraction itself'. Söhn-Rethel's detailed theoretical analysis of the formal elements of the exchange abstraction, as suggested by Marx's theory of value, serves to demonstrate that not only analogy but also 'true identity' exists between the formal elements of this abstraction and the formal cognitive constituents of those forms of thought that issued in the development of modern science. In particular the concepts of 'abstract quantity', 'abstract time and space', 'abstract movement' and 'strict causality' are all notions that have 'real' counterparts in elements of the act of exchange. Kant's categories *a priori*, then, are not transcendental properties of the human intellect, but historically produced concepts originating in specific types of social interaction and founded upon a real abstraction. Yet it remains importantly true that 'once the elements of the real abstraction have assumed conceptual form, their character, rooted in social postulates, evolves into the dialectic of logical argument attached to the concepts'.[38] The 'autonomy' of this 'dialectic of logical argument' from social being follows from the fact that the exchange abstraction is an abstraction associated with the *actions* of people and not with their thinking. It is an abstraction of which people are not consciously aware, but which is nevertheless reproduced in human consciousness in the form of the 'abstract intellect'.

It is in this rather special sense that 'value' (and its material expression as money) may come to exert itself as a significant 'social power' long before the

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36 Söhn-Rethel 1978, p. 68.

37 Söhn-Rethel 1978, p. 28, emphasis added.

38 Söhn-Rethel 1978, pp. 67, 47–55, 71.

advent of capitalism. To be sure, so long as exchange does not play a dominant part in giving social form to production, the forms of thought deriving from the value abstraction must wage an uphill battle against forms rooted in different (and often hostile) social postulates: the more-or-less conscious, yet pre-scientific, modes of socio-economic regulation that are founded on custom, tradition, and social privilege. All the same, this in no way obviates the thesis that the value abstraction *causally* influences the growth of scientific and technical knowledge, and in this specific way enters into the forces-relations dialectic as this unfolds in pre-capitalist history.

3 Value Relations and Social Progress

The view that ideas and the categories of thought are rooted in social relations and the activities of 'real, living individuals' originates with Marx. In *The German Ideology* he wrote that 'ideas, categories' are but 'the abstract ideal expressions of … social relations',[39] and in a letter to Engels (25 March 1868) he remarked that 'the logical categories are coming damn well out of "our intercourse" after all'.[40] The young Georg Lukács was to further explore the connection between the 'commodity-structure' and the abstract intellect of bourgeois society in his essay 'Reification and the Consciousness of the Proletariat'.[41] But it was left to Söhn-Rethel to provide ontological depth to the analysis of how commodity exchange engenders the categories of thought associated with technical rationality and how these could develop even in commodity-producing societies where the fully reified capitalist law of value did not yet hold sway.

According to Söhn-Rethel, the relationship between use and exchange as *contrasting* kinds of activity contains the real key to the abstraction of exchange; moreover, this is a relationship that resides at the very heart of the 'formal structure of exchange'. In defining this structure, he refers to the following passage from Marx's *Capital*:

> So long as the laws of exchange are observed in every single act of exchange – taken in isolation – the mode of appropriation [of the surplus] can be completely revolutionised without in any way affecting the property rights which correspond to commodity production. The same rights

39 Marx and Engels 1968, p. 189.
40 Marx and Engels 1965, p. 202.
41 Lukács 1971.

> remain in force both at the outset, when the product belongs to its producer, who, exchanging equivalent for equivalent, can enrich himself only by his own labour, and in the period of capitalism, when the social wealth becomes to an ever-increasing degree the property of those who are in a position to appropriate the unpaid labour of others over and over again.[42]

This passage is significant because it suggests that for Marx the 'laws of exchange' remain invariant across socio-economic epochs distinguished by different modes of exploitation.[43] Moreover commodity production is characterised by specific 'property rights' that remain *formally invariant* as between simple and capitalist commodity production. For Söhn-Rethel it is precisely the characteristics of commodity exchange as these are articulated on the basis of these rights that are central to the analysis of the value abstraction:

> The point is that use and exchange are not only different and contrasting by description, but are mutually exclusive in time. They must take place separately at different times. This is because exchange serves only a change of ownership, a change, that is, in terms of a purely *social status* of the commodities as owned property. In order to make this change possible on a basis of negotiated agreement the physical condition of the commodities, their *material status*, must remain unchanged. Commodity exchange cannot take place as a recognised social institution unless this separation of exchange from use is stringently observed.[44]

All of this suggests that commodity exchange involves a socially specific type of 'restriction of use'. Where such restrictions are associated with 'exploitation based on unilateral appropriation as opposed to the reciprocity of exchange', we are dealing with instances of what Marx calls 'direct lordship and bondage'. In such instances the restriction of use is a result of conscious design and deliberate intent, but not of 'objective necessity'. Things stand altogether differently with the restriction of use associated with commodity exchange; and it is this difference that is key to appreciating both the cognitive revolution associated with the exchange abstraction and the significance of the first tentative stages in the transition from 'personal-dependency relations' to 'objective-

42 Marx 1977, p. 733.

43 But note that the notion of 'laws of exchange' here is by no means synonymous with the law of value.

44 Söhn-Rethel 1978, pp. 23–4.

dependency relations' as promoted by simple commodity production.[45] It was precisely his belief that the latter relations were absent from 'Oriental life' that prompted the young Marx to regard it as a purely natural and 'barbarian' form of human existence, one outside of history, just as it was his later recognition that some objective-dependency relations existed under the 'Asiatic mode of production' that led him to include the latter in his sequence of 'historical epochs'.[46]

This point returns us to the issue of Marx's appreciation of 'progress' in human history. At the beginning of this chapter I suggested that Marx's vision of human progress was ultimately shaped by his belief in the realisability of a form of human society that is free of both material insecurity and social antagonism. Yet the realisation of such a society is dependent upon a definite development of the forces and relations of production made possible only by capitalism. In a world-historical sense, capitalism is indeed the necessary prelude to socialism, in part because it lays the basis for a world economy, but also because its encouragement of technical rationality creates the indispensable material premises of socialism and communism. The historical contribution of the capitalist mode of production has been to 'bring together' technical rationality and appropriative rationality by giving technical rationality an appropriative form. This was mainly accomplished through the commodification of labour power and the subordination of natural science to the demands of surplus-value production and realisation (that is, through the 'formal' and then the 'real' subsumption of labour under capital, the latter serving to extend the division of intellectual and manual labour into the very heart of the production process). The corollary to this, however, is that technical rationality has served the development of the productive forces under capitalism *only* to the degree that it has served the appropriation of surplus labour. It is precisely the object of Marx's *Capital* to disclose the limits of the convergence under capitalism of these historically antagonistic principles: labour-saving technological progress, on the one hand, and surplus labour appropriation, on the other. Indeed, the contradiction between these principles within capitalism is at the very heart of Marx's 'law of the falling tendency of the rate of profit' – a law that Marx considered to be 'in every respect the most important law of modern political economy, and the most essential for understanding the most difficult relations'.[47]

But if all this is so, how are we to explain Marx's 'revised' estimation of the Asiatic mode of production and his fascination with the Russian peas-

45 Marx 1973, pp. 157–64.
46 Vitkin 1981.
47 Marx 1973, p. 748.

ant commune as a possible basis for socialist development in the last years of his life? A definitive answer is, I believe, beyond our reach. But it would seem that Marx in the 1870s and the 1880s moved toward a position that recognised that capitalism had created a 'world history' to which the 'primary social formations' of the East (including the Russian commune) could now contribute. To be sure, Marx never embraced the populist notion that socialism could be achieved 'within Russia alone' thanks to the collectivist social relations inherited from the peasant commune. Still, he was prepared to entertain the idea that the task of building *world* socialism might be jointly shouldered by formerly capitalist and Asiatic (or semi-Asiatic) societies alike. Thus, while a socialist revolution might well begin in semi-Asiatic Russia, the construction of socialism would still depend decisively on the enormous technological resources and productive capacities bequeathed by advanced capitalism: 'The *contemporaneity* of Western [capitalist] production, which dominates the world market, enables Russia to build into the commune all the positive achievements of the capitalist system, without having to pass under its harsh tribute'.[48] This, along with many of Marx's other formulations in the various drafts of his letter to Vera Zasulich, suggests a position far closer to Leon Trotsky's 'law of uneven and combined development' and his theory of permanent revolution than to either Stalin's or Mao's versions of socialist economic autarchy (that is, the doctrine of building 'socialism in one country').

Finally, a few words should be said in defence of technical-scientific rationality and the social progress that it has made possible. When all is said and done, Marx's concept of 'human productive powers' (the forces of production) can only refer to the capacities of human beings to transform the world we inhabit in such a way as to reduce the burden of toil, increase the margin of material security, and attenuate the degree of social antagonism that we collectively confront. Technical-scientific rationality has contributed mightily to the development of these powers, and therefore to the potential for human wellbeing. To free it from its subordination to the logic of appropriation inherent in capitalist social relations, however, requires the promotion of a *socialist rationality* grounded in a vigorous commitment to *human progress* – to the realisation of a society in which 'human individuality' can develop unhampered by material hardship or social antagonism. Such a concept of human progress still stands as the loftiest of goals to which human beings can aspire. Yet its realisability and even its desirability must be persistently denied by forms of conscious-

48 Marx 1983 [1881], p. 110.

ness no less deeply rooted in the 'exchange abstraction' than the prevailing form of technical rationality. Ironically the division of exchange and use as contrasting types of activity, together with the division of intellectual and manual labour that has been profoundly ramified by the generalisation of commodity relations, must promote an 'abstract intellect' prone to a profoundly *dualistic* worldview, one which habitually views the relations between fact and value, 'is' and 'ought', freedom and necessity, theory and practice, as 'external' and eternally problematic. For many who share such a worldview, the epistemological and cultural relativism that is promoted by postmodernist thought may well appear to be the most humane as well as comfortable of intellectual options. But for those who reject it, together with its social basis, it must appear as the last line of intellectual defence of a social order that has now exhausted its progressive historical mission.

4 An Unresolved Issue

A possible implication of my argument is that the cognitive faculties associated with the commodity-value abstraction have not only *stimulated* technical rationality but have in large part been *constitutive* of this form of thought. Yet such a conclusion must be qualified by two observations: first, that prior to the cognitive revolution associated with the historical appearance of this real abstraction, labour-saving technological innovation was not at all unknown (the invention of projectiles, the wheel, and the plough are among the more obvious examples), and second, that myriad human communities untouched by this abstraction have developed unique technologies that enabled them to adapt successfully and often ingeniously to their particular physical environments.[49] Thus, technical rationality in general should not be regarded as *identical* to the 'abstract intellect' referred to by Söhn-Rethel, who, incidentally, regards the non-empirical concepts drawn from the real abstraction as constituting the 'paradigm of mechanistic thinking'.[50] What's more, 'modern' technical rationality, as promoted by the particular cognitive faculties associated with the commodity abstraction, may well be subject to further historical transformations sponsored by the development of new, post-capitalist social forms.[51] Thus, Kant's 'categories of pure reason' are by no means the last word

49 See Connor 2005 and Diamond 2012.

50 Söhn-Rethel 1978, p. 72.

51 For the present, I shall defer the question as to whether recent technical-scientific progress, in the shape of digital technology and its 'fourth industrial revolution' progeny, has

in defining the formal constituents of the 'abstract intellect'. As Marx averred, 'the categories are no more eternal than the relations they express. They are historical and transitory products.'[52] Indeed, even the scientific critique of these relations, as Marx's own work testifies, may help generate new theoretical categories and perspectives of relevance to the social and the natural sciences alike: for example, the categories of 'totality' and 'real contradiction'. In light of these considerations it may well be fruitful to explore the question of the socio-historical provenance of quantum theory, scientific realism, and the 'Chaos' paradigm as substantial recent examples of an ongoing, dialectical process of cognitive revolution.

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The following chapter explores the vicissitudes of the concept of 'value' resulting from its evolving relationship to the scientific and ideological requirements of the principal social classes of modern capitalist society.

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produced a fundamental change of social forms *within* capitalism, as suggested by Moulier Boutang and other theorists of 'cognitive capitalism'. This problematic thesis is taken up briefly in Chapter 11.

52 Marx 1989c, p. 11; Marx and Engels 1968, p. 189.

CHAPTER 3

Science, Ideology and 'Economic Value'

The concept of 'value' has been both a perennial and an elusive one in the history of economic thought. While value and price are usually thought of as coextensive if not synonymous terms, and even though most economists effectively conflate the two, there is clearly a sense in which value is considered to be the 'basis' of price and therefore as something conceptually distinct from it. Consumers, reflecting on the quality and the price of a particular commodity, routinely make a determination as to what is a 'good value' and what is an 'unreasonable price'. And while, at this level of apperception, the value of a good or service is certainly a subjective judgement, it is also one that has a substantial grounding in human experience, above all the 'common-sense' yet well-founded understanding that price and value do not always coincide: that is to say, that the *same* commodity can be variously priced.

The inner connection between value and price obscures the fact that the significance of 'value' extends well beyond the processes of individual price formation. Certainly, this was Marx's view. Yet neoclassical economists have maintained a curiously dogmatic insistence that any theory of value that is not primarily of direct use in explaining the constitution of individual prices is unworthy of consideration. Indeed, it is just this prejudice that sanctions the dismissal by most conventional economists of *all* notions of 'labour value' in favour of the marginal utility theory of value pioneered by Stanley Jevons, Carl Menger, Leon Walras and Alfred Marshall.

To be sure, a growing contingent of non-Marxist economists now dismiss the marginalist theory in the same way that the marginalists have long rejected the concept of labour value: by labelling it 'metaphysical'. Neo-Ricardian, post-Sraffian, 'Cambridge School', and post-Keynesian economists, in particular, are strongly inclined to dismiss any notion of 'value' as ideological mystification. All the same, the apparent even-handedness displayed by a Joan Robinson in rejecting the scientific claims of both marginal utility theory and Marx's labour theory of value may only mask a new twist on a familiar ideological bias. Thus, Robinson could easily have been speaking for the economics profession as a whole when she dismissed the labour theory of value as a politically motivated and 'unscientific' basis for Marx's thesis that capitalists do not steal from workers but rather exploit them. She averred in this connection that such a theory is 'ideologically … much stronger poison

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than a direct attack on injustice' since it leads to the conclusion that 'reform is impossible'.[1]

Notwithstanding her often crude critique of Marx, Robinson was clearly on to something here: for the 'operational significance' of Marx's theory of value is precisely that it serves to underpin his rather provocative proposition that 'the true barrier to capitalist production is capital itself',[2] thereby establishing the historical necessity to not merely reform or 'fine tune' capitalism but to replace it with a higher order of socio-economic organisation.

The labour theory of value did not always have such 'subversive' implications, at least not in the anti-capitalist sense. Indeed the career of the labour value concept provides a fascinating object lesson in how prevailing social relations of production and opposing class interests may intrude on the delineation of 'science' and 'ideology' – and affect the vicissitudes and relative fortunes of each.

1 The Labour Theory of Value in Classical Political Economy

Classical political economy emerged as a specialised field of inquiry some 300 years ago, its rise inextricably bound up with the breakdown of the feudal system, the proliferation of simple commodity production, the spread of European colonialism, and the articulation and rapid extension of national and international markets. Intellectually, it was part of the Enlightenment 'great awakening' that characterised the last phases of monarchical absolutism and the mercantilist trade system.

From its inception, the political-economy enterprise was associated with 'perhaps the two most important currents of thought of the emergent bourgeoisie in its ideological struggle against the established feudal society – utilitarianism and (mainly in the case of the physiocrats) natural law'.[3] Practically, it was concerned with the economic affairs of the state, as distinct from the management of a family household or individual business enterprise. More specifically, the political project of most of the early political economists was to influence states, above all the English state, to adopt policies favouring the interests of the rising bourgeoisie – interests that they took to embody the well-being of the great mass of the population, save the most recalcitrant and backward-looking elements of the landed aristocracy. As Simon Clarke

1 Robinson 1968, p. 39.
2 Marx 1981b, p. 358.
3 Therborn 1980, p. 130.

observes, the economic theories of classical political economy 'established the viability of capitalist society and showed that such a society could be ruled by reason and not by custom, as social order and class harmony were achieved on the basis of action oriented by enlightened self-interest'.[4]

In France, the programme of political economy found an early expression in attacks on the tax system of the *ancien régime*, that is, in opposition to the immunisation of nobles and clergy, and in the proposal for a single tax on land. In England, it found a more advanced expression in the ideas of 'laissez-faire' and free trade, against which were arrayed not only significant sections of the aristocracy but also mercantilist elements of the bourgeoisie with an interest in preserving existing trade monopolies. As Robinson notes, 'Adam Smith's main argument … was directed against mercantilism' while 'Ricardo's theory of rent led up to the abolition of the corn law'.[5]

The early popularity of the labour theory of value among the classical political economists needs to be situated within this general intellectual and political-programmatic context. While inklings of a labour value theory are traceable to medieval canonist tracts, its first systematic elaboration was at the hands of the economic and philosophical thinkers of ascendant capitalism. Both Thomas Hobbes and John Locke subscribed to theories of labour value, and both incorporated the notion into their broader political philosophies. In particular, Locke sought to use the idea of labour value as a premise for his argument against the alienation (coerced separation) of property – conceived as a product of labour – from those who produce it. The target of this critique was the transparently exploitative relations existing between the landed aristocracy and the actual cultivators of the land under feudalism: 'Whatsoever then [a man] removes out of the state that nature hath provided and left it in, he hath mixed his labour with, and joined to it something that is his own, and thereby makes it his property.'[6] Here a labour theory of value was invoked to support the notion of a 'natural right' to property, one violated by the feudal order but enshrined by the rising bourgeoisie.

If Locke used a labour value theory in support of his political theory of 'possessive individualism',[7] the notion of labour value found an altogether different status and use in the writings of Adam Smith and David Ricardo, the two pre-eminent figures of classical political economy. In Smith's writings, the theory appears as an adjunct to his case for a free trade policy as the indispens-

4 Clarke, 1982, p. 13.
5 Robinson 1968, p. 61.
6 Locke 1968, p. 340.
7 Macpherson 1962.

able means of encouraging productivity gains and the accumulation of capital stock. What is distinctive about Smith's ruminations on labour value, however, is that he identifies embodied labour as the determinant of the exchange-value of commodities only in an 'early and rude society' preceding 'the accumulation of stock and the appropriation of land' – that is to say, preceding the emergence of social classes. In other words, for Smith, the labour theory of value has full validity only where class divisions are not yet present. Once economic theory allows for the existence of ground rent and profit (corresponding to the incomes of landowners and capitalists), land and capital must then be considered along with labour as factors determining market prices. All the same, Smith regarded labour not only as the *principal source* of value but also as its *sole measure*: 'The real value of all the different component parts of price … is measured by the quantity of labour which they can, each of them, purchase or command. Labour measures the value not only of that part of price which resolves itself into labour, but of that which resolves itself into rent, and of that which resolves itself into profit.'[8] Hence, one can say that Smith's theory of labour value is confused inasmuch as he 'mixes notions of labour commanded (the amount of labour that can be employed) with the labour expended'.[9]

An understanding of society as divided into social classes similarly shaped David Ricardo's conception of economic value; yet unlike Smith, Ricardo saw the analysis of the *distribution of national income* among these classes as the key task of political-economic theory. In *Principles of Political Economy and Taxation*, he writes:

> The produce of the earth – all that is derived from its surface by the united application of labour, machinery and capital – is divided among three classes of the community; namely, the proprietor of the land, the owner of the stock of capital necessary for its cultivation, and the labourers by whose industry it is cultivated … To determine the laws which regulate this distribution, is the principal problem in Political Economy.[10]

In attempting to disclose the laws governing the distribution of this social wealth, Ricardo confronted the problem of its measurement, and it was precisely in this connection that he felt obliged to move his analysis beyond the sphere of relative commodity prices to the social origin of the value constituted by this wealth.

8 Smith 1970, p. 153.
9 Fine 1982, p. 76.
10 Ricardo 1951, p. 5.

While Ricardo distinguished between 'natural prices' and 'market prices', and anticipated the distinction, to be refined by Marx, between labour expended and 'necessary' labour, his theory of labour value failed to make any rigorous distinction between value and price. The consequence was that, in observing that even 'natural prices' are constituted by influences independent of (necessary) labour time, Ricardo arrived at a '93%' labour theory of price, which suggested that while labour, under normal conditions, is the strongest determinant of commodity prices, it is never the sole determinant.

2 The Economics Profession Repudiates the Labour Theory of Value

Ricardo was the last of the major classical political economists to enunciate a labour theory of value, and since his time, most economists within capitalist societies have dismissed all notions of labour value. The prevailing attitude of mainstream, 'professional' economists is captured well in Joseph Schumpeter's assertion that: 'For economics as a positive science [as distinct from a "social philosophy"] … it is important to ask how the labour theory of value works as a tool of analysis, and the real trouble is that it does so very badly.'[11] Schumpeter neglected to add, however, that the worth of any analytical tool can only be judged by how well it serves a specific analytical agenda, as well as the practical project with which that agenda is associated. In light of this, it can easily be argued that the main reason for the repudiation of the theory of labour value by most economists was that, after Ricardo, the concept of labour value was no longer contributing to the project to which conventional economists have always been devoted, namely, the elaboration of ideas useful to the legitimation and/or 'fine-tuning' of the existing capitalist order. As Clarke has put it: 'The essential ideological weakness of the Ricardian system is that it does not provide a very satisfactory basis on which to defend profit.'[12]

Such an argument gains cogency once one appreciates that economics, as a vocation, is indeed subject to *ideological* as well as scientific determinations, and that its leading theorists have been overwhelmingly committed to the promotion and perpetuation of capitalist economy, whether through fiscal tinkering or substantive reform. Accordingly, it is by no means a tendentious exercise to point out that John Locke was Secretary to the British Council of Trade and invested in the silk and slave trades; that Ricardo was a successful

11 Schumpeter 1962, p. 24.
12 Clarke 1982, p. 106.

stockbroker and contractor of loans who made an enormous fortune during the Napoleonic Wars; that Eugen Von Böhm-Bawerk was Finance Minister of the Austro-Hungarian Empire, as well as the author of the definitive marginalist critique of Marx's economics; that Joseph Schumpeter had been a Minister of Finance and the president of an Austrian bank before entering academic life; and that John Maynard Keynes enriched himself as a jobber in currency, securities and primary commodities.[13] Nor is it irrelevant to point out that two of the English pioneers of marginal utility theory, Stanley Jevons and Alfred Marshall, were virulent academic antagonists of organised labour. Jevons attacked trade unions for promoting the 'delusion' of a 'supposed conflict of labour with capital', and Marshall, outraged by a strike of engineering workers, wrote: 'I want these people beaten at all costs; the complete destruction of unionism would be as heavy a price as it is possible to conceive, but I think it is not too high a price'.[14]

3 Labour Value: From 'Ricardian Socialism' to Marx

Given the decidedly pro-capitalist profile of the economics profession throughout modern history, it is hardly surprising that when a 'popular economics' made its appearance at the beginning of the nineteenth century, establishment economists were quick to appreciate the potential threat it posed. Thomas Hodgskin, an influential and original exponent of this new economics, was a partisan of working-class self-organisation, a fierce critic of capitalism, and subsequently a socialist. The titles of his two main works bear eloquent testimony to his anti-establishment heresy: *Popular Political Economy* (1827) and *Labour Defended Against the Claims of Capital; or, The Unproductiveness of Capital Proved, With Reference to the Present Combinations Against Journeymen, By a Labourer* (1825). Importantly, Hodgskin was also a Ricardian – more specifically, an exponent of Ricardo's labour theory of value, which he had fashioned into a weapon for the critique of capitalism. After Hodgskin, the labour theory of value was never again to be favourably entertained by respectable economists. The tradition of 'classical political economy' began to falter, challenged on the one side by 'Ricardian socialism' and later Marxism, and on the other by what Marx termed 'vulgar economy' – an approach that sought to dispense with a theory of value entirely.

13 Therborn 1980, p. 131.
14 Quoted in Therborn 1980, p. 134.

To the extent that classical (liberal) political economy retained a theory of value, it was Mill's 'cost of production' theory. But while this theory restored a semblance of rigour and coherence to the classical approach, it was unable to provide a clear picture of the relations of determination between profit, rent and wages – precisely the problem that had most exercised Ricardo. Still, in contrast to vulgar economy, Mill's Ricardian political economy (minus a labour theory of value) commanded a real authority by virtue of its continuing – and ideologically appealing – focus on the problem of *the distribution of income*.[15]

Meanwhile, the project of refining and further developing the labour value formulation was being passed on from the 'Ricardian socialists' to Marx. Unlike Ricardo, who had been interested in labour quantities as a *numeraire* – as a means of measuring heterogeneous use-values in terms of a common yardstick, and unlike Hodgskin, who had regarded Ricardo's theory as a ready-made basis for identifying labour as the source of society's wealth, Marx was concerned with how economic value and its various forms express the contradictory social relations of capitalism as an historically specific socio-economic order.

Fundamental to Marx's reformulation of 'labour value' was the distinction he drew between value and exchange-value (and therefore price). Whereas the concept of exchange-value is concerned with a price system whose function is 'to put on the market the quantity of commodities that is required to fulfill the social need, i.e. the quantity for which the society is able to pay the market value',[16] Marx's purpose in analysing the more abstract concept of value was to expose the *hidden nexus* that exists between individuals operating in a society in which private labours are not immediately recognisable as social. The *invisibility* of this nexus and the implications of this invisibility are at the heart of Marx's analysis of the value-form and his critique of commodity fetishism; indeed, they constitute the pillars of a labour value theory that is fundamentally different, in content and in purpose, from those espoused by the classical political economists.

By identifying the inherent contradictions of the value relation in its fully developed capitalist form, Marx sought to discover nothing less than the 'economic law of motion' of the capitalist mode of production. Complete clarity is necessary on this point. Marx made no claim to having 'proved' that labour is the sole source of new value; for, on his view, once value is appro-

15 Clarke 1982, p. 108.
16 Marx 1981b, p. 289.

priately conceptualised, the foundation of value in labour is an incontestable *fact*. What he did accomplish was the scientific analysis of the *implications* of this fact for the 'real history' – the laws of motion – of the capitalist mode of production. Thus, in a famous letter to Kugelmann, Marx mocked the 'vulgar' objections to his labour value formulation, most of which are still widespread:

> Even if there were no chapter on 'value' in my book [*Capital*], the analysis of the real relations which I give would contain the proof and demonstration of the real value relations. All that palaver about the necessity of proving the concept of value comes from complete ignorance both of the subject dealt with and of scientific method. Every child knows that a nation which ceased to work, I will not say for a year, but even for a few weeks, would perish. Every child knows, too, that the masses of products corresponding to the different needs require different and quantitatively determined masses of the total labour of society. That this necessity of the distribution of social labour in definite proportions cannot possibly be done away with by a particular form of social production but can only change the mode of its appearance, is self-evident. No natural laws can be done away with. What can change in historically different circumstances is only the form in which these laws assert themselves … The vulgar economist has not the faintest idea that the actual everyday exchange relations *cannot* be directly identical with the magnitude of value. The essence of bourgeois society consists precisely in this, that *a priori* there is no conscious social regulation of production. The rational and naturally necessary asserts itself only as a blindly working average. And then the vulgar economist thinks that he has made a great discovery when, as against the revelation of the interconnection, he proudly claims that in appearance things look different.[17]

It is the cogency of arguments such as this – pointing unmistakably to Marx's preoccupation with a theoretical problematic entirely different from that of all versions of bourgeois political economy – that has forced the more sophisticated of Marx's critics to argue, as Schumpeter did, that 'it is incorrect to call the labour theory of value "wrong"' even while affirming that 'it is dead and buried'. Schumpeter's contradictory assessment is remarkably revealing of the ideological complexion of his and many others' dismissals of Marx's theory of labour

17 Marx and Engels 1965, pp. 209–10.

value. For its pro-capitalist critics, the point does not seem to be whether that theory is right or wrong; the point is rather that it constitutes a bad 'tool of analysis' for 'economics as a positive science'.[18]

4 Marginalism versus Marx

The 'marginalist revolution' sought to provide the analytical tools necessary to transform economics into just such a 'positive science' and thereby transcend the impasse created by the breakdown of the classical system. To be sure, neoclassical marginalism owed much more, both in theory and in method, to the 'vulgar' tradition derided by Marx than to the classical one, notwithstanding its success in projecting a sophisticated 'scientific' aura that had eluded vulgar economics. But it is important to emphasise that the 'rigour' of the marginalist theory of value was dependent on a dual theoretical movement: the adoption of vulgar economy's theoretical focus on micro-economic phenomena (in particular, *individual* producers, consumers, and commodity prices), and the elaboration of a 'positive' theoretical account of price formation (surpassing vulgar economy's simple disavowal of the labour theory of value). This dual movement defined the contours of the marginalist revolution in relation to classical and vulgar political economy as well as Marxism. As Ronald Meek observes: 'The new starting-point became, not the socio-economic relations between men as producers, but the psychological relation between men and finished goods.'[19]

Marginalism displaced the analysis of the social origins of economic value with an entirely different agenda – an inquiry into the role of *subjectivity* in the market determination of commodity prices. In asserting that '*rareté* is the cause of value in exchange' and that 'the theory of exchange based upon the proportionality of prices to intensities of the last wants satisfied … constitute the very foundation of the whole edifice of economics',[20] Walras expressed succinctly the key insights of what was essentially a fully 'demand-side' theory of price formation.

Marginal utility theory undoubtedly generated a number of techniques that have been useful in describing, analysing and predicting many of the phenomena of a market economy. Of equal importance, however, was its ideological

18 Schumpeter 1962, pp. 24–5.
19 Meek 1973, p. 235.
20 Walras 1954, p. 145.

function: the *elimination* of the analytical agenda of classical political economy, which had been inherited, refined, and to some significant degree transformed by Marx.

Joan Robinson, a determined critic of Marx's theory of labour value but no apologist for the neoclassical system, argues that the 'marginalist revolution' in economic theory was hardly the triumph of science over 'metaphysics' that its adherents claimed, but principally an ideological reaction to the 'disagreeable smell' of the labour theory.[21] Not only, asserts Robinson, was 'utility' a 'metaphysical concept of impregnable circularity', it served also as a justification for 'laissez faire':

> Everyone must be free to spend his income as he likes, and he will gain the greatest benefit when he equalises the marginal utility of a shilling spent on each good. The pursuit of profit, under conditions of perfect competition, leads producers to equate marginal costs to prices, and the maximum possible satisfaction is drawn from available resources.[22]

Revealingly, however, Robinson's assessment of marginalism as 'an ideology to end ideologies' is actually much less balanced than that of many Marxists. As a champion of Keynesian macro-economics and a leading figure of the Cambridge School that sought to revive interest in the concerns of classical political economy, Robinson had a keen insight into the very real deficiencies of marginalist micro-economics. Moreover, as a critic of all notions of economic value, she was apt to dismiss a utility-based theory of value no less forcefully than a labour-based one. Perhaps owing to just this frame of reference, Robinson missed one of the most salient features of marginalism – that it served not only to ideologically sanction laissez faire but also to determine the limits of the 'free market' and the scope for economic reform at a time of flagging confidence in the ability of the market economy to spontaneously reproduce the conditions of social harmony. As Clarke points out, neoclassical marginalism arose in response to a felt need to ground evaluative judgements concerning the 'proper' prices of commodities upon a *scientific* theory of price, so that price levels could achieve an optimal allocation of resources, especially scarce resources. 'The solutions that were reached would … serve as the basis of policy prescriptions about the proper role of state intervention in the formation of prices in order to achieve such an allocation'.[23]

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21 Robinson 1968, p. 48.
22 Robinson 1968, p. 53.
23 Clarke 1982, p. 149.

In view of such preoccupations, the refusal of neoclassical economists to engage seriously with the Marxist theory of value is entirely understandable: for they are the continuators of an ideological tradition that has always been primarily concerned with finding practical arguments on behalf of policies perceived as beneficial to the growth and extension of capitalist economies. The theoretical agenda of Marxist political economy has always been quite different: to disclose the barriers and limits to capitalist production; to demonstrate the inevitability of economic crises and disequilibria under capitalism; to expose the increasing irrationality of capitalist economy; and to point the way forward to a socialist society in which the growth of human productive capacities and the full flowering of the human personality will no longer be impeded by the structural constraints of capitalist social relations.

The fact that the ‘destiny’ of the labour theory of value was to pose questions and come up with answers that are injurious to the project of perpetuating the capitalist order is undoubtedly the fundamental reason that it fell out of favour with the theoretical defenders of that order and that it was inherited, and subsequently transformed, by capitalism’s socialist critics. By itself this statement establishes very little about the scientific merit of the theory. However, it should alert us to the need to understand science in relation to specific programmatic orientations and social interests – and not as some ‘absolute’ standard of truth unconnected to the practical goals of human action.

5 Science, Ideology and the Theory of Value

The precise dividing line between ‘science’ and ‘ideology’ is often well concealed, and it may well be that most theoretical production will contain ideological elements in combination with scientific ones. Given this, it is tempting to conclude that both marginalism and the Marxian labour value formulation will contain some measure of truth as well as certain blind spots. But if science is identifiable with a body of knowledge and a methodological strategy that permit the generation of the greatest number of reliable answers to the largest number of pertinent questions about reality, there would seem to be excellent grounds for adjudging Marx’s theory as scientifically superior to marginalism. For there is nothing in Marx’s theory of value that prevents us from generating a theory of market price informed by marginalist insights. Indeed, Marx’s own discussion of ‘market value’ in the third volume of *Capital* leaves the door wide open to a ‘demand-side’, and even marginalist, account of individual price formation. The point is that Marx never dismissed the kinds of questions posed by neoclassical economists as ‘irrelevant’ or ‘non-scientific’; he merely regarded them as less significant than the ones that he broached for the specific purpose of disclosing and explaining capitalism's historical laws of motion.

A similar intellectual generosity has been conspicuously absent from the stance of the neoclassical economists. Thus, Paul Samuelson, a towering representative of the breed, attributed Marx's 'stubborn' adherence to the labour theory of value to the fact that 'it provided him with a persuasive terminology for declaiming against "exploitation of labour"', even though it 'constituted bad scientific economics'.[24] But how Samuelson could have expected his own scientific commitments to be taken seriously when he egregiously *misrepresented* Marx as saying that 'the price ratios of goods can be predicted from labour costs alone' can only be a mystery to those familiar with Marx's ideas.[25] Not only did Samuelson fail to acknowledge the legitimacy of the questions that Marx sought to answer on the basis of his theory of value, but, following Böhm-Bawerk and many others, he assumed that Marx was occupied with the same theoretical issue that he was: the 'prediction' of price ratios. Surely, however, the *minimum* criterion for distinguishing between what is ideological and what is scientific in a particular discourse or inquiry must be *a concern for the facts*, including the facts about what one's own putative 'ideological' opponent has actually said. Yet, on this elementary criterion, Samuelson, not Marx, is exposed as the 'bad scientist'. Indeed, as a critical commentator on Marx to at least two generations of students studying introductory economics, Samuelson proved himself here to be nothing more than a crude propagandist, one for whom a scientific concern for the truth needed to be subordinated to the quintessentially ideological task of discrediting capitalism's most powerful critic.

Charles McKelvey, in an original and provocative attempt to reconstruct Marx's concept of science in light of the cognitional theory of Bernard Lonergan, has pointed out that what pre-eminently distinguished Marx as a scientist was his refusal to subordinate his 'desire to know' to 'the desire for prestige, power, material possessions, and material comfort'.[26] While he acknowledged the scientific achievements of Smith and Ricardo, Marx also knew that their analyses were necessarily flawed by their historical and social standpoints. Only by adopting the standpoint of the working class and accepting as given the latter's objective conditions was he able to theoretically, methodologically, and programmatically surpass the bourgeois 'horizon' of classical political economy. More precisely, by encountering the working-class movement, taking seriously its conditions and questions, and transforming its insights in

24 Samuelson 1968, p. 32.
25 Samuelson 1968, p. 819.
26 McKelvey 1991, p. 155.

light of the prevailing knowledge of bourgeois culture (in philosophy, science and political economy), Marx was able to formulate a theoretical knowledge that was less partial (if not less partisan) and therefore more objective in its grasp of concrete realities than anything produced by professional economists who limit themselves to the narrow horizon of bourgeois class interest. In this, it must be said, he fulfilled the most demanding – and personally courageous – requirement of an authentically scientific study of the capitalist socio-economic order.

CHAPTER 4

Marx's *Capital* and the Early Critiques

1 Elements of Marx's Theory of Value

If it is possible to reduce the several thousand pages of the many books and manuscripts comprising Marx's 'critique of political economy' to a single theme, it is surely this: for Marx, the capitalist mode of production (and, *inter alia*, its 'law of motion') is not 'eternal' but subject to specifiable historical limits that it is a task of science to disclose. On one influential and eminently plausible interpretation of Marx, these limits are precisely those of the *capitalist law of value*, as a historically specific expression of a more general 'law of human labour-time',[1] to bring about a systematic increase in the productive capacities of humankind and therewith progress in the development of human culture. In other words, Marx's project in his critique of political economy is to specify, *on the basis of his theory of value*, how and why capitalist relations of production must become fetters on the development of the forces of production (human productive and creative capacities).

1.1 *Marx's 'Concept' of Value*

Marx provides what is perhaps the clearest statement of the distinctive procedure he followed in elaborating his theory of value in *Notes on Adolph Wagner*, a short polemical work written late in his career:

> Herr Wagner forgets that neither 'value' nor 'exchange value' are my subjects, but *the commodity* … In the first place I do not start out from 'concepts', hence I do not start out from the 'concept of value', and do not have 'to divide' these in any way. What I start out from [in *Capital*] is the simplest social form in which the labour-product is presented in contemporary society, and this is the 'commodity'. I analyse it, and right from the beginning, in the *form in which it appears*. Here I find that it is, on the one hand, in its natural form, a *useful thing*, alias a use-value; on the other hand, it is a *bearer of exchange-value*, and from this viewpoint, it is itself 'exchange-value'. Further analysis of the latter shows me that exchange-value is only a '*form* of appearance', the autonomous mode of

1 Marx 1973, p. 173; Colletti 1972, pp. 91–2.

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> presentation of the *value* contained in the commodity, and then I move on to the analysis of the latter … Hence I do not divide *value* into use-value and exchange value as antitheses into which the abstraction 'value' splits, rather [I divide] the *concrete social form* of the labour-product; '*commodity*' is, on the one hand, use-value, and on the other hand, 'value', not exchange-value, since the mere form of appearance is not its proper *content*.[2]

This brief passage possesses the greatest methodological significance for an appreciation of Marx's theory of value. On the one hand, Marx emphasises his concern with the question of 'forms' and their analysis – as well as with the relationship between forms and their 'content'. On the other hand, he insists that the starting point of his theory is not conceptual (an ideal abstraction), but something *real*, something that can evidently be regarded as having both a 'natural form' and a 'social form' – the *individual commodity*, considered as a 'real abstraction'.

If the concepts of use-value and exchange-value are determined by the abstract qualities of a real object, however, it cannot be said that they are themselves *determinant of* how the analysis of the commodity must proceed. Classical political economy, no less than Marx, recognised that a commodity is characterised by both 'value in use' and 'value in exchange'; but this recognition did not lead the classical economists to the same conclusions about the commodity-capitalist economy that Marx drew. Indeed, even the Marx of *A Contribution to the Critique of Political Economy* of 1859 had yet to break with that tradition's conceptual conflation of 'value' and 'exchange-value'. What, then, led him to do so?

Consider the following passage from Marx's 1868 letter to Kugelmann: 'the form in which [the] proportional distribution of labour asserts itself [as a "natural law" stemming from "the *necessity* of the *distribution* of social labour in definite proportions"], in a state of society where the interconnection of social labour is manifested in the *private exchange* of the individual products of labour, is precisely the *exchange-value* of these products.'[3] The concept of exchange-value in this passage is unmistakably that of a specific social *form* of a general human imperative to distribute aggregate social labour in definite proportions – a form peculiar to a society in which the medium of 'interconnection' amongst different units of social labour is the *indirect* one of private exchange.

2 Marx 1989a, pp. 41–2.
3 Marx 1968, p. 209.

However, exchange-value is also a concept derived from the analysis of the 'individual commodity', which, according to the opening sentence of *Capital 1*, is itself the 'elementary form' of 'the wealth of societies in which the capitalist mode of production prevails'.[4] Thus, while the individual commodity has characteristics that are directly observable, it is also the 'elementary form' of something greater than itself: the 'immense collection of commodities' that is the 'appearance' of wealth in capitalist society.

Taking stock, the concept of exchange-value arises from the analysis of the *individual commodity*, as a form-characteristic of what turns out to be both a concrete object with a real (natural and social) content and an 'elementary form' of something larger than itself. The form-content distinction in this context is unmistakably aligned with – and a special case of – the distinction between the general (or universal) and the particular. As a particular incarnation of a general class of objects called commodities, an individual commodity is both a real, concrete object and a manifestation of the abstract characteristics of *all* commodities.

Once the focus of analysis shifts from the individual commodity to the mutual interconnections of all commodities, it becomes necessary to deploy a different 'concept' from that of exchange-value – a more 'general' or 'universal' concept that captures the characteristics of commodities no longer perceived as discrete things-in-themselves, but as an agglomeration (a mass) of products of labour, whose existence is necessarily a *collective* one.

Marx derives the concept of *value* from exchange-value by noting that a 'common element' must stand behind the myriad representations that an individual commodity can have as an exchange-value. For example, the exchange-value of a quarter bushel of wheat can be represented by *x* boot-polish, *y* silk, or *s* gold. When a commodity is exchanged with another type of commodity, its exchange-value finds expression in varying quantities of different, physically incommensurable use-values. As a consequence, exchange-value necessarily appears as 'accidental and purely relative', as 'the quantitative relation, the proportion, in which use-values of one kind exchange for use-values of another kind'.[5]

Having made this point, Marx then implies that it furnishes something like a logical proof for the existence of a common factor capable of rendering physically heterogeneous commodities commensurable in exchange. For him, 'utility' cannot play this commensurating role, since the different use-values of com-

4 Marx 1977, p. 125.
5 Marx 1977, p. 126.

modities *qualitatively* distinguish them from one another and impose the need for a means of commensuration that abstracts from utility: 'As use-values, commodities differ above all in quality, while as exchange-values they can only differ in quantity, and therefore do not contain an atom of use-value.'[6]

Marx's solution to the problem of commensuration proceeds as follows:

> Let us now take two commodities, for example corn and iron. Whatever their exchange relation may be, it can always be represented by an equation in which a given quantity of corn is equated to some quantity of iron, for instance 1 quarter of corn = x cwt of iron. Both are therefore equal to a third thing, which in itself is neither the one nor the other. Each of them, so far as it is exchange-value, must therefore be reducible to this third thing.[7]

Marx identifies this 'third thing' as the circumstance that these commodities are products of labour – while immediately acknowledging that, by itself, this observation is logically insufficient to resolve the problem of commensuration. The reduction of all commodities to a 'common element' must entail abstraction from the useful characteristics of the products of labour, and these characteristics are shaped by the 'useful character of the kinds of labour embodied in them'. For true abstraction from utility to occur, the labour embodied in commodities that serves to render them commensurable in exchange must be conceived as 'human labour-power expended without regard to the form of its expenditure', as 'congealed quantities of homogeneous human labour' characterised by 'phantom-like objectivity'. Marx refers to this 'human labour in the abstract' as a 'social substance' and to the products of labour abstracted from their utilities as 'crystals of this social substance', as 'commodity values'. The upshot is that 'the common factor in the exchange relation, or in the exchange-value of the commodity, is therefore its value'.[8]

Much has been said about the weakness of this argument as a 'logical proof' of Marx's labour theory of value. But what should be noted at this point is that the burden of Marx's argument is not to 'prove' that the substance of either value or exchange-value is labour (abstract or otherwise), but rather that the exchange-value of a commodity stands in a specific relation to its (underlying or intrinsic) value: as form to content.

6 Marx 1977, p. 128.
7 Marx 1977, p. 127.
8 Marx 1977, p. 128.

1.2 *Form and Content*

As a material expression and individual manifestation of a social division and distribution of labour carried out 'unconsciously', behind the backs of private commodity producers, the commodity is unavoidably implicated in 'value relations' and is, in this sense, a 'crystal' of value, understood as a 'social substance'. But the 'form of appearance' of the commodity's value – that is to say, of its relationship to the larger social process of forcibly articulating a division and distribution of labour between various branches and units of production – is necessarily its forms of exchangeability with other products, that is, its exchange-value(s). As a 'value' the commodity is conceived in abstraction from its use-value, as the embodiment of a definite fraction of the aggregate social labour employed in the production of all commodities; and it is precisely this that makes 'value' the *common factor* underlying the *different* exchange-values that the same commodity can manifest.

Depending upon the angle from which one approaches the problem, then, value can be conceived as the 'content' or 'substance' of exchange-value, or as the 'form' assumed by the division of labour under determinate social relations of production. Value may be defined as 'a representation in objects, an objective expression, of a relation between men, a social relation, the relationship of men to their reciprocal productive activity',[9] or as 'a definite social mode of existence of human activity (labour)',[10] which must assume the phenomenal form of exchange-value. As Rubin puts it: 'value is "reified," "materialised" *labour* and simultaneously it is an expression of production *relations among people*.'[11] Rubin illuminates this apparent 'contradiction' as follows: 'The two definitions of value contradict each other if one deals with physiological labour; but they perfectly supplement each other if one deals with *social* labour. Abstract labour [the *substance* of value] and value have a social and not a material-technical or physiological nature.'[12]

1.3 *The Significance of Marx's Method*

What Rubin points to here is the need for an adequate appreciation of the method underlying Marx's 'forms analysis'. As he rightly insists, '[the] process of development of forms in their various phases' can only be properly explored through a *genetic-dialectical* method, which considers the developmental and

9 Marx 1978, Vol. III, p. 147.
10 Marx 1978, Vol. I, p. 46.
11 Rubin 1973, p. 153.
12 Ibid.

contradictory relations among things. Crucially, such an approach is associated with an 'internal' conception of the *form/content* relation:

> One cannot forget that on the question of the relation between content and form, Marx took the standpoint of Hegel and not of Kant. Kant treated form as something external in relation to the content, as something which adheres to the content from the outside. From the standpoint of Hegel's philosophy, the content is not in itself something to which form adheres from the outside. Rather, through its development, the content itself gives birth to the form which is already latent in the content. Form necessarily grows from the content itself.[13]

The point here is that the 'boundary' between form and content is not at all well defined. To understand how value can be both the 'social content' of exchange-value and the 'objective (or material) expression' of the social relations existing between the productive activities of people requires analysis of *both* the form and the substance of value; and this is precisely the way that Marx proceeds. We shall return to these questions in due course, but first we need to consider the specific character of capitalism's social relations of production and their role in defining the content of the law of value.

1.4 *Capitalism and the Law of Value*

The law of value is a *regulatory principle* of an economy in which the products of labour are produced for the purpose of private exchange – that is, as commodities. It is also a specific manifestation of the human imperative to distribute the aggregate labour of society in definite proportions to a multitude of different economic tasks. Although operative to a limited extent in all pre-capitalist commodity-producing societies, it rules economic life only where capitalist institutions, property forms, and social production relations predominate.

The social production relation that is fundamental to all commodity production is the *social equality of commodities and commodity producers*, which entails *the social equality and homogeneity of commodity-producing labour*. The 'egalitarianism' of this principle no more presupposes the abolition of vertical social differentiation or 'ranking' than it obviates the technically heterogeneous and differentially skilled character of concrete 'utility-shaping' labours. What it points to, however, is the principle of the 'exchange of equivalents' – that is, to the *normative* imperative of maintaining a 'level playing field' in the sphere of exchange.

13 Rubin 1973, p. 117.

Under conditions of *generalised* (that is, capitalist) commodity production, two additional social production relations profoundly affect the concrete operations of the law of value. These are (a) the *exploitative relation* existing between capital and wage-labour, and (b) the *competitive relation* that exists amongst individual private capitals (the latter relation encompassing immanent tendencies toward 'monopolisation' or 'oligopolisation' as a necessary outcome of competition).

If, as Rubin suggests, 'value under capitalism' or the 'capitalist law of value' expresses the *ensemble* of these social production relations, then it should be apparent that the capitalist law of value – as a specific 'economic law of motion' – compels the capitalist mode of production to 'move in contradiction'. Accordingly, the 'contradictions' revealed in Marx's theory are *real contradictions*, not 'logical' ones: they are conceptual reflections of the contradictory relations comprising the object under investigation, namely a class-antagonistic mode of production based on three distinct, yet interpenetrated and contradictory principles of social organisation.

In light of these abstract considerations, how then are we to understand Marx's law of value in a more concrete or operational sense? Unfortunately, one of Marx's few explicit attempts to 'define' this law is somewhat less than enlightening: 'Whatever the manner in which the prices of various commodities are first mutually fixed or regulated, their movements are always governed by the law of value. If the labour-time required for their production happens to shrink, prices fall; if it increases, prices rise, provided other conditions remain the same.'[14] So formulated, it's hard to imagine how anyone could dispute the actuality of such a law, which seems merely to stipulate that a commodity's labour value constitutes a 'centre of gravity' around which its market price oscillates.

And yet, the substantive content of Marx's law of labour value, even though never explicitly defined by him, is actually much more interesting (and controversial) than the above passage suggests. Its basic postulate is that 'the source of the value added of the mass of commodities produced is the labor expended in producing them'.[15] If we couple this with the idea that value exists as an 'objective, quantitatively determined magnitude',[16] we arrive at the twin propositions that *living labour is the sole source of all new value* and that *value exists as a definite quantitative magnitude* at the level of the capitalist division of labour (or economy) as a whole – a magnitude that *limits* prices, profits and wages. Value,

14 Marx 1978a, p. 177.
15 Foley 1986, p. 14, emphasis added.
16 Hilferding 1975, p. 159.

to use a phrase coined by Mandel, is a 'parametric determinant' of the visible economic phenomena of the capitalist socio-economic system.[17]

These 'fundamental postulates' of Marx's theory of value, which are *shared* by the apparently contradictory analyses of Volumes I and III of *Capital*, constitute the basis of his analysis of the 'economic law of motion' of the capitalist mode of production. Much of Marx's critical analysis of capitalism, including his law of the falling tendency of the rate of profit, stands or falls with these postulates, and so it is with respect to them that his theory needs to be understood and evaluated.

1.5 *Marx's Value-Magnitude Analysis in Capital, Volume I*

In chapter 1 of *Capital I*, Marx identifies the 'substance' of value as 'abstract labour', defined as labour abstracted from its concrete utility-shaping characteristics and conceived as an aspect of the homogeneous mass of social labour entering into the production of commodities. The *measure* of this value-creating substance is socially necessary labour time, defined as 'the labour-time required to produce any use-value under the conditions of production normal for a given society and with the average degree of skill and intensity of labour prevalent in that society'.[18] It follows from this that 'the value of a commodity is related to the value of any other commodity as the labour-time necessary for the production of the one is related to the labour-time necessary for the production of the other'.[19] There is nothing in this statement, or in any of Marx's other statements in *Capital*, to suggest that the quantitative ratios (or proportions) in which particular commodities actually exchange are determined solely by the way in which they relate to one another as embodiments of abstract, socially necessary labour time.

The concept of socially necessary labour stands in contrast to the concrete and individual labours expended under varying conditions of technical efficiency in different productive enterprises. Just as a given commodity is produced through an expenditure of concrete labour that also constitutes a definite allocation of abstract social labour, so the individual labour-time expended

17 Mandel uses the expression 'parametric determinism' to indicate 'several possibilities within a given set of parameters' (1989, p. 121). To understand value as a 'parametric determinant' is to affirm that the law of value establishes a field of possibilities within which human action is constrained but within which a range of important choices can also be made – choices that can bear on the degree to which market prices will deviate from intrinsic commodity values.

18 Marx 1977, p. 129.

19 Marx 1977, p. 130. It should be noted that Marx speaks here of the *values* of commodities, not their exchange-values.

in the production of that commodity stands in a particular relation to the socially necessary labour-time required for its production. In measuring the *value* represented by a particular commodity, then, it is necessary to approach this measurement at the social – generally, the industry-wide – level, not at the individual enterprise level. The labour time actually expended on the production of a commodity is determinant of the *average* conditions of production of all such commodities. In Marx's words: 'The value of a commodity … varies directly as the quantity, and inversely as the productivity, of the labour which finds its realisation within the commodity.'[20]

1.6 *Marx's Analysis of the Value-Form*

Having derived the concept of value from that of exchange-value, and having defined both the substance and the magnitude of value in terms of abstract labour and socially necessary labour time, Marx proceeds to a demonstration of how value gives rise to its various forms of appearance. It should first be emphasised that the term 'value-form' may be understood in two distinct senses. The first pertains to value as a specific *historical form* of the social division of labour – a social form that predominates in capitalist but not pre-capitalist societies. The second sense pertains to value conceived as an objectification or materialisation of abstract social labour, that is, as the *content* of exchange-value: in other words, the form assumed by value within commodity-producing societies. Our concern here is with the 'value form' in this second sense: with how value is represented through *its own* forms of appearance.

Since value has a purely social existence, its form can only appear in the mutual relations existing between commodities – which, in turn, govern more and more of the relations between people as commodity production becomes generalised. Prior to his logico-historical derivation of it, Marx identifies this mode of appearance of the value-form as the 'money-form', for this is universally known as the 'common value-form' of commodities 'which contrasts in the most striking manner with the motley natural forms of their use-values'.[21] The *necessity* of the money-form, Marx argues, is implied by even the simplest expression of the value 'contained in the value relation of commodities'. But what is the *origin* of the money-form, and how does it develop as 'the expression of value'?

In answering these questions, Marx begins by considering 'the simple, isolated, or accidental form of value', in which x units of commodity A are equal

20 Marx 1977, p. 131.
21 Marx 1977, p. 139.

to or worth *y* units of commodity B. In this expression, commodity A plays 'an active role' while commodity B plays a 'passive' one. 'The value of the first commodity is represented as relative value, in other words the commodity is in the relative form of value. The second commodity fulfills the function of equivalent, in other words it is in the equivalent form.'[22] What this means is that the value of commodity A finds expression in commodity B, while commodity B is the standard by which the value of commodity A is expressed. 'Whether a commodity is in the relative form or in its opposite, the equivalent form, entirely depends on its actual position in the expression of value. That is, it depends on whether it is the commodity whose value is being expressed, or the commodity in which value is being expressed.'[23]

Further reflection on the relative form yields the insight that while commodity B is a material representation of commodity A's value, they are equated not by virtue of their natural forms as products of concrete labour, but rather because commodity A's value must possess an existence *distinct from* its status as a product of concrete labour. Accordingly, the physical form of commodity B becomes the value form of commodity A, or 'the physical body of commodity B becomes a mirror for the value of commodity A'. But this is possible only because commodity A has entered into a 'relation with commodity B as an object of value, as a materialisation of human labour'.[24] The expression of equivalence between physically distinct commodities thereby discloses the specific character of abstract labour as *value-creating labour*. It also reveals that it is the process of exchange that reduces all individual, utility shaping labours as these are embedded in commodities to their common aspect as instances of social labour in general.

Moving forward, Marx then considers the 'three peculiarities' of the equivalent form of value as these have emerged from the preceding analysis. First, 'use-value becomes the form of appearance of its opposite, value'.[25] The physical body of commodity B expresses the *value* of commodity A and is the objectification of the latter's abstract labour content. It follows from this that the *concrete labour* that went into the production of commodity B's physical body stands in a relation of equivalence to the abstract labour embodied in commodity A: 'The equivalent form therefore possesses a second peculiarity: in it, concrete labour becomes the form of manifestation of its opposite, abstract

22 Ibid.

23 Marx 1977, p. 140.

24 Marx 1977, p. 144.

25 Marx 1977, p. 148.

human labour.'[26] This leads directly to a third peculiarity, namely that the equivalent form demonstrates that 'private labour takes the form of its opposite, namely labour in its directly social form'.[27] This observation follows from the fact that while the labour that produced commodity B is the labour of private commodity producers, it 'possesses the characteristic of being identical with other kinds of labour'. Indeed, 'it is precisely for this reason that it presents itself to us in the shape of a product which is directly exchangeable with other commodities.'[28]

The 'reversals' suggested in this analysis of the value-form are of central importance to Marx's value theory as a whole. Within value relations, Marx asserts, *use-value appears as value, concrete labour as abstract labour, and private labour as social labour*. The commodity is a unity of use-value and value, but this dual character of the commodity is only expressed when its value has a form of appearance distinct from its natural (use-value) form. This form of appearance is precisely its exchange-value: it is *through exchange* that the internal opposition of use-value and value is given external expression. One might say that exchange-value furnishes a ground of unity between value and use-value, just as exchange relations provide the necessary framework for a resolution of the contradictions arising from the value/use-value opposition.

The next stage of Marx's analysis involves the emergence of the 'total or expanded form of value' from the simple form. Marx observes that commodity A exchanges not only with commodity B (that is, with one other commodity) but with a *myriad* of commodities whose individual identities are irrelevant to their role as equivalents. The expanded relative form of value, unlike the simple form, reveals that the relations existing between commodities are by no means contingent or accidental. Since the individual commodity is now recognised to be a citizen of an entire world of commodities, its value appears unaltered in magnitude 'whether expressed in coats, coffee, or iron, or in innumerable different commodities belonging to as many different owners'.[29]

Despite its conceptual advantages over the simple form, the expanded relative form of value evinces a serious defect: 'the relative form of value of each commodity is an endless series of expressions of value which are all different

26 Marx 1977, p. 150.
27 Marx 1977, p. 151.
28 Marx 1977, p. 150.
29 Marx 1977, p. 156.

from the relative form of value of every other commodity'.[30] This poses sharply the need for a 'single, unified form of appearance' of the abstract human labour constituting the commodity's value.

The problem is resolved, however, when Marx inverts the total or expanded form of value and derives the 'general form of value'. Since the value of commodity A is expressed in an innumerable series of other commodities, it follows that these latter commodities express their value *through* commodity A. Thus, a single commodity, here commodity A, may be set aside to represent that value of all other commodities. The generic name for such a commodity is 'the universal equivalent', and 'its natural form is the form assumed in common by the values of all commodities'. Since this commodity is directly exchangeable with all other commodities, the 'physical form [it assumes] counts as the visible incarnation, the social chrysalis state, of all human labour'.[31]

It is theoretically conceivable for any commodity to assume the universal equivalent form of value; however, 'a commodity is only to be found in the universal equivalent form … if, and in so far as, it is excluded from the ranks of all other commodities, as being their equivalent'.[32] Once a particular commodity is so excluded it becomes a *money commodity* (in the 'money form of value'), and this completes the separation of the commodity's expression of value from the commodity itself. For Marx, 'the only difficulty in the concept of the money form is that of grasping the universal equivalent form, and hence the general form of value as such'.[33]

Any derivation of the money form of value that does not begin with the simple form and follow its transformation into the general form must proceed a-historically, through a purely idealist dialectic of concepts. Thus, Marx's 'manner of presentation' of the money form in *Capital* differs from that undertaken in the *Grundrisse* (the preparatory manuscripts he wrote a decade prior to the publication of *Capital* in 1867) in that *Capital* provides a historical as well as a logical derivation of the categories of his analysis. With that caveat in mind, the following brief passage from the *Grundrisse* serves to clarify brilliantly the main conclusions of Marx's value-form analysis:

> [Each commodity's] value must … have an existence which is qualitatively distinguishable from it, and in actual exchange this separability must become a real separation, because the natural distinctness of commodit-

30 Ibid.
31 Marx 1977, p. 159.
32 Marx 1977, p. 162.
33 Marx 1977, p. 163.

> ies must come into contradiction with their economic equivalence, and because both can exist together only if the commodity achieves a double existence, not only a natural but also a purely economic existence, in which the latter is a mere symbol, a cipher for a relation of production, a mere symbol of its own value.[34]

The historical development/generalisation of commodity production and exchange brings with it the full emergence of the money form of value. Indeed, with the advent of capitalist 'generalised commodity production', money becomes the singular form of expression of value. This point is made unequivocally clear in *Capital*: 'Money as the measure of value is the *necessary* form of appearance of the measure of value which is immanent in commodities, namely labour-time.'[35]

1.7 *Value and Commodity Fetishism*

Marx follows up his analysis of the value-form in *Capital* with his famous (but often misunderstood) discussion of 'The Fetishism of the Commodity and Its Secret'. This section contains at least part of the explanation for Marx's insistence upon founding his analysis of the capitalist mode of production on a properly specified 'labour theory of value'.

It is by no means obvious that commodities contain value in the specific sense that Marx attaches to this concept. Indeed, the forms of appearance of value *lead us away* from the recognition that commodities both reflect and give expression to definite social production relations existing between commodity producers. The value-form, in this sense, contributes to a *false* understanding of the realities of commodity-producing societies and the social relations existing within them.

The 'mysterious' or 'enigmatic' character of the commodity-form of the product of labour stems fundamentally from 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'.[36] Consequently, the commodity-form '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'. But the question is then posed: in what sense is the analysis of this 'reflection' usefully informed by the idea of 'fetishism'?

34 Marx 1973, p. 141.
35 Marx 1977, p. 188.
36 Marx 1977, pp. 164–5.

Marx notes that fetishism refers to a situation in which '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'. In the 'misty realm of religion', such figures are purely illusory products of the human imagination, their relations both with each other and with human beings' wholly fantastic projections. However, in analogising the 'world of commodities' to this mystical religious realm, Marx asserts clearly that the commodity-form 'is nothing but the definite social relation between men themselves which assumes here, for them, the fantastic form of a relation between things'.[37] This can easily be misinterpreted to mean that it is a 'fantasy' to believe that social relations between people are reducible to a relation between things. But commodity fetishism is not linked to any such 'belief'; to the contrary, it is linked to the *denial* that a relation between things can express social relations between people, and that the products of labour 'relate' to one another as they do because they are 'bearers' of definite social production relations.

When Marx refers to the 'socio-natural properties' of commodities, he means to suggest that the commodity-form of the product of labour, as a *thing*, renders obscure the distinction between the natural and social aspects of the commodity product. Indeed, prior to rigorous scientific investigation, the social and natural characteristics of the commodity are indistinguishable in that they present an amalgamated face in the *natural form* of the commodity as a physical object or effect. Thus, the most salient feature of the fetishism that attaches to commodities is the *denial* of the 'sociality' of commodities, and *not* the denial that social relations are reduced to relations between things under conditions of commodity production and exchange. The *social* dimension of commodities, for those bewitched by this fetishism, appears entirely unrelated to their conditions of production/reproduction, and seems to spring entirely from their mutual relations of exchange. As a result of this misperception, the value of the individual commodity appears to be *externally related* to its status as a product of labour – just as the process of exchange appears to be externally associated with the process of production. The upshot of all this is explained in the following crucial passage:

> Objects of utility become commodities only because they are the products of the labour of private individuals who work independently of each other. The sum total of the labour of all these private individuals forms the

37 Marx 1977, p. 165.

> aggregate labour of society. Since the producers do not come into social contact until they exchange the products of their labour, *the specific social characteristics of their private labours appear only within this exchange*. In other words, the labour of the private individual manifests itself as an element of the total labour of society only through the relations which the act of exchange establishes between the products, and, through their mediation, between the producers. To the producers, therefore, the social relations between their private labour appear *as what they are*, i.e. they do not appear as direct social relations between persons in their work, but rather as material [*dinglich*] relations between persons and social relations between things.[38]

Marx's basic proposition in this passage is that value relations refer to the *indirect* and *hidden* relations established between private producers through the activity of commodity exchange. Within these relations, social production relations are manifested *in fact* through commodity exchange relations: 'private labours appear … as material [*dinglich*] relations between persons and social relations between things'. This appearance is *not at all illusory*; on the contrary, private labours appear here 'as what they are'. The mediation between private labours and the aggregate labour of society is provided by the exchange of privately produced commodities; and consequently, persons *do* in fact relate to one another through the mediation afforded by 'things'.

Still, as *commodity producers*, persons stand in a relation of formal equality to one another; their social production relations are predicated on the actuality of their socially equal status. What's more, the 'free' exchanges characterising commodity relations are the basis for 'the products of labour [acquiring] a socially uniform objectivity as values, which is distinct from their sensuously varied objectivity as articles of utility'.[39] This social uniformity is not a function of the equality of concrete labours, for concrete labours are only exceptionally 'equal', but rather a function of the social equality of producers whose labour is, at one and the same time, physically/ technically heterogeneous and *socially homogeneous*. As Marx insists: 'Equality in the full sense between different kinds of labour can be arrived at only if we abstract from their real inequality, if we reduce them to the characteristic they have in common, that of being the expenditure of human labour-power, of human labour in the abstract.' Such

38 Marx 1977, pp. 165–6, emphasis added.

39 Marx 1977, p. 166.

a reduction is inconceivable, however, except where exchanges are conducted under the normative assumption of the social equality of the private producers.

The above considerations are necessary presuppositions of the following well-known passage:

> Men do not therefore bring the products of their labour into relation with each other as values because they see these objects merely as the material integuments of homogeneous human labour. The reverse is true: by equating their different products to each other in exchange as values, they equate their different kinds of labour as human labour. They do this without being aware of it. Value, therefore, does not have its description branded on its forehead; it rather transforms every product of labour into a social hieroglyphic.[40]

According to Marx, then, it is precisely *because* people equate their products as values through the act of exchange that they unconsciously equate their different kinds of labour as well. Exchange, as the *social form* of commodity production, gives expression to and conceals the regulative role of labour in the determination of commodity values. It gives expression to it in the sense that free exchange is the normative/institutional presupposition of commodity production and valuation; it conceals it by permitting quantitative variance between a commodity's intrinsic value and its ultimate exchange-value. Marx sums up these themes as follows:

> The production of commodities must be fully developed before the scientific conviction emerges, from experience itself, that all the different kinds of private labour (which are carried on independently of each other, and yet, as spontaneously developed branches of the *social division of labour*, are in a situation of all-round dependence on each other) are continually being reduced to the quantitative proportions in which society requires them … The determination of the magnitude of value by labour-time is therefore a hidden secret under the apparent movements in the relative values of commodities. Its discovery destroys the semblance of the merely accidental determination of the value of the products of labour, but by no means abolishes that determination's material form.[41]

40 Marx 1977, pp. 166–7.
41 Marx 1977, p. 168, emphasis added.

And further:

> The forms which stamp products as commodities and which are therefore the preliminary requirements for the circulation of commodities, already possess the fixed quality of natural forms of social life before man seeks to give an account, not of their historical character, for in his eyes they are immutable, but of their *content and meaning*. Consequently, it was solely the analysis of the prices of commodities which led to the determination of the magnitude of value, and solely the common expression of all commodities in money which led to the establishment of their character as values. It is however precisely this finished form of the world of commodities – the money form – which conceals the social character of private labour and the social relations between the individual workers, by making those relations appear as relations between material objects, instead of revealing them plainly.[42]

This latter passage contains the key to differentiating the classical and Marxian labour value formulations. Whereas classical political economy was concerned with the magnitude of labour value as this related to the formation of money prices, Marx was concerned with the 'content and meaning' of 'the forms which stamp products as commodities'. But this content and meaning, pertaining to 'the social character of private labour and the social relations between the individual workers', is obscured – concealed in fact – by the 'finished' money form of value. Unlike the classical political economists, therefore, Marx does not proceed directly in his analysis from the magnitude of value as labour-time to the money-price of commodities. Instead, he explores the reasons behind the successive transformations of the value-form, while establishing value theory as the indispensable basis for disclosing the economic law of motion of the commodity economy in aggregate. In the end, however, the *relevance* of such an investigation can only be grasped by those who are prepared to see that commodity production is but one (perishable and transcendable) socio-historical form of production and of the social division of labour – in other words, by those prepared to dispel the mystifying influences of commodity fetishism. 'The whole mystery of commodities, all the magic and necromancy that surround the products of labour on the basis of commodity production, vanishes therefore as soon as we come to other forms of production.'[43]

42 Marx 1977, p. 168.
43 Marx 1977, p. 169.

Marx elaborates his critique of classical political economy on this basis more fully at the conclusion of the first chapter of *Capital*, Volume I:

> Political economy has indeed analysed value and its magnitude, however incompletely, and has uncovered the content concealed within these forms. But it has never once asked the question why this content has assumed that particular form, that is to say, why labour is expressed in value, and why the measurement of labour by its duration is expressed in the magnitude of the value of the product. These formulas, which bear the unmistakable stamp of belonging to a social formation in which the process of production has mastery over man, instead of the opposite, appear to the political economists' bourgeois consciousness to be as much a self-evident and nature-imposed necessity as productive labour itself.[44]

2 Value, Capital, and Exploitation

In approaching his analysis of capital, one must bear in mind that Marx regards capital as *both* a form of value and an expression of social production relations that are specific to the capitalist mode of production. As a form of value, capital encompasses, as a social production relation, the *formal equality* of commodity producers and of commodities. As a *metamorphosed* form of value, however, capital also encompasses and expresses two other social production relations: an *exploitative* relation between capitalists and waged workers, and a *competitive* relation between many individual capitalists.

By stating that Marx regards capital as encompassing (at least) three social production relations, we are acknowledging a profound difference between Marx's concept of capital and that found in non-Marxian economics. Against those who defined capital simply as a 'factor of production', as a stock of producer goods, or as an investable fund of monetary wealth, Marx insisted that capital is pre-eminently a *social relation involved in a continuous process of reproducing and expanding itself*. Two passages from *Capital* serve to clarify this idea:

> Capital is not a thing, it is a social relation of production pertaining to a particular historical social formation, which simply takes the form of a thing and gives this thing a specific social character … [Capital] is the

44 Marx 1977, pp. 173–5.

> means of production monopolised by a particular section of society, the products and conditions of activity of labour-power, which are rendered autonomous vis-à-vis this living labour-power and are personified in capital through this antithesis.[45]

> [In capitalist circulation] value suddenly presents itself as a self-moving substance which passes through a process of its own, and for which commodities and money are both mere forms … Value therefore now becomes value in process, money in process, and, as such, capital.[46]

Marx's concept of capital as 'value in process' is the culmination of his discussion of the 'general formula' for capital, where he considers the transformation of money into capital. Denoting commodities as C and money as M, Marx contrasts two possible sets of transactions that can occur within the sphere of circulation: the sale of commodities followed by the purchase of different commodities (C-M-C), and the buying of commodities with the aim of realising an enlarged magnitude of money through sales (M-C-M′). For Marx, M-C-M′ is the 'general formula for capital, in the form in which it appears directly in the sphere of circulation'.[47] But this formula appears to contain a contradiction: How is it possible to purchase commodities and then resell them at a price permitting an increment on the original money-capital investment? Several possible explanations present themselves – the presence of trade monopolies, a non-universalised market, and so on – but each of these appeals to a suspension of the normal operation of the law of value. To be sure, the law of value is not inconsistent with the idea of a 'redistribution' of value among commodities, such that individual commodities will be sold at prices diverging from their intrinsic (abstract) labour value; but it is certainly inconsistent with the idea that value can be *created* in the act of exchange. 'Buying cheap and selling dear' – the watchword of merchant capital and mercantilist economics – is predicated either on unequal exchange between regions and/or countries, or on the possibility of a real transfer of commodity value from productive to commercial capitals before the sale of these commodities at prices approximating their value. Assuming equal exchange in the aggregate (that is to say, the conservation of value in exchange), it is impossible to see how – through exchange alone – a net increase in value can be realised in the form of M′. Yet the existence of this 'surplus-value', which Marx initially defines as the difference between

45 Marx 1981b, pp. 953–4.
46 Marx 1977, p. 256.
47 Marx 1977, p. 257.

M′ and M, is the only possible value-theoretic explanation for the realisation of profits, interest, and other readily observable phenomenal forms of augmented value.

Marx explains the origin of surplus-value in the unique capacity of one particular commodity to create more value than it embodies or represents. This commodity is *labour power* – the ability to labour. The money-price of labour power is the wage paid to its seller, the worker. But the value of the commodities produced by wageworkers will normally exceed the value of all inputs. In other words, the value of output commodities exceeds the value of input commodities simply because one of the latter, labour power, imparts more value to output through its *activity* than it represents as a mere 'ability'.

The apparent contradiction contained in the formula M-C-M′ is resolved by establishing that this circuit encompasses a phase of *production*, without which surplus-value could not be created and the circuit could not be successfully completed. Within this circuit, commodities are bought with a view not to their resale at a higher price but to the production of *new* commodities embodying a magnitude of value exceeding the original money-capital investment.

The centrality of production to the process of creating surplus-value is illustrated in the following, 'expanded' representation of the general formula for capital:

$$\text{M} - \text{C}\ (\text{LP}\ \&\ \text{MP}) \ldots \text{P} \ldots \text{C}' - \text{M}'$$

In this revised formula, LP denotes labour power, MP the means of production, P the productive process that transforms input commodities C into output commodities embodying greater value C′, and M and M′ money capital as before. The key point in this expanded version of the circuit of capital is that, through the purchase of commodities constituting inputs to production, money capital is transformed into productive capital capable of yielding the commodity capital C′. The realisation of the value embodied in C′ involves the transformation of C′ into M′ through the successful sale of the output commodities. Thus, the circuit of capital embraces two overlapping phases of activity: the circulation of money and commodity capital, and the process of production, which transforms inputs into new outputs while also imparting to these outputs a quantity of new value derived from the performance of living labour.

Let's reconsider the C-M-C circuit, which describes the economic activity of such independent commodity producers as farmers or fishermen. The law of value can be seen to be operating here in perfect equilibrium: individual commodity values and prices coincide perfectly. One commodity (say grain) is taken to market where it is sold at a price reflecting its intrinsic value (its socially necessary labour input). The money derived from this sale is then taken by the producer and used to purchase other commodities (say, clothing or farm machinery) that represent a magnitude of value equivalent to that of the grain. Now, consider the possibility that what happens in this circuit also occurs with the sale of labour power. For the wage-labourer, money earned through the sale of this 'unique' commodity is not capital but simply the means to purchase commodities needed to reproduce the 'ability to work'. As far as the worker is concerned, the circuit ends in consumption, in 'use', rather than in an augmentation of value (profit).

Yet the circuit C-M-C, in so far as it applies to labour power sold for a wage, is also a necessary presupposition of the circuit M-C-M′. Unless the commodity labour power is sold for a money-wage that is used to purchase articles of consumption, it is not possible for money capital to be transformed into the productive ('variable') capital necessary for its self-expansion. This is why the distinction that Marx makes between labour power (as a commodity) and labour (as a value-creating activity) is so pivotal to his analysis: it renders intelligible not only the compatibility of C-M-C and M-C-M′ but also the decisive dependence of the latter upon the former. At the same time, this distinction makes it possible for Marx to reconcile theoretically two seemingly antithetical social relations of production that are foundational to capitalism: the normative equality of commodity producers and commodities, and the actual exploitation of labour by capital.

The commodity labour power has an altogether unique status as an input to production in that it is neither itself the product of a capitalist production process nor a commodity that makes a 'definite' or 'predetermined' contribution to the formation of the value of commodities emerging from capitalist production. Unlike all other commodity inputs to production, labour power expresses a social relation of production between owners of means of production and non-owners. Indeed, this is why Marx's characterisation of capital as 'the means of production monopolised by a particular section of society' is essential to his analysis: for it is the *class inequality* inherent in the monopolisation of the means of production that makes possible the *interpenetration* of relations of exploitation and relations of equal exchange. It is only when we abstract from production, and focus solely on the sphere of circulation, that the 'principle of equality' among commodity producers appears universal within capitalist society. The formal equality of the market-place cannot and does not obviate the social inequality and exploitation inherent in a situation where the means of production are owned and controlled by a tiny minority while the direct producers are dispossessed of means of production and compelled, on pain of starvation, to sell their ability to work to the highest bidder. It is precisely the class division between labour and capital that compels workers to sell the commodity labour power at a price reflecting its *cost of reproduction* rather than a price reflecting the actual contribution of their labour to the 'new value added' of the output.

The sale and purchase of labour power occurs entirely within the sphere of circulation and commodity exchange. The consumption of labour power, however, occurs within production, where it is put to use by capitalists in the creation of *surplus-value*. The 'equality' of the sphere of commodity-exchange is thus superseded by the 'despotism' that reigns in the sphere of production; relations of domination and exploitation displace relations of formal equality. No part of this analysis involves a 'logical contradiction', merely the revelation of a contradictory reality in which the law of value comes to lend a particular and historically specific social form to class inequality and to the extraction of a social surplus product from the direct producers.

In its incarnation as capital, value can be referred to as 'self-expanding' or 'self-valorising'. This is the burden of the idea that capital is value 'in process': *capital is an exploitative relation of production operating through value relations geared toward the reproduction of a fundamental class inequality*. In other words, under capitalism, commodity exchange is the social form not only of the reproduction of the 'material content' of society but also of the exploitative relationship between a class of appropriators and a class of direct producers.

Capital, when analysed from the point of view of its relation to wage-labour in general, is termed the 'social capital' by Marx; and it is precisely through the analysis of this relation that Marx develops the fundamental categories of his 'economics': the constituent categories of value making up the commodity, and the basic quantitative ratios underlying the capitalist economy's 'laws of motion'.

Let's begin by considering the total value of the commodity product. In the process of its immediate *production*, the commodity receives value from both 'living' and 'dead' sources: from living labour, on the one hand, and from various elements of the means of production, on the other. In furnishing these sources of value, both of which are required for a physical production process that is simultaneously a valorisation process, capital appears in two forms: as constant capital (c) and as variable capital (v). Within production, constant capital takes the form of the means of production (machinery, raw materials, fuel, etc.) that can impart to the new commodity product no more value than these physical inputs represent. To be more precise, the elements of constant capital can only transfer *previously existing value* to the newly produced commodity; they cannot create *new value*.

Marx attributes the role of creating new value to the variable capital 'invested' in the acquisition of labour power. The commodity labour power is the only input to production that releases *living labour*, the sole source of new value. The value newly created by living labour in production accounts for both the value embodied in the wages received by *productive* workers and the surplus-value created by these workers during the 'unpaid' portion of their working day.

The total value of the commodity product is represented as P = c + v + s, where c – the constant capital – represents the value objectified in those embodiments of 'dead labour' that contribute only indirectly to the value-expansion process (through a transfer of previously existing value effected by living labour); v – the variable capital – represents the value represented in the wage bill of productive workers (whose labour power itself assumes the social form of variable capital within production); and s represents the surplus-value created through the performance of surplus-labour by productive workers (surplus-labour constituting the difference between the total labour performed in the course of the working day and the necessary labour performed to create the value represented in workers' wages).

By dividing the working day into two discrete periods – one during which the worker creates the value equivalent of the day's wages and another during which surplus-value is created – Marx offers a convenient way of considering the first of his fundamental quantitative ratios: the rate of surplus-value, that is to say, s/v, the ratio of the two flows of new value created by living productive labour.

The rate of surplus-value exerts its influence within a capitalist economy through its impact on the *rate of profit*, which may be defined as the rate of valorisation of the total capital 'advanced' for the purpose of capitalist production, or, more simply and conventionally, as the rate of return on invested capital. The rate of profit may be represented in a number of ways consistent with Marx's analytical purpose (not to mention in ways that are inconsistent with it), but he himself usually defined it as the ratio of surplus-value to 'total capital' (s/c + v) for purposes of simplified theoretical exposition. This ratio occupies a central place in his analysis as the decisive regulator of capitalist accumulation and growth.

For the social capital as a whole, if not for individual capitalist enterprises, the rate of profit is 'co-determined' by the rate of surplus-value and the *composition* of the capital applied to production. The composition of capital refers to the proportions in which 'living' and 'dead' labour appear in the total process of production and reproduction, and may be conceptualised and expressed in several different ways. For the moment, however, it will be represented as the ratio c/v – the ratio that Marx uses in his discussion of the 'transformation' of commodity values into prices of production. This transformation process is intimately connected to the third social production relation encompassed by capital: the competitive relation existing between the many 'individual capitals' that make up the social capital as a whole.

3 Value, Capitalist Competition, and the General Rate of Profit

In defining capital as an exploitative social relation of production operating through value relations, I have so far stressed the exploitative aspect of capital while abstracting from the full implications of saying that capital operates as value in the sphere of market exchange. But implicit in the notion of value relations is the existence of *many* private commodity-producers supplying a marketplace and seeking a livelihood through the sale of their commodity products. Not surprisingly, then, Marx states that capital 'exists and can only exist as many capitals' and that consequently 'competition is nothing other than the inner *nature of capital*, its essential character, appearing in and realised as the reciprocal interaction of many capitals with one another, the inner tendency as external necessity'.[48]

Individual capitals do not face uniform prospects of an accretion of their value. Owing to a host of factors, they experience quite different profit margins and rates of profit. Moreover, capitals that earn less than the average rate of profit cannot be expected to survive indefinitely; hence, a strong tendency exists for all capitals to seek out the most favourable possible conditions of valorisation. This tendency presupposes that capital is *mobile*: that it can move from one sector of the economy to another in search of higher profits. Capital mobility – which is never 'perfect' owing to persistent difficulties in rapidly transforming productive and commodity capital into an investable money form – is the mechanism for *equalising* the myriad rates of profit and for the (tendential) formation of a *general rate of profit*. It is precisely the appearance of this general rate of profit that underlies a crucial transformation of the value-form: the transformation of individual commodity values (understood as 'monetised intrinsic values' or 'direct prices' dictated solely by the commodity's socially necessary labour content) into (tendentially uniform) 'prices of production'.

Prices of production are not market prices, so we are not considering the transformation of value into a final 'monetised' exchange-value but into an

48 Marx 1973, p. 414.

intermediate form. The specificity of this form pertains to the influence of a single mechanism on the process of price formation: the 'redistribution' of surplus-value effected by the equalisation of profit rates through competition.

In Marx's theory, individual capitalists do not directly appropriate the surplus-value produced by 'their own workers'. Rather, the appropriation of surplus-value is conceived as a process of collective class exploitation, while the distribution of the aggregate (social) surplus-value among different capitals is seen as the outcome of inter-capitalist competition in the sphere of circulation and the tendential formation of a general profit rate.

In view of all this, the equalisation of profit rates will tend to produce a divergence between the surplus-value 'represented' by a particular commodity and the actual profit that can be realised through its sale. While at the aggregate level total profit 'should' equal total surplus-value, and total value 'should' equal total prices of production, the differing conditions of production will mean that a divergence between value and price of production will be the norm for individual commodities. But what is meant by 'different conditions of production' in this connection?

As already discussed, different capitalist firms have varying compositions – that is, they are *heterogeneous* with respect to their ratios of dead to living labour. Although the variable portion of the capital is solely capable of creating surplus-value, enterprises that invest a relatively greater portion of their capital in labour power than in means of production will not automatically realise more surplus-value than those that are more 'capital-intensive'. Instead, a portion of the *socially produced* aggregate surplus-value will become a constituent of the production price of a given commodity *in the form of profit* and *in proportion to the capital invested in its production*.

Accordingly, the individual capitalist will *tend* to receive as an increment to his invested capital not the magnitude of surplus-value produced by his own workers but the profit that is due in accordance with the general rate of profit calculated on the capital investment. Hence, Marx's *theoretical formula* for the transformation process: 'When a capitalist sells his commodities at their price of production, he recovers money in proportion to the value of the capital consumed in their production and secures profit in proportion to his advanced capital as the aliquot part of the total social capital.'[49]

Both the adequacy of Marx's conceptualisation of the transformation process and the consistency of the production-price theory with the 'labour theory of value' have been disputed by a long list of critics, including many other-

49 Marx 1978a, p. 159.

wise sympathetic to Marx's theoretical project. In the next two sections, some 'traditional' criticisms of Marx's value theory will be considered, together with various 'solutions' to what is often described as 'the transformation problem'.

4 Traditional Criticisms and Orthodox Responses

The first phase of the controversy surrounding Marx's theory of value, characterised principally by a confrontation between neoclassical marginalism and the 'orthodox' understanding of Marx's *Capital* prevalent among the classical Social Democratic theorists of the pre-World War I era, took the form of a clear-cut, pro-Marx/anti-Marx cleavage. While complete unanimity never existed among the neoclassical critics of Marx's value theory, nor among the Social Democratic guardians of Marxist orthodoxy, the terms of debate between the two camps were relatively straightforward, as were the class and political allegiances of virtually all the participants in the debate. This makes the task of summarising the first phase of the controversy a relatively simple one.

With the publication of the third volume of *Capital* in 1894, the floodgates of debate between Marx's neoclassical critics and his defenders were fully opened. To be sure, many criticisms of Marx's theory of value had already appeared in the 1870s and 1880s following the publication of the first volume of *Capital*; indeed, Marx had himself responded to one of them – Adolph Wagner's polemic – shortly before his death in 1883. Two circumstances, however, served to slow the critical response. First, during the quarter of a century between the publication of the first and third volumes, most professional economists were attempting to put their own house in order by establishing a solid theoretical framework that could stand as a credible alternative to Marx's theories. Second, the professional economists most concerned with answering Marx's critique of political economy had been frustrated by the unavailability of the long-promised conclusion to Marx's analysis in *Capital III*, which, like *Capital II*, was drawn together from Marx's unfinished manuscripts under the editorship of Friedrich Engels.

Among the many critiques of Marx that appeared after 1894, Eugen von Böhm-Bawerk's *Karl Marx and the Close of His System* ranks as the most influential. Most of the criticisms of Marx's value theory advanced by Loria, Wicksteed, Pareto, Croce, Schumpeter, and other representatives of neoclassical economics and bourgeois sociology find expression there, and, just as importantly, in a cogent, systematic, and comprehensive fashion. Accordingly, Böhm-Bawerk's critique remains a touchstone of the value controversy, as do the responses it elicited from Marxist theorists in the early years of the twentieth century.

On Böhm-Bawerk's interpretation, Marx's law of value 'states and must state … that commodities are exchanged in proportion to the socially necessary working time incorporated in them'. But in the third volume of *Capital*, Marx argues that the price ratios of commodities in exchange are decisively influenced by a phenomenon that is independent of embodied labour-time: the tendency for the profit component of price to be determined by the general rate of profit as calculated on the cost-price of the commodity. According to Böhm-Bawerk, these two propositions are logically incompatible. Having exposed this contradiction in Marx's theoretical system (as between the accounts of the first and third volumes of *Capital*), Böhm-Bawerk then shows that it arises from a confrontation between a real phenomenon (the general rate of profit and its palpable influence on commodity price ratios) and Marx's false theory regarding the determination of commodity prices.

In building his case against Marx, Böhm-Bawerk cites the following passage from *Capital III*, which seems to suggest that Marx was well aware of the 'contradiction' embedded in his theoretical system:

> At a given rate of surplus-value it is only for capitals of the same organic composition – assuming equal turnover times – that the law holds good, as a general tendency, that profits stand in direct proportion to the amount of capital, and that capitals of equal size yield equal profits in the same period of time. The above argument is true on the same basis as our whole investigation so far: *that commodities are sold at their values*. There is no doubt, however, that in actual fact … no such variation in the average rate of profit exists between branches of industry, and it could not exist without abolishing the entire system of capitalist production. The theory of value thus appears incompatible with the actual phenomena of production, and it might seem that we must abandon all hope of understanding these phenomena.[50]

Triumphantly, Böhm-Bawerk concludes: 'To speak plainly his solution is obtained at the cost of the assumption from which Marx has hitherto started, *that commodities exchange according to their value*. This assumption Marx now simply drops.'[51]

What Böhm-Bawerk neglects conveniently to add is that the 'assumption' that 'commodities are sold at their value' is just that: an *assumption* that Marx

50 Marx 1981b, p. 252, emphasis added.
51 Böhm-Bawerk 1975, p. 21.

posits at *certain stages* of his analysis in order to lay bare specific features of the capitalist mode of production. What's more, it is an assumption that is posited as part of a procedure of *theoretical abstraction* from certain other features of capitalism that are in no way regarded by him as incidental to a concrete theoretical reconstruction of the capitalist totality.[52] But what this 'assumption' most emphatically *is not* is a necessary or constitutive postulate of Marx's value theory. It is neither a statement of empirical fact nor an explanation for the formation of market prices, but only a simplification to help reveal that the creation of surplus-value depends on the exploitation of wage labour in the process of production.

Why then does Marx speak of an apparent incompatibility between the 'theory of value' on the one side and 'the actual phenomena of production' on the other? As we have seen, capitalist reality constitutes a contradictory unity of three social production relations: between private but socially equal commodity producers, between capitalists and wage-labourers, and between different competing capitals. The *appearance* of an incompatibility between Marx's labour value formulation and the equalisation of profit rates among capitals of different composition corresponds to a *real contradiction* that is a constitutive element of capitalist social reality. This contradiction has nothing at all to do with any notion that commodities exchange at their value from one conceptual perspective and that they exchange at their prices of production from another: that is to say, nothing to do with a *theoretical contradiction*, as Böhm-Bawerk asserts. Rather, this 'contradiction' arises from the fact that Marx's theory maintains that living labour is the sole source of new value, even while also affirming that capital invested in 'dead labour' (such as machinery and buildings) can establish the same rate of profit as capital invested in living labour.

The *real* contradiction that gives rise to the apparent incompatibility between the law that only living labour can produce surplus-value and the observable tendency toward uniform rates of profit among capitals of varying composition is this: within capitalist society, capital simultaneously expresses an exploitative relation between social classes and an equalitarian relation between competing individual capitals. The *production* of surplus-value presents itself as a process of class exploitation operating through value relations, while

52 This procedure of abstraction, which provisionally suspends certain aspects of concrete reality in order to bring into clearer focus other aspects, is not entirely unknown to bourgeois economists, who routinely entertain far more unrealistic assumptions – such as 'perfect competition' or 'equilibrium conditions of growth' – in the construction of their own theoretical models.

the *realisation* of profits appears as a life-and-death struggle among individual 'socially equalised' capitals for their rightful share of total profits – a struggle that also operates through value relations. By acknowledging the real-life tendency toward a general rate of profit, Marx reveals that the social production relations of capitalist society inevitably result in a real contradiction between the valorisation process and the realisation process, a contradiction that is 'resolved' in reality through the tendency of capitals of equal magnitude to realise equal profits, *regardless* of their compositions. But the fact that this contradiction is resolved in this way does *not* entail a renunciation on Marx's part of *the fundamental postulate* of his theory of value: that living labour is the sole source of all new value, including surplus-value.

As for the notion that 'commodities exchange according to their values', this provisional 'assumption' can be dropped as soon as the focus of analysis shifts from the exploitative class relation between capital and labour manifest in the sphere of production to the competitive relation between individual capitals manifest in the sphere of circulation/realisation. To further underline the point: the 'withdrawal' of the assumption of commodities exchanging according to their values in no way entails the abandonment of the 'value postulate' *shared* by the first and third volumes of *Capital*, namely that, irrespective of how the exchange ratios of particular commodities are determined, and irrespective of how the aggregate surplus-value is 'shared out' to individual capitals in the form of profit (or interest, or rent), the magnitude of surplus-value is decisively determined by the socially necessary labour-time expended by productive workers.

Hilferding makes much the same sort of argument in his response to Böhm-Bawerk: '[His] entire train of reasoning is utterly beside the point. Marx is inquiring about the total value, and his critic complains because he is not inquiring about the value of the individual commodity.'[53] But the idea of 'total value' (linked to total social labour) can only be incomprehensible to an economist who *reduces* the idea of value to an exchange relation between discrete commodities. As Hilferding observes: 'Böhm-Bawerk overlooks the fact that value in the Marxist sense is an objective, quantitatively determined magnitude. He overlooks it because in reality the concept of value as determined by the marginal utility theory lacks this quantitative definiteness.'[54]

Böhm-Bawerk's critique of Marx is not confined to the alleged contradiction between the first and third volumes of *Capital*. He also wants to expose

53 Hilferding 1975, p. 158.
54 Hilferding 1975, pp. 159–60.

Marx's faulty logic in identifying 'labour' as the common factor underlying the exchange-values of different commodities. According to Böhm-Bawerk, 'Marx searches for the "common factor" which is the characteristic of exchange-value in the following way: He passes in review the various properties possessed by the objects made equal in exchange, and according to the method of exclusion separates all those which cannot stand the test, until at last only one property remains, that of being the product of labour. This, therefore, must be the sought-for common property.'[55]

Böhm-Bawerk's first substantive point of criticism is that Marx deliberately excluded goods that are *not products of labour* from his analysis, defining such goods as non-commodities. Such 'gifts of nature', however, constitute 'important objects of property and commerce', and it would be preposterous to assume that the prices attaching to these goods are established arbitrarily or by accident simply because they are devoid of labour content. How then are the prices of this undeniably important class of economic goods determined? This question obliges us to consider non-labour candidates for the designation of 'common factor'.

In Böhm-Bawerk's view, there are several properties shared in common by *all* exchangeable goods, products of labour as well as gifts of nature, among them: scarcity in relation to demand, regulation by the law of supply and demand, causing expense to their producer, and being subject to apportionment. What each of these properties points to however is the concrete *utility* of all exchangeable goods. Thus, for Böhm-Bawerk, a leading exponent of the marginal utility theory, the 'common factor' shared by all exchangeable goods and accounting for their value in exchange is the circumstance that they all possess a *use*.

In response to this argument, Hilferding reminds us first that Marx derives his concept of value *not* through a formal-logical process of 'eliminating' everything but labour as the substance of value but rather by identifying the material form assumed by social labour in capitalist society: the individual commodity. The real object of Marx's investigation is not the precise determinants of *price* in a commodity-capitalist economy, but the forms of appearance and modes of distribution and apportionment of *social labour* under conditions of commodity exchange. In Hilferding's words:

> [Marx] starts from labour in its significance as the constitutive element in human society, as the element whose development determines in the

55 Böhm-Bawerk 1975, p. 69.

> final analysis the development of society … [Capitalist] society has, as it were, assigned to each of its members the quota of labour necessary to society; has specified to each individual how much labour he must expend. And these individuals have forgotten what their quota was, and rediscover it only in the process of social life. It is therefore because labour is the social bond uniting an atomised [commodity-producing] society, and not because labour is the matter most technically relevant, that labour is the principle of value and that the law of value is endowed with reality.[56]

This passage demonstrates, unmistakably I think, that the 'orthodox Marxism' of pre-World War One Social Democracy was by no means unaware of what Diane Elson has called Marx's 'value theory of labour'.[57] Indeed, for Hilferding, the value theory of labour constituted the true starting-point, if hardly the sole content, of Marx's theory of value.

Hilferding points out that a good becomes a commodity in Marx's sense only to the extent that it becomes a 'bearer of social labour' and the 'material expression' of a social relationship of production. By the same token, however, goods that are not products of labour can acquire the 'character' of commodities 'as the expression of derivative relationships of production'.[58] The gifts of nature can have exchange-value, then, to the extent that they are subsumed under the dominant relations of a commodity-capitalist society. An important example of this is the changing status of land in history and, specifically, the process whereby land 'acquires the characteristics of a commodity as a condition requisite to the production of commodities'.[59]

The second aspect of Böhm-Bawerk's criticism – concerning the status of labour as the common factor underlying commodity values – is no stronger than the first. As Ernest Mandel points out: 'Marx nowhere … declares that the *only* property common to commodities is that they are products of human labour.'[60] What's more, Marx has no need to 'prove' that labour is such a singular property of commodities. The significance of Marx's discussion concerning labour as the *relevant* common factor underlying commodity exchange is that it suggests the need for 'a *social* property which makes it possible to weave a fabric

56 Hilferding 1975, pp. 133–4.
57 Elson 1979.
58 Hilferding 1975, p. 134.
59 Hilferding 1975, p. 135.
60 Mandel 1968 Vol. 2, p. 711.

of relationships between all these producers'.[61] This point reinforces Hilferding's crucial observation that Böhm-Bawerk's catalogue of 'common properties' shared by all exchangeable goods 'continually confuses the natural and the social'[62] – the hallmark of economic fetishism.

Böhm-Bawerk's attempts to logically confute Marx's labour value formulation are not convincing in themselves, but they acquire a certain power when they are joined to his attempted demonstration of the superiority of the marginalist approach to value. His argument on this terrain proceeds as follows:

> Labour and value in use have a qualitative side and a quantitative side. As the value in use is different qualitatively as table, house, or yarn, so is labour as carpentry, masonry, or spinning. And just as one can compare different kinds of labour according to their quantity, so one can compare values in use of different kinds according to the amount of value in use … If Marx had chanced to reverse the order of the examination, the same reasoning which led to the exclusion of value in use would have excluded labour; and then the reasoning which resulted in the crowning of labour might have led him to declare the value in use to be the only property left, and therefore to be the sought-for common property, and value to be 'the cellular tissue of value in use'.[63]

In response, Hilferding makes the point that Böhm-Bawerk proceeds from 'the error of attempting from the subjective individual relationship, where-from subjective estimates of value are properly deducible, to deduce an objective social measure'. This error follows from a theory of value that starts with the natural qualities of commodities as use-values and then focuses upon 'the individual relationship between a thing and a human being instead of starting from the social relationships of human beings to one another'.[64]

Geoffrey Kay presses beyond such general methodological points by establishing that the 'logical structure' of Marx's argument can in no way accommodate the simple substitution of the concept of utility for that of labour as the common property rendering different commodities commensurable in exchange:

61 Mandel 1968 Vol. 2, p. 712.
62 Hilferding 1975, p. 135.
63 Böhm-Bawerk 1975, pp. 76–7.
64 Hilferding 1975, p. 133.

> To insist with Böhm-Bawerk that use-value is not only the reason for exchange … but also its basis and its measure, posits among other things the category of general utility. But as such a category is incapable by its nature of achieving any form of existence, it is doomed to unreality, and any theory based upon it must be a contentless abstraction.[65]

The same sort of argument can be made against the category of 'abstract labour', however, if concrete labour is conceived as its form of appearance:

> If we constitute abstract labour as the common property of concrete labour – the expenditure of muscles, brains, etc. – we are inventing a mental abstraction and not discovering the real abstraction that Marx was after … [A]bstract labour defined simply as the common property of concrete labour is not distinguishable at all. It can no more be distinguished from concrete labour than the quality of being a mammal can be distinguished from the feline body of a cat or the canine body of a dog. It cannot be distinguished quite simply because there is nothing to distinguish, because it does not exist.[66]

In what sense, then, can we speak of abstract labour as existing independently of the concrete manifestations of human labour? If concrete labour is not the necessary form of appearance of abstract labour, what is? Kay reminds us that the answer to these questions is to be found in Marx's analysis of the value-form – an analysis that is slighted by Hilferding and entirely ignored by Böhm-Bawerk. As Kay puts it, 'in searching for the form of existence of abstract labour we are merely looking for the value-form … [Money] is the medium through which concrete labour becomes abstract labour. In a word it is money that is the form of existence of abstract labour.'[67]

The failure of Hilferding and many other Marxist theorists of the Second International, such as Nikolai Bukharin, to highlight Marx's value-form analysis in their critiques of marginalist economics both reflected and reinforced a tendency on their part to underestimate the *methodological* divide between Marx and his neoclassical critics. For example, according to Bukharin, 'the methodological difference between Karl Marx and Böhm-Bawerk may be summarised concisely as follows: objectivism-subjectivism, a historical standpoint – an unhistorical standpoint, the point of view of production – the point

65 Kay 1979, p. 53.
66 Kay 1979, p. 55.
67 Kay 1979, p. 58.

of view of consumption.'[68] Bukharin's list of contrasts is germane as far as it goes, but can this really be considered an adequate 'concise summary' of the methodological differences existing between Marx and the marginalists? It seems doubtful, and our suspicions on this score can only be strengthened if we recall that the orthodox theory of the Second International attempted, in numerous ways, to accommodate itself to the prevailing positivism of the era.[69]

Bukharin's critique of Menger's and Böhm-Bawerk's 'methodological atomism' is certainly instructive and important, as is his larger argument that a scientific analysis of economic phenomena should begin with economic subjects as these appear as members of a 'social economic system' not as isolated individuals. Yet Bukharin, along with other prominent Social Democratic theorists, failed to specify the truly distinctive features of Marx's method. Consequently, their defence of Marx left many important issues unexamined, many significant questions unanswered, and many opportunities unexplored for a reinterpretation of Marx's thought in ways consistent with the limited methodological strictures they specified, yet inconsistent with the more demanding, if elusive, principles of Marx's own theory of scientific knowledge.

5 The Controversy Surrounding the 'Transformation Problem'

During the 'first phase' of the value controversy, the most significant critique of Marx's procedure for transforming commodity values into prices of production was authored by the Prussian statistician and Ricardian economist Ladislaus von Bortkiewicz – a critique made largely outside the parameters of debate between Marxism and neoclassical marginalism. The technical-mathematical character of Bortkiewicz's critique anticipated much of the later discussion surrounding value theory, as this was to unfold among Marxist economists throughout the twentieth century. Paradoxically perhaps, this Ricardian's sympathetic criticisms of Marx's engagement with the 'transformation problem' contributed far more to dissension among Marxist economists than did any of the hostile polemics emanating from the marginalist camp. Indeed, it was precisely Bortkiewicz's apparent relative proximity to Marx that made his critique and alternative 'solutions' to the value-price transformation issue a significant pole of attraction for a number of academically trained Marxists, in particu-

68 Bukharin 1972 [1927], p. 32.
69 Colletti 1972.

TABLE 2 Marx's Transformation Procedure: a Three Capital Model

Branch	c	v	s	p′	Value	PoP	Deviation
I	80	20	20	20%	120	120	0
II	90	10	10	20%	110	120	+10
III	70	30	30	20%	130	120	−10
	240	60	60	20%	360	360	0

BASED ON MARX 1981B, P. 264

lar Paul Sweezy, the economist who did the most to popularise Bortkiewicz's contributions and legitimise them within Marxist economic discourse.[70]

For reasons that will soon become clear, it is useful to initially approach Marx's transformation procedure as illustrated in his example involving three capitals (or branches of production) rather than the five-capital model that Marx describes in greatest depth in chapter 9 of *Capital III* ('Formation of a General Rate of Profit [Average Rate of Profit] and Transformation of the Values of Commodities into Prices of Production').

Once again, the individual value of a commodity is calculated as the sum of c (constant capital expended) + v (variable capital expended) + s (surplus-value produced), while the commodity's price of production is calculated as the sum of cost price (c + v = k) and profit (p), where p is calculated as the product of k multiplied by the average rate of profit (p′). Marx's three-branch example is represented in Table 2.

Marx's illustration, as reproduced in this table, leads us to conclude that the phenomenon of profit-rate equalisation between branches of production with different compositions (c/v ratios) poses no special problem for the two equalities that his theories of value and exploitation jointly posit: the equality of values and prices of production (in aggregate) and the equality of profits and surplus-value (in aggregate). Like his earlier five-capital example, therefore, this three-branch illustration of the transformation process sustains Marx's theoretical formula: 'When a capitalist sells his commodities at their price of production, he recovers money in proportion to the value of the capital consumed in their production and secures profit in proportion to his advanced capital as the aliquot part of the total social capital'.[71]

70 Sweezy 1975, 1968 [1942].
71 Marx 1978, p. 159.

Bortkiewicz's point of departure is that Marx failed to consider whether his theoretical formula for the transformation of commodity values into prices of production could be reconciled with the model of 'simple reproduction' of a capitalist economy outlined in the second volume of *Capital*. Assuming the existence of three 'departments of production' that encompass the total social capital of a given economy, Bortkiewicz reconstructs Marx's transformation scheme in terms of a series of equations positing the conditions of simple reproduction. The three departments of production are Department I, which produces means of production (the elements of constant capital), Department II, which produces workers' consumption goods, and Department III, which produces capitalists' consumption ('luxury') goods. The conditions of simple reproduction in such a three-department model are represented in the following system of equations, where the numerical subscripts refer to the three departments of production, and where it is also assumed that demand equals supply:

(1) $c_1 + v_1 + s_1 = c_1 + c_2 + c_3$ = total value, Dept. I
(2) $c_2 + v_2 + s_2 = v_1 + v_2 + v_3$ = total value, Dept. II
(3) $c_3 + v_3 + s_3 = s_1 + s_2 + s_3$ = total value, Dept. III

For Bortkiewicz, the challenge is now to transform this 'value' expression of the conditions of simple reproduction into a 'production price' expression, while simultaneously maintaining the equality of the social aggregates at the heart of Marx's theory (surplus-value = profit; total value = total production prices) and conforming to 'the law of the equal rate of profit'. Marx's own solution to this problem is considered unacceptable by Bortkiewicz because 'it excludes the constant and variable capitals from the transformation process, whereas the principle of the equal profit rate … must involve these elements'.[72] To 'correctly' transform commodity values into prices of production, the values of the input commodities c and v need to be transformed along with the magnitude of surplus-value produced.

This correction seems necessary once Marx's own mathematical illustrations are replaced by one reflecting the conditions of simple reproduction. Operationalising Bortkiewicz's procedure, Sweezy divides a hypothetical capitalist economy into three departments of production, each with its own unique composition of capital. Applying Marx's transformation procedure to this model, he finds that a discrepancy arises between the quantity of constant capital produced in Department I and the total quantity of constant capital consumed in production by all three departments. A similar discrepancy arises

72 Bortkiewicz 1975, p. 201.

with respect to the variable capital produced and consumed. Thus, *assuming variance in capital compositions as between departments of production*, Marx's solution to the transformation problem appears to be flatly inconsistent with an equilibrium model of simple reproduction.

The 'correction' to Marx's transformation procedure recommended by Bortkiewicz and Sweezy proceeds in two steps. First, as already noted, the general rate of profit is to be applied to c and v as well as to s. If this is done, and if the 'unit of account' of both value and production price is unity ('1'), then a result is obtained in which a direct correspondence between the output of each department (expressed in price terms) and the income of each department (again in price terms) is achieved. As Sweezy puts it: 'The output of Department I equals the constant capital used up; the production of Department II equals wages paid out; and the output of Department III is sufficient to absorb the total surplus-value accruing to the capitalists.'[73] This procedure also allows for total value equalling total production prices, and total surplus-value equalling total profits. (A mathematical example of the procedure is furnished by Sweezy, but not by Bortkiewicz).

All appears well until the assumption is dropped that the unit of account of the price and value expressions will be the same. Sweezy's example of the 'corrected' transformation procedure then becomes a 'special case'. In general, *gold*, as the 'common measure' of value and price, will not have the *same* price and value. That is to say, the price and the value of gold (as the 'money commodity') will diverge from one another whenever the capital composition of the gold industry rises higher or falls below the composition of the social capital as a whole (the 'socially average' capital composition). The consequence will be that the accounting measure of value and production price will no longer equal '1' in both the value and price schemes. Thus, the specific capital composition of the gold industry will unavoidably affect the entire transformation process.[74] The upshot is that the Bortkiewicz-Sweezy alternative to Marx's transformation procedure restores the conditions of simple reproduction (equilibrium), allows for the identity of total surplus-value and total profits, but also requires that total value deviate from total price whenever the capital composition of the gold industry diverges from the social average.

In assessing the significance of the Bortkiewicz-Sweezy handling of the transformation process, we need to be clear as to how it differs from Marx's own procedure. It should first be noted that Sweezy *does not use* Marx's three-

73 Sweezy 1968, p. 120.
74 Sweezy 1968, pp. 121–2.

capital illustration of the transformation process but constructs his own, quite different one. The data in Table 2 cannot be reconciled with a model of simple reproduction even if Bortkiewicz's method of transforming cost price along with surplus-value is applied. The reason is straightforward: Marx's own mathematical models of the transformation process never assume the conditions of simple reproduction or a static interdepartmental equilibrium. Marx is solely concerned with establishing the effects of variant capital compositions as these influence individual production prices, not as they affect whole departments of production. In short, Marx is not concerned with reconciling his transformation procedure, developed in *Capital III*, with the model of simple reproduction elaborated in *Capital II*. Nor is he concerned with the vicissitudes of the composition of capital in the industry that produces any standard 'money commodity' (such as gold), since Marx's own transformation procedure *abstracts from* the specific physical properties of the money commodity and assumes that the money expressions of both value and production price are forms of appearance of socially equalised and socially necessary labour time.

Bortkiewicz and Sweezy, by contrast, begin by assuming simple reproduction and then proceed to the further assumption that the problem of variant capital compositions needs to be understood in relation to entire 'departments of production' – although they nowhere provide a theoretical rationale for the postulate of variant capital compositions as between whole departments.

One possible rejoinder to Bortkiewicz and Sweezy is to suggest that departments of production will tend to mirror the composition of the social capital as a whole. Since the assumption of interdepartmental divergence of capital compositions is essential to Sweezy's critique of Marx's transformation procedure, this line of argument is a perfectly relevant one, and the onus is really on Sweezy and his supporters to establish *why* unequal compositions as between departments should be postulated.[75]

Another line of response to the Bortkiewicz-Sweezy 'correction' was formulated by Winternitz, who argues that it is arbitrary to hold the ratio of prices and values in Department III equal to 1 in order to ensure the equivalence of gold's price and value expressions.[76] Selecting *this* as the 'invariance postulate' can only lead to the conclusion that values and production prices will generally diverge just as soon as the postulate is relaxed. Winternitz argues that a different invariance postulate should be selected, one more consistent with Marx's basic theoretical assumptions. Accordingly, he recommends the addition of a

75 This point has been pursued by Mage 1963, p. 238.
76 Winternitz 1948, pp. 276–80.

further equation to the transformation formula, one positing the equality of aggregate values and aggregate production prices. The result – once 'cost price' is transformed in accordance with Bortkiewicz's method – is a discrepancy between the magnitude of total profit and the magnitude of surplus-value.

Winternitz's challenge to Bortkiewicz was of a genus that was to be repeatedly attempted by participants in the 'transformation-problem' debate. For a considerable period of time, Bortkiewicz's 'correction' of Marx was interrogated primarily on his own terrain of formal mathematical models, with only his 'secondary' premises receiving the sort of scrutiny that should have met his more fundamental theoretical assumptions. Consequently, the debate tended to bog down in arguments concerning the plausibility of assorted invariance postulates and their unique effects on a model that appeared congenitally resistant to maintaining both of Marx's aggregate equalities along with the equilibrium conditions of simple reproduction – all of which only served to underscore Seton's observation that 'there does not seem to be an objective basis for choosing any particular invariance postulate in preference to all the others, and to that extent the transformation problem may be said to fall short of complete determinacy'.[77]

Rather than quarrel over which invariance postulate is most appropriately plugged into a Bortkiewicz-type model of value-price transformation, it would seem more fruitful to question some of the basic presuppositions of that model: the *need for* 'simultaneous valuation' of cost price and surplus-value, and the appropriateness of seeking to establish a theoretical space in which the conditions of simple reproduction (relating to the turnover of the total social capital) intersect the issue of value-price transformation (which concerns the results of the interactions of *many individual capitals*). Since such an examination must return us to some of the fundamental issues posed by Marx's theory of value, and since the transformation problem continues to figure prominently in the contemporary value controversy, I shall defer further discussion of these points to the next chapter.

77 Seton 1957, p. 153.

CHAPTER 5

Currents within the Value Controversy

This chapter provides an overview and critical assessment of the controversy among Marxist and neo-Marxist theorists concerning the content, probity and implications of Marx's theory of value beyond its 'first phase', as reviewed in the last chapter. As with many other controversies that developed following the revival of Marxism in the 1960s and 1970s, the 'second-phase' of the value controversy has testified to the willingness of Marxist intellectuals to entertain a variety of interpretations of Marx's theoretical legacy and to part company with him on issues of the utmost importance. Unfortunately it has also testified to their ability to debate such issues in a fashion that renders them relatively inaccessible to the non-specialist. In consideration of this problem, I shall try to 'interpret' Marx's value theory and the ongoing debates surrounding it in such a way as to highlight what I take to be the *key postulates* of the capitalist law of labour value. This will, I hope, contribute not only to a better understanding of some of the contested issues, but also to a clarification of *what is at stake* in this controversy, something which is too rarely discussed by its participants.

The principal idea developed here as well as in the next chapter is that Marx's theory of value constitutes the unity of a *qualitative* treatment of the value-form (exchange-value/money-price) and a *quantitative* concern with the 'substance of value'. Its conceptual nexus is considered to be 'abstract labour' – a category that bridges the divide between value's 'particular' and 'universal' aspects. Key to this interpretation is an extension of the ontological reversals described by Marx in his discussion of the value-form to include the relation between abstract labour, understood as *a real social structure*, and commodities, as sensuously concrete particulars. Such a conceptualisation furnishes a much-needed ontological and methodological basis for sustaining the key postulates of what I call the 'fundamentalist' approach to Marxian value theory as against a 'neo-orthodox' approach that strips Marx's value theory of much of its 'operational' significance. These fundamentalist postulates, I argue, pertain to the laws of motion of the capitalist economy as a whole, and it is therefore a mistake for those who defend them to pursue a theoretical agenda that tilts Marx's value theory in the direction of accounting for 'relative equilibrium prices', a project having little to do with disclosing the historical-structural limits of capitalism.

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1 The Second Phase of the Value Controversy

The origins of the second phase of controversy surrounding Marx's theory of value, a phase now a half-century old, is easily specified. First, by the 1960s, the critique of neoclassical economic theory undertaken by the Cambridge School of Piero Sraffa, Joan Robinson, Nicholas Kaldor et al. had constituted itself as a major 'neo-Ricardian' challenge to some central tenets of marginalism and was doing much to encourage the rehabilitation of some characteristic concerns of classical and Marxian political economy: in particular, the problem of the source, measurement and distribution of an economic surplus. Second, the renewed interest in Marx's thought resulting from the New Left/student radicalisation of the 1960s focused increasingly upon Marx's 'economics' as the world capitalist economy experienced worsening dislocation and malaise after 1970 (the collapse of the Bretton Woods monetary agreement, falling rates of profit in several of the advanced capitalist countries, and the worldwide recession of 1974–75). Third, interest in Marx's theory of capitalist crisis was spurred during the 1970s by the apparent exhaustion of Keynesian macro-economic policy, which had manifestly failed to anticipate the specific features of the emerging economic crisis of Western capitalism as popularly encapsulated in the notion of 'stagflation'.

These economic, political and intellectual developments provide the socio-historical backdrop to our discussion. By way of introduction to the latter's principal themes, a brief characterisation of each of its main 'camps' or 'currents' will help to further specify the context and significance of this second major phase of debate surrounding Marx's theory of value.

1.1 *Neo-Ricardianism and the Ricardian-Marxist Orthodoxy*

The neo-Ricardianism that initially came to the fore in the 1970s encompasses both a 'left wing' that considers itself Marxist in some circumscribed sense and a right wing that has been primarily concerned with what Latouche aptly called the 'reswitching of dominant ideologies' within the economics profession.[1] Our concern here is strictly with 'left neo-Ricardianism', that is, with the varied attempts of Marxist or neo-Marxist economists to either reconcile Piero Sraffa's critique of neoclassicism with Marxian political economy or to substantially revise the latter in light of the former.

1 Latouche 1976. By the twenty-first century, this more conservative wing of neo-Ricardianism had substantially merged with post-Keynesian and 'institutionalist' schools of thought on the boundaries of 'mainstream' and 'heterodox' economics.

This characterisation of left-wing neo-Ricardianism already suggests a certain tension within its ambit that should be noted. Neo-Ricardian Marxism began as an attempt to employ Sraffa's system to resuscitate a rather moribund 'orthodox' understanding of Marx's political economy. To Ronald Meek and Maurice Dobb, two of the stalwarts of this orthodoxy during the darkest days of the Cold War, Sraffa's system was in no sense a threat to Marx's fundamental ideas. Rather, it was a welcome ally in the project of analysing economic phenomena – in particular, the distribution of net income, inclusive of a 'surplus' – in a manner that takes into account the existence of an *antagonistic class structure*. But the fact that both of these eminent Marxist scholars ended their careers by touting the potential superiority of Sraffa's framework over Marx's attests to more than a weariness in upholding a logically untenable orthodoxy; it also suggests that both men – in common with many of their 'orthodox' colleagues – may well have had an essentially Ricardian appreciation of Marx's economics all along. Hence, it might legitimately be inferred that *one* of the streams leading into modern 'neo-Ricardian Marxism' is a certain tradition of Marxist orthodoxy itself. Indeed, the collapse of this 'Ricardian-Marxist' orthodoxy was an important formative influence in the development of this school.

If Meek and Dobb emphasised the possibility and fruitfulness of a friendly encounter between Sraffian and Marxian economics, a younger generation of radical neo-Ricardians sought to substantially overhaul Marxian political economy on the basis of Sraffa's model. Indeed, it was the Sraffa-based critique of Marx's value theory as articulated by Ian Steedman, Geoff Hodgson and others that came to define the neo-Ricardian position within the contemporary value controversy – and it is this strain of neo-Ricardianism that will principally concern us.

1.2 *Neo-orthodoxy*

The second camp within the value controversy is constituted by what I call the 'neo-orthodox' current.[2] Far more than the neo-Ricardian Marxists, the neo-orthodox theorists encompass a substantively heterogeneous range of opinion, although they are united by a strong emphasis on 'value-form' analysis and by a commitment to specifying the distinctive methodological underpinnings of

2 I have selected this term because what unites this group of Marxian value theorists is their reassertion of the importance of Marx's own 'value-form' analysis (making them 'orthodox' to some degree) while also rejecting or downplaying Marx's 'value-magnitude' analysis (making them 'revisionist' as well). This combination of orthodoxy and revisionism is captured, if imperfectly, by the term 'neo-orthodox', which, it should be said, is a descriptor that encompasses many irreconcilable positions as to what 'good value-form theory' involves.

Marx's political economy. The general though hardly unanimous disinterest of the neo-orthodox theorists in the analysis of the *magnitude* of value, as well as their understanding of Marx's project as essentially a *critique* of political economy rather than as a 'positive' development of it, invites a characterisation of neo-orthodoxy as a 'sociologising' or 'philosophising' current within the value controversy.[3]

In part, the neo-orthodox current was and remains a reaction to the collapse of the Ricardian-Marxist orthodoxy and the rise of neo-Ricardianism, in part a relatively autonomous development owing its origins to an encounter between the humanist philosophical preoccupations of the early New Left (Hegel, Lukács, Marcuse, alienation theory, etc.) and Marx's critique of political economy in *Capital I*. The theoretical result of this encounter – a commitment to the analysis of the value-form and a reassertion of the critique of economic fetishism as fundamental to Marx's critical project – has led some to identify this current with the work of Isaac I. Rubin, even though others regard Rubin's general approach as no less consistent with that of the Marxist 'fundamentalists'.

1.3 *Fundamentalism*

The fundamentalist camp originated as an inchoate and somewhat disparate current that shares certain positions in common with both the Ricardian-Marxist orthodoxy and neo-orthodox value theory. Since the term 'fundamentalist' has often been used to refer to all adherents of Marxian economic 'orthodoxy', I should make clear that I reserve the designation to those who are more concerned with the overall coherence of Marx's political economy than with the 'letter' of his analysis. In particular, the fundamentalist project involves a commitment to reviving interest in Marx's analysis of the value-form in order to *strengthen* his value-magnitude analysis rather than to abandon the latter in the neo-orthodox fashion. This orientation also distinguishes the fundamentalists from orthodox Ricardian-Marxists, who have traditionally been almost exclusively concerned with the magnitude of value and neglectful of its form. The term 'fundamentalist' seems appropriate in that it indicates a return to *both* aspects of Marx's fundamental theoretical program: the analysis of the form and the magnitude of value, as well as a concern with the relationship of each to the *social substance* of value: abstract labour.[4]

3 Perhaps the fullest and best-known expression of this tendency is the work of Postone 1993.

4 It should go without saying that none of this implies a *dogmatic* stance of the type associated with religious fundamentalism!

My goal in what follows is to highlight some of the more distinctive theoretical and methodological positions of each of these broad currents of thought by drawing upon and critically interrogating the work of some of the more prominent participants in the value controversy as this developed between the 1960s and the 1980s. A shorter section summarising some significant developments in the controversy in more recent decades will follow this.

2 The Neo-Ricardian Challenge

There are some very substantial reasons for labelling the ostensibly Marxist followers of Piero Sraffa's economics as 'neo-Ricardians' – even though the term 'post-Sraffians' would probably do just as well. These reasons have less to do with the specific positions of Ricardo and the neo-Ricardians as with certain methodological and theoretical considerations pertaining to a common 'problematic' – one quite distinct from Marx's, yet one that has recurrently been suppressed and revived within the boundaries of bourgeois economics: the complex of issues surrounding *the distribution of income, conceived at least in part as a distribution of surplus*. Without anticipating too much of what will be discussed later, it should be observed that such a problematic differs from Marx's in two decisive respects: in its focus on the distribution rather than the production of a surplus, and in its disregard of the socio-historical form of surplus production and economic reproduction in general. These Ricardian features are very much in evidence both in Sraffa's work and in the neo-Ricardian Marxists' critique of Marx's value theory. We begin with a consideration of Sraffa's project as it relates *indirectly* to Marx's.

2.1 *Sraffa and Marx*

Whatever his followers might believe about the wider implications of his theoretical model, Sraffa apparently had a well-defined and quite limited objective in mind when he wrote *The Production of Commodities by Means of Commodities*. This objective was not at all to undermine the credibility of Marx's critical analysis of capitalism, but to develop an 'internal' or 'immanent' critique of a number of marginalist propositions that had long served as pillars of the neoclassical system, as well as to adumbrate some ideas suggestive of an 'external' critique of the latter's 'general equilibrium' analysis.

Sraffa develops his critique on the basis of a series of models that illustrate how prices of production are constituted. Throughout his analysis he abstracts from the marginalist problem of demand-side determination of market prices. His concern is rather with the influence of such distributional variables as the wage rate and the rate of profit on commodity prices, as commodities emerge from a production process in which they appear as the products of other commodities – namely, the commodities comprising the physical means of production and the wage-bundle.

Sraffa constructs his central economic model by successively considering: 1) a subsistence economy in which the same commodities appear as inputs and outputs; 2) a surplus-generating economy governed by the principle of the equalisation of profit rates; 3) an economy in which the wage varies according to labour's 'share of the surplus'; and 4) the economic conditions of existence of a 'standard' or composite commodity that can be used in the analysis of income distribution over a given period of time.

The central equation of Sraffa's 'standard system' is

$$r = R(1\text{-}w),$$

where r is the rate of profit; R, the ratio of net product (Sraffa's surplus) to the means of production; and w, the wage per unit of labour (or the wage component of national income). After demonstrating that the standard system is unique, Sraffa employs his equation for a variety of theoretical purposes. The underlying premise of all of these investigations is that once either of the distributional variables is fixed (that is, either the wage or profit rate), we can then 'determine' – meaning, calculate – both prices and the real level of the other distributional variable. Accordingly, within Sraffa's system, either the wage rate or the profit rate can function as the 'independent variable' for the system as a whole.

It would be tangential to our purpose to explore the implications of Sraffa's economic model for the critique of marginalist theory. However, it is important to identify some of the ways in which the Sraffa model diverges from Marx's approach to the analysis of capitalism.

First, Sraffa does not define commodities as socio-historically specific manifestations of social labour (that is, as the *social form* of the product of labour under determinate conditions), but rather as *things* – as physical inputs or outputs of a production process that is regarded entirely from a 'technical' point of view. Accordingly, Sraffa's conception of commodity production is *fetishistic and physicalist*.

Second, intimately related to this fetishism is the divergence between Marx's and Sraffa's respective *objects of analysis*. Marx is concerned with analysing the role of *social labour* in generalised commodity production (that is, with the capitalist production of commodity-values *by means of labour*), while Sraffa's economic model is given historical specificity only through his assumption of the operation of a 'uniform rate of profit' – an assumption that necessarily refers to the operations of a capitalist economy. Yet, in Sraffa's model of capitalism, a *proxy* represents labour: the wage goods that enter into the reproduction process. Clarity on this point is crucial: the problem with Sraffa's model from Marx's standpoint is *not* that it allows for the complete elimination of living labour from production (conceived as a physical-technical process of producing goods), for Marx himself clearly envisaged the possibility of a more-or-less complete automisation of the material production process. The problem is that such a possibility is present in a model that involves such phenomena as profits, wages, prices of production, and equalised rates of profit – that is, phenomena that presuppose the institutional presence of capitalist relations of production. From Marx's standpoint, the presence of such social and property relations demands that the production process be approached not only in respect to its technical or physical aspects, but above all in respect to its *social* aspects (that is, production as valorisation and as class exploitation). A social production system that requires the class appropriation of surplus labour *cannot dispense* with labour as an input to production. Yet Sraffa sidesteps this crucial issue by banishing all considerations of class relations to the sphere of distribution.

Third, Sraffa's concept of the 'surplus' is a purely physical aggregate, the origins of which remain unspecified and the magnitude of which is co-extensive with Marx's 'net product' (the sum of variable capital and surplus-value expressed in use-values). In a very rough sense, this surplus refers to what is available for human consumption and reinvestment after the consumed material inputs have been 'replaced'. To be sure, Sraffa acknowledges alternative ways of treating the wage. Indeed, in his simplest model, he treats the wage – or, more specifically, the bundle of wage goods – as a *necessary* input (subsistence for workers), and suggests that the ideal procedure would be to treat a portion of the wage as subsistence (a necessary input) and a portion as a share of surplus. But in order to entirely abstract from the *social* or *cultural* determinants of subsistence, Sraffa ends up treating the *entire wage* as a component of the surplus.

By treating wages as part of the surplus, Sraffa places himself decisively at odds with Marx. Implicitly, his procedure denies that labour is a 'necessary' input to production in an economy based on generalised commodity production and geared toward profit-maximisation. The significance of labour and of labour's income, the wage, is reduced to its role in limiting capital's 'share' of the surplus within the realm of distribution. By definition, the role of labour *in creating surplus-value* is denied. Again, the problem with this is *not* that in all-conceivable production systems or economies living labour is indispensable to the creation of a physical surplus; the problem is that Sraffa's physical surplus can be and is expressed in terms of production prices divisible into profits and wages, and is therefore constitutive of a 'uniform rate of profit'. And, once again, this can only mean that Sraffa's physical surplus partakes of a *capitalist* social form. Hence, Sraffa moves *directly* from a surplus conceived as a physical aggregation to a 'price-form' (profits and wages), while effectively denying the *necessary* role of social labour in mediating this transformation.

As we shall soon see, the neo-Ricardians regard this direct movement as a positive advantage of Sraffa's system. But from Marx's standpoint, whatever 'technical' advantage is gained in this way is more than offset by the enormously misleading implications of treating price as a direct and immediate external form of 'physical products' rather than as the money-form of the social labour that enters into their production. To put the matter bluntly, the assumption built into Sraffa's system is that one can speak of prices, profits and wages *without reference to social labour*, whereas in Marx's view these phenomena could have no existence whatsoever except in an economy founded upon the class appropriation of monetised surplus labour.

These fetishistic features of Sraffa's system are, of course, just as consistent with neoclassical notions as they are inconsistent with Marx's conceptions. Arguably, Sraffa can be excused for employing them as part of 'an internal critique' of the neoclassical system; but there would seem to be altogether less justification for regarding his models as a ready-made basis for 'an internal critique' of Marx's theory. And yet this is precisely the way many neo-Ricardians have treated it.

Fourth, although attempts have been made by some neo-Ricardians (notably Hodgson)[5] to develop a theory of exploitation consistent with Sraffa's system, the phenomenon of capitalist exploitation really does not belong to a world in which commodities are produced by 'things'. It is therefore strictly incorrect to state that in Sraffa's system the phenomenon of exploitation belongs to the sphere of distribution; the *most* that one can say is that *if* exploitation occurs in Sraffa's system, it can only occur externally to production. This follows from the fact that living labour is in no sense an essential ingredient of Sraffa's system and also from the fact that Marx's 'labour power' is *not* among the commodities that appear as means of producing other commodities. Accordingly, the production of the surplus is in no way conceived as a result of class exploitation.

5 Hodgson 1980, 1981.

Fifth, for Sraffa, a surplus-generating economic system is one experiencing what Marx would have called 'expanded reproduction'. But for Marx the existence of a surplus must be understood in social as well as physical terms. Expanded reproduction can occur with or without exploitation; but, under capitalism, a surplus product can only result from the coercive extraction of *surplus labour* within the sphere of production. Furthermore, the appropriation of surplus-labour under capitalism must take the form of the appropriation of *surplus-value* as realised money profit. None of this is captured in Sraffa's system, but neither does it become 'redundant' or 'inessential' on this account either.

In light of these divergences between Marx and Sraffa, it is quite remarkable that the once orthodox Marxist economist Ronald Meek could have concluded a discussion of Sraffa in the following way:

> [O]ur Sraffa-type sequence of models does essentially the same set of jobs which the Marxian labour theory was designed to do; it starts, as Marx's system did, with a 'prior concrete magnitude' which limits the level of class incomes; it is based on the same view about the order and direction of determination of the variables as Marx's was; it is just as well suited to the application of a 'logical-historical' method of approach; and it has the great additional advantage that it contains a built-in solution of the 'transformation problem'.[6]

The notion that Sraffa's system contains 'a built-in solution' to the so-called transformation problem certainly explains much of its appeal to many Marxists who had grown exasperated with this issue. However, it should be clearly understood that Sraffa suggests no 'solution' other than demonstrating that value and surplus-value can be ignored, or treated as 'redundant', in the derivation of prices of production and profits from 'physical data'.

2.2 *Ian Steedman's 'Sraffa-based' Critique of Marx*

The starting-point of Steedman's study is the traditional one: the 'transformation problem'. His handling of this issue is, however, far from traditional. After reaffirming the standard Bortkiewiczian criticism of Marx's transformation procedure (namely, that Marx failed to transform the prices of inputs), Steedman presses a somewhat different criticism: that Marx's 'solution' 'is internally incoherent, even when input prices are transformed'.[7] This assertion

6 Meek n.d. [1956], p. xlii.
7 Steedman 1981, p. 35.

rests upon what is a central proposition of his critique, namely that Marx's value magnitudes are 'redundant', as well as 'irrelevant' to the degree that they deviate from their price correlatives.

Steedman correctly argues that in Marx's own theory the value rate of profit and the money rate of profit must diverge once prices diverge from values. But if this is so, the question then becomes, *which* of these 'distinct' rates of profit is the 'relevant' one? It is no good to say that they have relevance at 'different levels'. By Steedman's lights, only the money rate of profit can affect the concrete micro-economic decisions of real capitalists, and therefore only the money rate will influence capital mobility, evince a tendency to equalise, and constitute a uniform rate of profit. Consequently, it is the uniform money rate of profit that is the *significant* rate of profit for capitalism.

Steedman's argument requires response at two levels. First, while he accepts the notion that 'an abstraction' (the uniform rate of profit) can have a real bearing on the business decisions of capitalists, he is insistent that only the uniform money rate will exercise this influence. But a problem presents itself here: capitalists *do not* calculate a money rate of profit on a 'uniform' basis. The uniform rate of profit is only a *tendential* phenomenon that exerts its influence, not as a calculable guide to wise micro-economic investment decisions, but as a limiting factor – a 'parametric determinant' – on the amount of profit a given capital can earn. Second, it can be shown that Steedman's understanding of the relationship between the value and money rates of profit is problematic. Steedman specifies this relationship in a way that owes much more to Ricardo than it does to Marx, since it is predicated on a rather crude understanding of value as *embodied physical labour*.

The real core of Steedman's book, however, is not his revelation of the supposed inconsistency or incoherence of Marx's value-price transformation. Rather, it is his argument that Marx's value magnitude analysis is *redundant* to the Sraffian method of deriving price phenomena from physical factors and that it cannot meet the challenge posed by the problem of 'joint production' – a problem that Sraffa exploited to much effect in his critique of neoclassical capital theory.

It is unnecessary to reproduce Steedman's own model in detail here. Suffice it to say that his Sraffa-like 'physical' depiction of a simple capitalist economy is rendered in terms of 'units' of labour and of raw materials like iron, gold, and corn, and that this physical data is the basis for specifying the same economy in terms of value (by which Steedman means the 'socially necessary labour' directly and indirectly consumed in production). The upshot is that 'from knowledge of the physical conditions of production and the real wage,

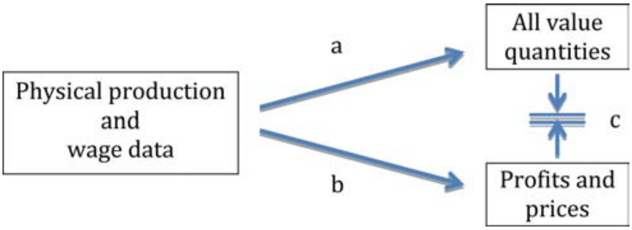

FIGURE 1 Steedman's illustration of the 'redundancy' of values

one can determine values, the value of labour power and surplus-value', as well as such quantitative relationships as the rate of surplus-value.[8]

Steedman's argument may be summarised as follows. The physical data of an economy determines both the value magnitudes of Marx's analysis and the price magnitudes that find phenomenal expression. But since value magnitudes are generally inconsistent with price magnitudes (as the debate around the transformation problem has putatively established), calculation in value terms is redundant and irrelevant. One does not *need* to specify economic phenomena in value terms in order to derive (calculate) prices and profits. This is illustrated by Figure 1, which Steedman comments on as follows:

> The solid arrow labeled (a) shows that from the physical data all the value quantities can be explained … Arrow (b) shows that from the same data one can explain profits and prices, etc. … The dashed and 'blocked off' arrow (c) represents the fact that one cannot, in general, explain profits and prices from value quantities as set out in the usual value schema, that s/(c+v) is not the rate of profit, etc. We thus have to picture our theoretical structure as having a 'fork-like' character, with a 'value prong', arrow (a), and a 'profit-price prong', arrow (b). *There is*, in general, *no way from one prong to the other*.[9]

Although Steedman provides no corresponding figure to illustrate what he understands to be Marx's 'theoretical structure', it seems likely that Figure 2 captures the essence of Marx's model of price and profit determination from Steedman's point of view. At this point we need only note that much of the cogency of Steedman's charge of 'redundancy' depends on the adequacy of the account of Marx's theory represented by this figure.

8 Steedman 1981, pp. 41–2.
9 Steedman 1981, p. 49.

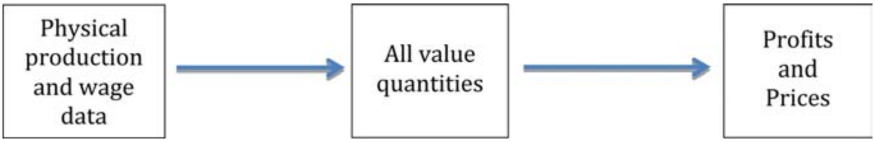

FIGURE 2 An illustration of Steedman's account of Marx's theory

The fundamentals of Steedman's critique are set out above, and all refinements to it rest upon a common set of theoretical assumptions. This is important because, as Steedman himself insists, if one wishes to contest what is essentially an 'argument in logic', one must do so 'either by finding a logical flaw in the argument or by rejecting explicitly and coherently one or more of the assumptions upon which it is based'.[10]

The second pillar of Steedman's critique of Marx concerns the compatibility of Marx's theory of value with the 'real-world' problem of 'joint production'. Steedman tries to show that in cases where some production processes result in joint products (for instance, mutton and wool), commodity values, calculated as quantities of embodied labour-time, may well be indeterminate. Further, he suggests that when values *are* determinable such cases can give rise to situations in which *negative* values and *negative* surplus-value appear alongside positive prices and a positive rate of profit. Both of these claims, particularly the latter one, appear to strike a fatal blow to the analytic integrity of a labour value theory of price and profit determination.

Later in the chapter, Steedman's argument will be considered again in connection with the responses it has provoked.

2.3 *The Neo-Ricardian Challenge to Marx in Perspective*

Many years have now passed since the publication of Steedman's *Marx After Sraffa*. Contrary to the expectation of many of its enthusiasts, however, this work failed in its stated purposes – to end the debate surrounding Marx's value-magnitude analysis, and to redirect the energies of Marxists to the construction of a new materialist political economy on a post-Sraffian basis. It did, however, mark the culmination of a particular stage of the value controversy by clearly establishing the full implications of adopting Sraffa's 'physical magnitudes' approach. There was henceforth no longer a question of 'reconciling' Sraffa and Marx, or of 'reading' Sraffa as 'complementary' to Marx; the question became one of *choosing* between them. Whether or not Steedman's critique of Marx holds up, it was his lasting achievement to have sharpened the

10 Steedman 1981, p. 49.

lines of demarcation within the value controversy and forced its participants to more rigorously clarify their positions.

While Steedman's critique had a patina of originality, it was largely an extremely able and concise rehearsal of old complaints about Marx's treatment of a number issues – the value-price transformation, the reduction of heterogeneous to simple labour, etc. – as seen through the eyes of a follower of Sraffa. Despite his avowal that he was aware of the 'qualitative' or 'value-form' aspects of Marx's theory, Steedman never allowed his appreciation of them to influence – he might say 'confuse' – his portrayal of Marx's analysis in its quantitative dimensions. His Marx is theoretically and methodologically very close to Ricardo, a Marx whose analysis in the third volume of *Capital* appears to be, at best, unrelated to his analysis in the first.

This raises an important consideration pertaining to the 'periodisation' of the controversy. Up to the mid-1970s, students of Marx's *Capital* tended to focus their attention on *either* the 'value-form' analysis of *Capital I* or the 'value-magnitude' analysis of *Capital III*. Neo-Ricardians like Steedman, Hodgson, Lippi and others tended to engage a range of issues in Marxist political economy as these had been represented by the Ricardian-Marxist orthodoxy. And what the orthodox tradition had in common with neo-Ricardianism was a marked preoccupation with value-magnitude analysis, conceived in 'physicalist' terms: that is, with the mathematical quantification and modeling of Marx's value categories with a view to addressing a number of narrowly-conceived 'economic' problems that mainstream economists would recognise as germane to their 'positive' analytical agenda. Most of the Marxist economists who distanced themselves from the old orthodoxy and neo-Ricardianism were otherwise occupied – primarily with the qualitative (philosophical and sociological) aspects of Marx's theory as contained in the value-form analyses of *Capital I*.

Between these two currents of 'Marxian political economy' there was little real communication. As Ben Fine aptly observed: 'each strand subscribed to a different method, each addressed a different problem, making little if any contribution to that of the other side, and each engaged on textual terrains that were not only distinct but which were also separated by the vast majority of both Volumes I and II of *Capital*. At the same time, the situation was described as a dialogue of the deaf (even if it was hardly a dialogue of the dumb)'.[11] This general configuration of theoretical interests and analytical partisanship appeared to shift with the successive contributions of Yaffe (in 1975), Gerstein (in 1976) and Shaikh (in 1977) to the discussion of the value-price

11 Fine 1986, p. 7.

transformation. For, despite their differences, each of these was characterised by an attempt to engage the value-magnitude issues on the ground of a 'truer' appreciation of Marx's concept of value than that recapitulated in Steedman's notion of value as 'embodied socially-necessary labour time'.

3 Neo-orthodoxy and the Rediscovery of the Value-Form

Although it emerged partly in reaction to the post-Sraffian critique of Marx, the neo-orthodox current has also been committed to transcending the 'Ricardian' reading of Marx popularised by such prominent Marxist economists as Dobb, Meek and Sweezy. From its earliest formative days, most of its adherents have taken a quite consistent stand with respect to what has traditionally been the central issue of the value controversy: Marx's value-price transformation. In general, the neo-orthodox tack on this matter has been to (a) deny that this is a 'real problem' for Marx's overall theoretical structure, once this is properly understood, and (b) affirm the 'correctness' of Ricardian or neo-Ricardian criticisms of the orthodox understanding of Marx's handling of the transformation of values into prices of production. Thus, Ira Gerstein, in a seminal neo-orthodox article originally published in 1976, concedes that 'the point made by Bortkiewicz [concerning the transformation of inputs] is valid (although his conclusions from it are not) and must be confronted',[12] while Diane Elson, writing in a later stage of the controversy, allows that '[t]here is no doubt that within its own terms [Steedman's] critique of the theory of value, as an explanation of equilibrium prices in terms of labour quantities, is quite correct'.[13]

Concessions of this sort may seem an odd way to defend Marx's theory of value, but they need to be understood as one aspect of the neo-orthodox attempt to *redefine* the central issue of the value controversy. In this respect, the neo-orthodox project has been to challenge the notion that Marx subscribed to a Ricardo-style theory of value as *embodied labour* and to show that Marx's concept of abstract labour is actually inconsistent with any such theory. From this standpoint, the traditional debates surrounding the 'transformation problem' can then be dismissed as substantially irrelevant to any development within Marx's theory of value and as germane only to those trapped within the (mistaken) framework of an embodied-labour theory of value.

12 Gerstein 1986, p. 72.
13 Elson 1979, p. 121.

The most distinctive features of the neo-orthodox approach to the theory of value may be disclosed by examining three interconnected sets of questions: its critique of the old (Ricardian-Marxist) orthodoxy; its contraposition of abstract to embodied labour; and its response to neo-Ricardianism.

3.1 *Critique of the Old Orthodoxy*

The years 1972–73 marked something of a turning point for the modern value controversy. They saw the publication in English of Rubin's *Essays on Marx's Theory of Value* for the first time, as well as the appearance of Geoffrey Pilling's path-breaking article on 'The Law of Value in Ricardo and Marx'. As already noted, Rubin's work constituted an early attempt to specify the relationship between Marx's theory of value and the fundamental principles of historical materialism. Pilling's aim was similar, if more narrowly focused: to clearly distinguish Marx's and Ricardo's respective problematics while demonstrating that many influential Marxist economists had developed an unacknowledged Ricardian appreciation of Marx's work. Maurice Dobb was a case in point. According to Pilling, Dobb's view that 'Marxism is superior in an "operational" sense in that "labour" provides … a constant to which all the other entities in his model can be reduced' betrayed an elementary misunderstanding. Not only was Marx's method inconsistent with the notion of 'model-building', it was not *reductionist* in the way suggested by Dobb: 'The task of Marx's critique of political economy was not one which involved him finding a "constant" in terms of which everything could be quantified but of establishing the laws of mediation through which the "essence" of phenomena manifested itself as "appearance"'.[14]

Ricardo had regarded labour as a 'numeraire' for the measurement of social wealth (including the value of individual commodities); but, argues Pilling, Marx's theory of value was guided by a quite different method and purpose:

> All Ricardo's weaknesses reflect [an] empiricism and resolve themselves into this: that while he starts correctly from the law of value he attempts *immediately* to deal with all the phenomena which conflict with this law … What is lacking in [Ricardo's] *Principles* is any treatment of the process of *mediation* by which the 'forms of appearance' in bourgeois society are connected to the source of their origin, the law of value.[15]

14 Pilling 1986, p. 21.
15 Pilling 1986, pp. 30–1.

This 'process of mediation', in Marx's view, served both to express and obscure the relationship between commodity-producing labour and the price structure constituting the immediate regulating mechanism of economic reproduction.

Gerstein further solidified a distinctive theme of the emerging neo-orthodox approach by noting that the old orthodoxy had tended to identify the value of a commodity with the *concrete* labour producing the commodity, thereby failing to grasp the real significance of Marx's concept of 'abstract labour'. While 'vulgar Marxists' entertained Ricardian preoccupations, Marx himself regarded the value-creating aspect of labour as abstract and 'emphasises that [abstract labour] has a purely social reality'.[16] This points directly to a contrast with Ricardo's 'labour theory of price': 'The reason that Marx's theory of value is not a theory of price is that there is no way to reduce observable concrete labour to social abstract labour in advance, outside of the market which actually effects the reduction'.[17] As for the *measurement* of value, this cannot be done by analysing the immediate conditions of production, that is, through a direct reckoning of units of socially necessary labour time. Abstract labour, as the substance of value, 'can be "measured" only when it takes the independent form of money, a form that poses it against the bodily form of the commodity in which it is embodied.'[18]

Gerstein's emphasis on the money-form as the only possible measure of abstract labour and value is a recurring theme of the neo-orthodox current – but his reference to the abstract labour 'embodied' in commodities is not. Generally, neo-orthodox theorists have argued that the concept of abstract labour should be regarded as wholly incompatible with any 'embodied-labour' theory of value.

3.2 *Abstract Labour versus Embodied Labour*

The starting point of the neo-orthodox attempt to contrapose 'abstract labour' and 'embodied labour' is a critical re-examination of Marx's own handling of the idea of 'value-creating labour'. Neo-orthodox theorists perceive at best an equivocation and at worst a contradiction in Marx's argument. Much of the problem hinges on the following passage from *Capital I*: 'On the one hand, all labour is an expenditure of human labour power, in the physiological sense, and it is in this quality of being equal, or abstract, human labour that it forms the value of commodities. On the other hand, all labour is an expenditure of

16 Gerstein 1986, p. 51.
17 Gerstein 1986, p. 52.
18 Gerstein 1986, p. 53.

human labour power in a particular form and with a definite aim, and it is in this quality of being concrete useful labour that it produces use-values.'[19] Elsewhere in his discussion of the dual character of commodity-producing labour, Marx refers to concrete or 'useful' labours as 'qualitatively different productive activities' that share the quality of being 'a productive expenditure of human brains, muscles, nerves, hands, etc.', thereby implying that *this* is what is meant by 'human labour in general'.[20]

Such a 'physiological' conception of abstract labour appears, however, to be at odds with Marx's insistence (at the beginning of his discussion of the value-form) that 'not an atom of matter enters into the objectivity of commodities as values'.[21] Indeed, Marx goes on to assert 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'.[22]

It is important to note that neo-orthodox theorists have tended to associate a 'physiological expenditure of human labour' *exclusively* with 'concrete labour'. In their view, the actual expenditure of labour on a commodity can *only* bear on that commodity's concrete characteristics as a use-value. In contradistinction, abstract labour is creative of 'social values', but not of physical use-values. Accordingly, concrete labour can find 'embodiment' within a commodity while abstract labour cannot. One may speak of 'embodied concrete labour' but not of 'embodied abstract labour'.

The essential problem with any notion of embodied abstract labour has been well-stated by the fundamentalist theorist Anwar Shaikh: 'It is clear in Marx … that it is not the historical cost of a commodity in labour time, but rather its current cost of reproduction, which determines the magnitude of a commodity's Value. As such, it is not a question of the labour-time "embodied" in a commodity but of the social cost which the current production of the commodity entails'.[23] For this reason Shaikh prefers to use the expression 'abstract labour represented' rather than Marx's 'abstract labour embodied' – even though Marx makes it sufficiently clear that the term 'embodied' should not be taken literally. Does all this boil down then to an arid terminological dispute? The answer is probably yes – even though both neo-orthodox and fundamentalist theorists are right to insist that Marx's notion of 'embodied

19 Marx 1977, p. 137.
20 Marx 1977, pp. 134–5.
21 Marx 1977, p. 138.
22 Marx 1977, pp. 138–9, emphasis added.
23 Shaikh 1977, p. 113.

abstract labour' is theoretically imprecise and potentially misleading. However, when Shaikh refers to the 'abstract labour *time*' required for the production of a given output, he sides with Marx on a substantive theoretical point that appears to perplex many neo-orthodox theorists: the idea that value is created *entirely* within the sphere of production through the expenditure of labour that, under conditions of commodity production, is *both* abstract and concrete.

In this regard, the influential neo-orthodox argument of Himmelweit and Mohun is worth considering:

> The process of the theoretical discovery of abstract labour is not merely a process of mental generalisation, but has a real existence in the reality of the exchange process. The equalisation of products of labour on the market occurs every day, standardised by money, the universal equivalent of value. Since individuals alienate their products as commodities in exchange, so too do they alienate the labour producing those commodities. Abstract labour is a real activity, a social reality, whereby individuals alienate their labour-power from themselves.[24]

Several points in this passage deserve highlighting. First, Himmelweit and Mohun emphasise that 'abstract labour' refers to a *real activity* inserted within a specific socio-historical dimension – an activity pertaining to production for exchange. Second, and more problematically, the real activity to which abstract labour refers does not appear as an activity grounded in production, but appears to involve market exchange at least as much as it involves the actual production of commodities. The 'real abstraction' underlying abstract labour is identified with the activities of individuals in *alienating* 'their products as commodities in exchange'. Accordingly, 'abstract labour' has a purely 'social' existence. It is not conceived as an aspect of productive labour – the other aspect being its *concreteness*. Instead, it is conceived as a 'social reality' springing from the act of commodity exchange – or, at the very least, from the 'interaction' of production and exchange.

Himmelweit and Mohun are certainly correct to suggest that Marx's concept of abstract labour is a real abstraction, while the Ricardian notion of commensurable embodied concrete labour is an 'anomalous assumption'. However, by following Rubin in identifying a 'physiological expenditure of labour' entirely with the concrete aspect of labour, they effectively sever the concept of abstract

24 Himmelweit and Mohun 1981, p. 235.

labour from its *general* basis in the production of commodities. Once this is done, there is a strong tendency to associate concrete labour with the (physical) production process and abstract labour with the (social) exchange process. Since abstract labour is conceived as both the creator and the substance of value, such reasoning can only attenuate the proposition basic to Marx's theory that *value is created by living labour in production*.

One does not need to deny that values are 'purely social' or that 'not an atom of matter enters into the objectivity of commodities as values' in order to affirm that a 'physiological' expenditure of human labour is value-creating *provided* that this expenditure is subject to a process of real abstraction, *occurring in production* even though framed and conditioned by exchange. It is precisely because exchange effects a process of 'equalisation of products of labour on the market' (that is, involves a real abstraction) that *production oriented toward exchange* must take account of the fact that 'physiological labour' is both utility-shaping and value-creating – that is, both concrete and abstract at one and the same time. To deny this is to invite De Vroey's peculiar thesis that value is created 'not in production but at the articulation of production and circulation'[25] – a notion replete with circular reasoning and requiring the most robust of mental gymnastics to entertain.

3.3 *The Transformation Problem and the Response to the Neo-Ricardians*

Himmelweit and Mohun's conception of abstract labour represents just one possible direction of a value-form analysis: one that sublates the problem of the 'magnitude of value' by exalting money as the only possible measure of abstract labour. No doubt, the appeal of this approach is amplified by the apparent ease with which its exponents are able to stave off the neo-Ricardian assault on Marx's labour value formulation. In this way, the 'value-form analysis' – or what Elson calls the 'value theory of labour' – becomes a refuge from the formidable theoretical challenge of articulating the qualitative and the quantitative aspects of Marx's value theory.

The problem with this approach is that if one accepts that 'abstract associated labour has no substantial existence apart from the value form, money',[26] then commodity values appear to be severed entirely from any determination in the conditions of their production, and the way is paved for an effective *identification* of value and price. This result draws the neo-orthodox theorist as

25 De Vroey 1981, p. 173.
26 Eldred 1984, p. 136.

close to neo-classicism as the embodied-labour concept draws the old orthodoxy to Ricardianism and neo-Ricardianism. The ultimate 'banality' of a 'value theory of labour' that denies the exclusive role of productive labour in the creation of *values* (conceived as distinct from and regulative of production and market prices) is well stated by Gleicher: 'When stripped of its Hegelian garb, the [value theory of labour] reduces to the assertion … that the allocation of labour between industries is determined in the context of generalised commodity circulation by the formation of market prices. As such, however, neither the Sraffian, classical Marxist or for that matter neo-classical theorists would deny the validity of this assertion.'[27]

In Gleicher's view, the valid insights of the 'value-form analysis' or of a 'value theory of labour' can be put to good use only if they are presented in a fashion consistent with Marx's 'labour theory of value'. Yet it is just this theory that many neo-orthodox theorists abandon in their haste to avoid a confrontation with the neo-Ricardians on the traditional terrain of the value-magnitude analysis.

Let's examine in turn the responses given by the neo-orthodox school to the 'transformation problem' and the Steedman critique of Marx.

Gerstein approaches the transformation problem as follows: 'The theory of value belongs to the level of production, considered in abstraction, and the general rate of profit to the level of the complex unity of production and circulation. The question then is not how to reconcile the two sides of a contradiction, but how to move or "transform" from one level of analysis to another.'[28] And further: 'The transformation from Volume I to Volume III is not a transformation from value to price, but from value and price considered purely from the point of view of production to value and price as modified by circulation and capitalist competition.'[29]

Gerstein's notion that not only the forms of value but values themselves are 'modified' by circulation and competition should be especially noted since it anticipates the indeterminacy of the neo-orthodox school's treatment of the *source* of value. However, Gerstein also addresses the traditional debates surrounding the transformation problem *on the basis* of the form-analytic insights. In other words, he wrestles with the transformation problem and seeks to 'solve' it in a way consistent with 'forms-analysis' – *while also providing himself with an escape route from the value-magnitude analysis*. Appearing after the publication of Steedman's *Marx After Sraffa*, the approach of Himmelweit and Mohun

27 Gleicher 1985, p. 152.
28 Gerstein 1986, p. 67.
29 Gerstein 1986, p. 68.

is less equivocal. They identify the central problem in Marx's 'solution to the transformation problem' in his notion of surplus-value *redistribution*:

> Surplus-value is not redistributed between capitals so as to equalise the rate of profit, because there is no state *from* which this *re*distribution occurs. At no stage in the circuit of capital is surplus-value attributed to capitals in proportion to the labour-power they consume. A parable of the sale of the commodity leading to redistribution until each capital's share of surplus-value is proportional to the total capital advanced is as misleading as parables of redistribution through history. Redistribution is meaningful only if one can specify a state from which it occurs and a state prevailing after the redistribution.[30]

Once the notion of surplus-value redistribution is dropped, the traditional frame of reference for discussion of the transformation problem is itself transformed. No longer is there a question of developing a mathematical model that assumes a process of *re*distribution (as all the traditional 'solutions' and 'corrections' do); rather the question becomes one of recognising the real contradictions of capitalism and giving them a theoretical reflection: 'The transformation "problem" is therefore a necessary result of the contradictory nature of capitalist production relations: it is a contradiction in reality, and not at all a problem with Marx's theory, which simply conceptualises this reality.'[31] *Not* a problem, in other words, for the value-form analysis of *Capital I*, even if it *is* a problem for Marx's attempt to solve the Ricardian dilemma of reconciling an embodied-labour theory of value with the process of profit-rate equalisation! Once again, if one *begins* with the premise that value is formed in exchange and is only vaguely related to the activity of labour within the sphere of production, it follows that one does not need to concern oneself with value transfers or redistributions amongst different firms or branches of production. The transformation issue becomes a purely 'qualitative' problem of specifying the ways in which the value-form is influenced by circulation and capitalist competition: '[C]ompetition distributes aggregate surplus-value according to total capital advanced, but there is no *re*distribution.'[32]

It is curious that Himmelweit and Mohun speak at one point of the need to conceive 'the value produced in production first in abstraction from competition, and second while allowing for the effects of competition'. For if value is

30 Himmelweit and Mohun 1981, pp. 240–1.
31 Himmelweit and Mohun 1981, p. 241.
32 Himmelweit and Mohun 1981, p. 248.

'produced in production', it must be produced at particular sites and in definite magnitudes. This would seem to mandate the introduction of some notion of 'redistribution' in order to explain the process whereby particular capitals are able to 'realise' values that have been produced by *other* capitals. By rejecting the notion of redistribution, Himmelweit and Mohun are forced to either adopt a 'parable' according to which capitals 'realise' only those values they have produced (which really negates the role of competition and profit-rate equalisation) or embrace the idea that values are 'produced in production' but 'formed' (in the sense of 'quantitatively determined') in exchange. We already know, of course, that the latter is the real tendency of the neo-orthodox school. And we also know that such a position can only be construed as antithetical to the theoretical postulates that Marx was trying to sustain with his transformation procedure, in particular the idea that the magnitude of new value is quantitatively determined by the performance of living labour in production. This returns us to our earlier point: the neo-orthodox school's handling of the transformation issue reflects a typically neo-classical preoccupation with the value of *individual* commodities, that is, with the metamorphoses of the value-form as these pertain to micro-economic exchange relations.

It is in light of all this that Himmelweit and Mohun's response to Steedman's post-Sraffian critique of Marx should be approached. With respect to Steedman's argument regarding the 'redundancy' of values, Himmelweit and Mohun concede the point so long as 'values' are understood in terms of an 'embodied-labour' concept. The significance of value as a theoretical category does not relate to its utility in calculating what is more accurately calculated on the basis of physical data and a specified wage rate. Rather it concerns the 'specification of what is produced (the composition of output) and how (the technical coefficients of production)', in relation to 'the way in which the labour process is organised and from the way in which production, as a social activity through the market's universal commensuration of what is produced, determines both what is produced and how it is produced'.[33]

Himmelweit and Mohun also concede that Steedman is right to argue that the 'established methods of calculating values' lead to indeterminate or negative results in certain cases. But again, these results are deemed relevant only to the critique of an *embodied-labour* concept of value. Joint production and similar 'anomalous' cases appear as real contradictions because the law of value 'operates through the distorted form of capitalist competition' and 'the capital

33 Himmelweit and Mohun 1981, p. 255.

that sets in motion some production processes which are "wasteful" of social labour may still be validated by that competition, and hence produce a portion of the total surplus-value'.[34]

Many of the 'qualitative' considerations adduced by Himmelweit and Mohun in their responses to Steedman are valid and important. But in advancing these considerations they offer up as a sacrificial lamb to neo-Ricardianism all of the quantitative elements in Marx's value theory that endow it with deterministic force. Moreover, the excision of these elements is accomplished by equivocating on the key question of the relationship between production and exchange within Marx's theory, as well as by drawing close to the neo-classical conception of an effectively autonomous role for market exchange in the determination of *both* value and price. Not only does this approach call into question the very possibility of empirical analysis of the magnitude of value; it also calls into question the primacy of production in a substantive, social-ontological sense. Hence, where the old orthodoxy subordinated the value-form to the value-magnitude analysis, the neo-orthodox theorists have done precisely the reverse; the only continuity between them concerns the *dissociation* of the 'quantitative' and 'qualitative' aspects of Marx's theory of value.

An important consequence of the neo-orthodox preoccupation with the 'form of value' over the 'magnitude of value' is a tendency to go beyond the correct perception that 'interaction' occurs between production and the other moments of economic reproduction (circulation, exchange, consumption) to the conclusion that, under capitalism, exchange emerges as the *predominant* moment. Such an approach is not at all the same as saying, as Rubin did, that market exchange is the social form of a commodity-producing economy. Indeed, by implicitly rejecting the social-ontological primacy of production, it involves a complete evacuation of Marx's problematic and a major concession to neoclassical marginalism as well as neo-Ricardianism. In fact, through its 'qualitative' focus on micro-economic exchange relations, the neo-orthodox school draws dangerously close to the conventional economic identification of value and price. This drift is particularly evident in statements by Gerstein and De Vroey quoted above, but the logic of such identification is also evident in the work of Elson, Eldred, and Himmelweit and Mohun, despite occasional references to 'value produced in production' and the like. In this connection, Alain Lipietz's balance sheet of the French neo-orthodox experience should be noted: the French school's 'failure to deal with the problem of [the] magnitude

34 Himmelweit and Mohun 1981, pp. 262–3.

[of value] had an unexpected result: they abandoned the pole of substance and slipped irresistibly towards a purely formal and subjectivist theory of value'.[35]

The 'autonomous role' of exchange in modifying or forming values appears much less autonomous once the focus of analysis shifts from the value formation of discrete commodities (whose values must be brought into correspondence with the values of similar commodities in the market) to the mechanisms of value creation conceived from the ontologically fundamental standpoint of the material-production process, from whence all commodities emerge and where *total value* is quantitatively determined.

4 Fundamentalist Value Theory

Like the neo-orthodox school, the fundamentalist value theorists recognise that the old orthodoxy issued in the dead-end of neo-Ricardianism because of its failure to come to terms with the profound theoretical and methodological differences between Marx's and Ricardo's respective legacies. But unlike that school, the fundamentalists have sought to develop a response to the neo-Ricardians capable of preserving and further developing the value-magnitude analysis – an analysis that they regard as indispensable to a fully scientific investigation of the 'laws of motion' of the capitalist mode of production.

In what follows, we will be concerned with (a) fundamentalist approaches to the transformation problem; (b) the fundamentalist critique of neo-Ricardianism; and (c) fundamentalist responses to the 'joint-production' and 'choice of technique' arguments. Throughout we will be particularly concerned with the contributions of Anwar Shaikh, one of the most consistently interesting and provocative of the fundamentalist theorists.

4.1 *Fundamentalist Approaches to the Transformation Problem*

As we have seen, the Bortkiewicz-Sweezy criticism of Marx's handling of the 'transformation problem' is that Marx failed to transform inputs along with outputs in his scheme. Furthermore, his critics allege that Marx was *aware* of this 'logical inconsistency', as the following passage from his discussion of prices of production appears to show:

> It was originally assumed that the cost price of a commodity equaled the *value* of the commodities consumed in its production. But for the

35 Lipietz, 1985, p. 158.

> buyer of a commodity, it is the price of production that constitutes its cost price, and can thus enter into forming the price of another commodity. As the price of production can diverge from its value, so the cost price of a commodity, in which the price of production of other commodities is involved, can also stand above or below the portion of its total value that is formed by *the value of the means of production* going into it. It is necessary to bear in mind too that if the cost price of a commodity is equated with *the value of the means of production* used up in producing it, it is always possible to go wrong.[36]

When Marx states that 'it is always possible to go wrong' when cost price is equated with the value of the *means of production* consumed, it would seem that he is contradicting what he says in his 'transformation formula', according to which the capitalist 'recovers money in proportion to the value of the capital consumed'.[37]

A proto-fundamentalist attempt to dispute the Bortkiewicz-Sweezy contention of a 'logical inconsistency' in Marx's transformation procedure was carried out by Shane Mage as early as 1963. The starting point of Mage's response to this Ricardian criticism is that 'the value of *the means of production* consumed' and 'the value of *the capital* consumed' are by no means interchangeable formulations. It is a *fetishistic* error to equate capital – including constant capital – with physical things, that is, with means of production. It follows from this that the value of the *capital* consumed in production is not necessarily the same as the value of the means of production consumed. Moreover, this observation seems to be supported by what Marx says immediately following the passage quoted above: 'The cost price of the commodity is a *given precondition* independent of his, the capitalist's production, while the result of his production is a commodity that contains surplus-value, and therefore an excess value over and above its cost price.'[38]

As a 'given precondition', the cost price of a given commodity input to a capitalist production process should be regarded as a form of value that has *already* been subject to the transformation process.[39] In other words, input commodit-

36 Marx 1981b, pp. 264–5, emphasis added.

37 Marx 1981b, p. 259.

38 Marx 1981b, p. 265.

39 In the first edition of this work (Smith 1994), the sentence following this one contained an *erroneous* formulation: 'Since it is the *value of the capital* exchanged with input commodities that is consumed in production, and not just the physical commodities themselves, a value expression of cost price must take into account the status of means of production as

ies have *already* been subject to the influence of the general rate of profit (and, for that matter, other sources of determination in the sphere of circulation), having been purchased at a 'market price'. But this 'market price' corresponds to the *value* of the *money capital* that has been exchanged with it for the purpose of its physical consumption in production. Differently expressed, the market price of an input commodity finds a renewed *value* expression in the value of the money capital invested in its purchase. As Mage puts it: 'The difference between the value created by its production and its price of production has *already* been transferred to other capitalists through the average rate of profit … Accordingly, in the Marxian formulas c + v + s and c + v + p, c and v are indeed value expressions: they express the value of the capital consumed.'[40]

Referring to the same passages from Marx, Mandel makes a similar point: '[T]he extract cited [from Marx] does not imply that prices of production of inputs should be calculated within the same time-span as prices of production of outputs.' Hence, it is incorrect to assume that Marx anticipated, but then ignored, the so-called 'feedback problem' that the Bortkiewicz method of 'simultaneous transformation' tries to circumvent. Indeed, according to Mandel, 'inputs in current cycles of production are *data*, which are given at the start of that cycle, and *do not have* a feedback effect on the equalisation of the rates of profit in various branches of production during that cycle. It is sufficient to assume that they are likewise calculated in prices of production and not in values, but that these prices of production result from equalisation of rates of profit during the *previous* cycle of production, for any inconsistency to disappear.'[41] Operationally, Mandel's point has the same result as Mage's argument: inputs – whether conceived as values, prices of production, or market prices – *should not be transformed along with outputs*. Rather, the assumption should be made that these inputs have already been subject to a transformation process in a previous period. The method of 'simultaneous equations' is therefore erroneous.

Guglielmo Carchedi arrives at this same conclusion, while pursuing a somewhat more complex line of argumentation: 'While c [the elements of constant capital] must be bought and sold at the same price, this price is at the same

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commodities whose values are subject to transformation' (p. 104). The key problem with this sentence, now removed from the revised text, is that it states that the *value* of means of production is 'consumed' in the production process, when in reality it is *transferred* to the new product through the physical consumption of means of production in the labour process.

40 Mage 1963, p. 243.

41 Mandel 1981b, pp. 22–3.

time its social value as an output … of *the previous period* and its individual (but not embodied) value as an output of the present period.'[42]

Shaikh has attempted a 'form-theoretic' approach to the transformation issue from a different angle, arguing that Marx's transformation procedure does not literally concern the transformation of values into prices of production, but rather 'transforming one form-of-Value, direct prices, into another form, prices of production'.[43] By 'direct prices' Shaikh means a money price equal to a commodity's value relative to the value of the unit of money; or, more simply put, a monetised expression of value that still allows for the assumption that exchange occurs in proportion to the *value* of commodities. This conception has the merit of underlining that commodity-values have undergone a form change *before* they are subject to the transformation wrought by the equalisation of profit rates. Unfortunately, this form change is systematically concealed in the traditional 'algebraic' attempts to find a 'correct solution' based upon simultaneous valuation of inputs and outputs. For this reason, Shaikh rejects the use of linear equations in selecting a method through which to demonstrate Marx's own correct, if incomplete, procedure. Building on an idea independently suggested by Morishima,[44] he proposes an 'iterative' solution in which Marx's 'perfectly general' procedure can be extended (successively applied) to arrive at 'correct' prices of production.

What all these approaches have in common is a desire to demonstrate that there is no inconsistency in Marx's transformation procedure – no 'error in logic'. But the problem is not simply one of understanding Marx's procedure in its own terms, as important as this may be; according to the Bortkiewicz-Sweezy critique, it is also one of reconciling it with some notion of economic equilibrium. As we have seen, all of the algebraic attempts to solve the problem on the basis of a model involving three departments of production have had to rely on arbitrarily selected 'invariance postulates' or 'normalisation conditions' that are in general incompatible with one or the other of the aggregate equalities posited by Marx. Even Shaikh's non-linear iterative solution (which assumes the standard three-department model) does not allow for the simultaneous results: total values = total prices, and total surplus-value = total profit. The conclusion seems unavoidable: neither Marx's transformation procedure nor the alternative procedures based on the Bortkiewicz principle of simultaneous valuation can accommodate the two aggregate equalities without violating the conditions of simple reproduction.

42 Carchedi 1986a, p. 229, emphasis added.

43 Shaikh 1977, p. 134.

44 Morishima 1973.

In light of this, only two possibilities remain open to the fundamentalists: either to dispute the importance of reconciling the value-price transformation process with the presuppositions of simple reproduction, or to redefine 'what is at stake' in the transformation process itself. Among the first to explore the first strategy were Yaffe and Carchedi.[45] The latter argues as follows:

> [The reproduction] schemes concern themselves with 'the reconversion of one portion of the value of the product into capital and the passing of another portion into the individual consumption of the capitalist, as well as the working class' [Marx, *Capital II*]. In other words, these schemes concern themselves with the redistribution of the social product (in terms of use and exchange value) after that product has been realised through sale, in such a way that the equilibrium conditions of simple (or expanded) reproduction are met … Both inputs and outputs are commodities whose value has already been produced and realised so that – obviously – a commodity must be sold (as output) and bought (as input) at the same price (market price). To consider constant and variable capital as inputs in an input-output sense means to have already left the transformation problem behind, to deal with *already realised* values.[46]

The second fundamentalist strategy has been to call into question the necessity of sustaining *both* of the aggregate equalities. If the conservation of value through exchange is simply built into the transformation procedure (by positing the value-price equality as a normal condition), then there is a problem in explaining how total profit can diverge from total surplus-value. Shaikh has offered a novel and rather convincing explanation for this, which will be considered later in connection with his response to Steedman.

One other possible rejoinder to the traditional critiques of Marx's transformation procedure involves the wholesale *abandonment* of the 'uniform rate of profit' concept. Strictly speaking, this approach is inconsistent with a 'fundamentalist' position since it not only rejects the theoretical framework of Marx's critics, but of Marx himself. However, as the proponents of this position have sought to show, profit-rate uniformity plays a far less significant role in Marx's theoretical system than it does in neo-Ricardianism and neoclassicism. Indeed, for Marx, the uniform rate of profit is an abstract concept flowing from

45 Yaffe 1975; Carchedi 1986a.
46 Carchedi 1986a, pp. 220–1.

a *tendential* law – the equalisation of profit rates – rather than a 'real condition'. This line of argument will be considered more closely at the end of this section.

4.2 *Shaikh's Critique of Neo-Ricardianism*

The strength of the neo-Ricardian critique of Marx appears to reside in its logical rigour and mathematical precision. But neither logic nor mathematics is a substitute for good theory, and neither can yield reliable conclusions if the theoretical presuppositions of an argument are faulty. As we have seen, Steedman himself acknowledged this point in *Marx After Sraffa*, and this is precisely the basis of Shaikh's response to Steedman and neo-Ricardianism in general:

> The analysis of Marx is, I claim, vastly superior in its overall structure to anything imaginable within the flat conceptual space of the neo-Ricardians. Indeed, it is their vaunted algebra, on which they base so many of their claims to rigor, that is in fact their greatest weakness. This is so, as we shall see, precisely because their algebra goes hand in hand with a series of concepts taken directly from what Marx calls vulgar economy: equilibrium, profit as cost, and worst of all, perfect competition and all that it entails. It is not the algebra but rather these concepts, whose apologetic and ideological roots are well known, that generate the basic conclusions. This will become immediately apparent when it is shown that exactly the same algebra generates very different conclusions, once it is 'asked' different questions. And these questions, in turn, are different exactly because the method and the system of concepts in Marx, his scientific analysis of the law of value, is so unlike that of vulgar economy.[47]

Shaikh begins with a lucid and concise presentation of his own interpretation of Marx's theory of value. Drawing upon Marx's famous letter of 1868 to Kugelmann, he shows that the foundation of Marx's theory is the historical-materialist thesis that 'labour-time is fundamental to the regulation of the reproduction of society: the performance of labour produces both use-values and social relations; the performance of surplus labour reproduces both the surplus product and the class relation; and a particular distribution of the "social labour in definite proportions" results in the production of "the (specific) masses of products corresponding to the different needs" of society.' However, since capitalist production is based on generalised commodity pro-

47 Shaikh 1981, pp. 268–9.

duction, 'the vast bulk of the products that constitute the material basis of social reproduction are produced without any direct connection to social needs'.[48] This means that production is directly for exchange and that the private independent labour processes making up the social division of labour need to be 'forcibly articulated' with one another. But it also means – and this is crucial to Shaikh's subsequent argument – that each of these private independent labour processes is 'dominated by the profit motive'. What all this suggests is that these production processes are 'informed' and animated by the knowledge that their commodities must 'measure up' to certain *social* standards if they are to be sold *at a profit*. This circumstance establishes a particular *relation* between production and exchange:

> Exchange is the sphere in which the contradiction *internal to production itself*, the contradiction between private labour and the social division of labour, is made visible. It is here that each capitalist first gets the good or bad news, through the medium of prices and profits. But at the same time, because this contradiction is internal to the social division of labour itself, its resolution implies the *domination* of the outcome of exchange, of prices and profits, by social labour-time. The outcomes of exchange are 'the form in which this proportional distribution of labour asserts itself' [Marx's letter to Kugelmann 1868].[49]

Shaikh does not deny the 'relatively autonomous' role of exchange in economic reproduction; indeed, it is precisely *because* exchange is the sphere in which the contradictions of commodity production are both 'exposed and resolved' (to quote Marx) that the process of exchange 'reacts back' upon the sphere of production and lends a particular form to the results of a given 'proportional distribution of labour'. However, Shaikh refuses to lose sight of the fundamental historical-materialist principle that what transpires in exchange *must be* regulated and dominated by the way in which social labour-time has been allocated in the sphere of production. This permits him to see 'abstract labour' – the substance of value – as the reflection in thought of 'a real social process': a process rooted not in exchange, as it appears to most neo-orthodox theorists, but rather in the conditions whereby commodities are produced for the purpose of sale and the realisation of profit. Accordingly, abstract labour and value are, for Shaikh, the results of commodity *production*. Both are *created*

48 Shaikh 1981, p. 270.
49 Shaikh 1981, p. 271.

through the real activity of producing commodities before their entry into the realm of exchange. Once in exchange, of course, commodity-values must then be *realised* in a money (price) form. But this process of realisation is *distinct* from the 'creation', 'production' or 'formation' of values in much the same way that the final sale of a commodity is conceptually distinct from its production.

By refusing to conflate the concepts of 'value production' and 'value realisation' into a murky notion of 'value formation' in the manner of the neo-orthodox school, Shaikh preserves a fundamental distinction that is apparently better understood by the neo-Ricardians than it is by the neo-orthodox theorists. This distinction concerns the measurement of value and abstract labour. For the neo-orthodox school, *money* is the sole measure of abstract labour. But since money is incapable of measuring 'labour-time', the 'abstract labour' that it measures is necessarily far removed from any concept of the socially necessary labour-time required for the reproduction of a given commodity. The process of exchange is accorded *full* autonomy to 'determine' the aliquot share of the 'total abstract labour' that is to be allotted (in some 'social accounting sense') to that commodity. In the neo-orthodox account, then, while the structure of production might influence the exchange process in some measure, it is far from dominating it. Once again, the logic of the neo-orthodox position draws it irresistibly toward neoclassical notions. Shaikh *reinstates* the notion of 'socially necessary labour time,' which is central to Ricardian and neo-Ricardian interpretations of Marx. At the same time, however, he links it to a concept of how commodities 'represent' value rather than 'embody' abstract socially necessary labour, while also registering the significance of the 'value-form' to Marx's theory. For Shaikh, abstract labour, as the *substance* of value, serves to *link* the value-form and value-magnitude analyses and consequently is measurable in *two* senses: at the level of exchange or circulation, *money* is its sole measure and necessary form of appearance; but at the level of production, the concept is conceptually apprehended/ measured in terms of *socially necessary labour-time*.

By refusing the notion that 'abstract labour' can be measured at the level of production in terms of socially necessary labour time, the neo-orthodox school renders consistent their theoretical revision according to which value is created, if only in some 'final' sense, in exchange. Shaikh and other fundamentalists overturn this revision by explaining how the 'form of value' and the 'magnitude of value' are contradictory in the sense that they are conceptual reflections of the real contradictions of commodity production: '*labour involved in the production of commodities produces value, while exchange merely realises it in money-form*. It is only because of this that Marx can distinguish

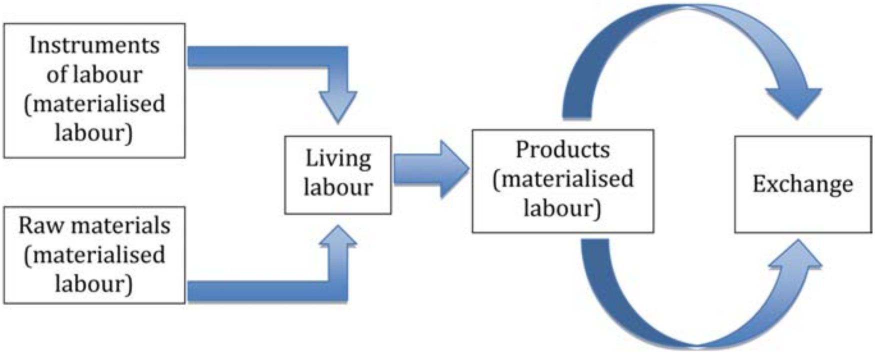

FIGURE 3 Marx on labour value regulated reproduction, according to Shaikh

between the amounts of value and surplus-value created in commodity production, and the generally different amounts realised through exchange.'[50]

Having summarised Shaikh's understanding of Marx's theory of value, we can now turn to his critique of Steedman. As an accompaniment to the figures used in our earlier discussion of Steedman's argument, concerning the redundancy and irrelevance of a value analysis, it is useful to consider Shaikh's diagrammatic conceptualisation in Figure 3 of Marx's account of economic reproduction as determined by labour values.

As can be readily seen by comparing Figure 3 to Figure 2, Shaikh's conceptualisation of the role of 'labour values' in economic reproduction is quite different from the one that Steedman imputes to Marx. But more than that, Shaikh's figure captures the essential points of his interpretation of Marx, as well as his critique of Steedman's 'redundancy' argument:

> It is human productive activity, the actual performance of labour, that transforms 'inputs' into 'outputs', and it is only when this labour is successful that we have any 'physical production data' at all. Moreover, if the labour process is a process of producing commodities, then it is one in which value is materialised in the form of use-values. Thus both 'inputs' and 'outputs' are the use-forms of materialised value, and we can then say that in the *real* process it is values that determine the 'physical production data' … [I]t is *values that also determine prices*, in a double sense: prices are the forms taken by values in exchange, and the magnitudes of these values dominate and regulate the movements of their price forms.[51]

50 Shaikh 1981, p. 274.
51 Shaikh 1981, p. 280.

It can scarcely be said that Shaikh and Steedman have equal claims to a correct interpretation of Marx's understanding of the process whereby labour values come to dominate capitalist economic reproduction. For, although he does not explicitly acknowledge this, Shaikh has provided a diagrammatic representation of the *circuit of capital* as Marx defines it in the formula: M – C ... P ... C′ – M′. By comparison, Steedman's representation of Marx amounts to little more than a crude caricature. (The one thing clearly missing from Shaikh's figure is money – M and M′, an omission that has real theoretical significance, as we shall see when we come to more recent debates).

Shaikh next turns his attention to Steedman's argument that there is an irremediable *inconsistency* in Marx's analysis of prices of production and the transformation process. He starts by taking up from where his own treatment of the transformation problem had left off: 'The question is, given that circulation neither creates nor destroys values (assuming the whole product is sold), how is it that profits can differ from surplus-value?'[52] His answer is based on Marx's distinction between the circuit of capital and the circuit of capitalist *revenue*. It should be recalled that most of the attempts to develop a 'correct' scheme for transforming values into prices of production have sought to do so without violating the 'equilibrium' conditions of reproduction. But such schemes are concerned exclusively with the circuit of capital, and they cannot by their nature take into account the effects of *value transfers* between the circuit of capital and the circuit of capitalist revenue.

To appreciate the significance of this distinction, consider first what happens when there is a value-price divergence with respect to means of production or workers' articles of consumption. In all such cases, the divergence can be explained in terms of a transfer of value within the circuit of capital: what one capitalist loses in capital values is gained by another, and in the end the value-transfers cancel one another out. Consider next what happens when there is a value-price divergence in capitalists' articles of consumption. Because the circuit of capitalist revenue originates in the circuit of capital, it might be expected that all of the value associated with this revenue will be 'fed back' into the circuit of capital once the revenue is expended by capitalists on articles of personal consumption. And indeed it will be. However, a 'social accounting' problem will appear as a result of any decline in the prices of such commodities relative to their value. Such price drops will entail an equivalent loss of profit in relation to surplus-value, *but* 'the loss in capital-value due to profits being below surplus-value ... appears as a gain in *revenue-value* to the capitalists who

52 Shaikh 1981, p. 283.

buy these articles of consumption'. The result is that the loss in capital-value is compensated by an equivalent gain elsewhere, but this compensation 'disappears from the purview of the circuit of capital and is therefore not "charged" … against the fall in profit'.[53] Simply put, the capitalists get to have their cake – and to complain about not having it too!

The relevance of all this to the transformation problem is summarised by Shaikh as follows: 'It is this transfer of value between the circuit of capital and the circuit of revenue, through the process of exchange, that explains why price-value deviations can give rise to deviations between the sum of profits and the sum of surplus-values, without violating the law of conservation of value through exchange.'[54] This idea, which Shaikh notes is entirely absent from most Marxist discussions, finds support in the following passage from Marx: 'This phenomenon of the conversion of capital into revenue should be noted, because it creates the *illusion* that the amount of profit grows (or in the opposite case decreases) independently of the amount of surplus-value.'[55] Or, as Shaikh puts it following some reflection on the form-of-value and the relative autonomy of the sphere of circulation: 'Profit … depends not only on the mass of surplus-value but also on its specific mode of circulation.'[56]

This argument is directly relevant to answering Steedman's general point that the money rate of profit, but not the value rate, has a significant bearing on the operations of a capitalist economy. Shaikh points out that such a conclusion is predicated on the correct observation that profit can diverge from surplus-value, but also on the *incorrect* notion that this divergence is not 'strictly limited'. Taking the concept of the relative autonomy of circulation from production as his starting point, Shaikh demonstrates 'how value categories themselves provide the limits to the variations in their money-expressions'.[57] The value rate of profit is a 'significant' rate of profit in the capitalist economy because it provides an axis around which the money rate oscillates (just as the aggregate value magnitude is the axis of the aggregate production price magnitude). Discrepancies arise between the value and money rates of profit as a result of a divergence between the mass of surplus-value and the mass of money profit, one determined by 'the extent to which the prices of capitalists' articles of consumption deviate from the values of these articles' and

53 Shaikh 1981, p. 285.
54 Ibid.
55 Marx 1978, Vol. III, p. 345.
56 Shaikh 1981, p. 286.
57 Ibid.

by 'the extent to which this surplus-value is consumed by capitalists as revenue'.[58] None of this, however, vitiates the 'significance' of the value rate of profit; indeed, if anything, it *underscores* the importance of invoking the value rate of profit in order to *demystify* the money rate of profit.[59]

The upshot of Shaikh's argument is as follows:

> [In] the relatively autonomous mirror of circulation, the transformed rate of profit appears as a displaced image of the value rate of profit, essentially the same in determination but somewhat different in magnitude. The autonomy of the sphere of circulation is expressed in this displacement of magnitude; on the other hand, the limited nature of this autonomy manifests itself precisely through the fact that it is the structure of value categories (the pattern of organic composition, and the proportion of surplus-value that is converted into revenue) that provides the limits to this displacement effect. The variations in the form of value are thus shown to be conditioned and limited by the very structure of value itself.[60]

But what of Steedman's argument that a value rate of profit can have only a *conceptual* existence, whereas the uniform money rate of profit has a real, palpable existence reflected in the actual behaviour of capitalists? Clearly, a uniform or general rate of profit can only be conceptualised on the basis of processes of *equalisation* of profit rates occurring within the sphere of circulation. A general value rate of profit can only exist 'through' its circulation form, the money rate. But it in no way follows from this that the money rate has primacy over the value rate, for the latter has a real existence, not as a calculable ratio influen-

58 Shaikh 1981, pp. 286–7.

59 Note here as well that the money rate of profit may diverge from the value rate of profit as a result of perverse monetary policies (quantitative easing, money-printing) associated with the increasing 'financialisation' of the global economy in recent years. This anticipates the discussion to come in Chapters 7 and 10 of 'fictitious profits' – profits that are not based on current surplus-value. However, these considerations are independent of the phenomenon discussed by Shaikh, which has to do with how *current surplus-value*, generated in production, can circulate as revenue rather than as new capital, and how this can serve to *conceal* the *real* magnitude of profit. Contrariwise, the phenomenon of fictitious profit, by increasing the money rate of profit but not the value rate, serves to *exaggerate* the magnitude of visible profit, and should be seen as belonging to a higher, more concrete level of analysis in the reconstruction in thought of capitalist reality, one that Marx could not have foreseen from his historical vantage-point: the level of 'anticipated future value' in an increasingly debt-burdened capitalist economy.

60 Shaikh 1981, p. 290.

cing capitalists' business decisions, but as a regulator and 'limiter' (a parametric determinant) of the money rate of profit.

Shaikh makes the important point that Steedman's argument can be turned around and directed against the 'concept' of the *uniform* money rate of profit, a concept integral to all Sraffian models: for capitalists do not calculate a uniform rate of profit in order to price their commodities or transfer their capital. Indeed, the uniform rate of profit is a purely *tendential* phenomenon, operating behind their backs and imposing upon them certain decisions pertaining to price-setting, profit mark-up, and capital investment. This imposition is a mediated and indirect one; the uniform money rate of profit can exert its influence only through the far more 'concrete' market prices, stock-exchange indices, and individual profit rates upon which capitalists base their actual decision-making. The 'uniform' money rate of profit, then, is no less of an abstraction than the value rate; indeed, one could argue that the status of the latter as a 'real abstraction' is more secure.

The matter does not end here, however. Shaikh accepts that the uniform money rate of profit is a useful conceptual construct in depicting real processes. The trouble is that Steedman understands and applies the concept in a neoclassical 'equilibrium' vein rather than in terms of tendential regulation. This point relates to the charge that several Marxists have brought against Steedman according to which his analysis is infused with 'harmonistic' notions. The bias toward 'harmonism' finds its clearest expression in his treatment of prices of production and the uniform rate of profit as phenomena that 'obtain directly in circulation' – a notion that could only be entertained on the assumption that 'there is no contradiction between private independently undertaken labours and the social division of labour'. As Shaikh concludes, 'Once you replace the concept of tendential regulation with that of equilibrium, you have switched from abstraction as typification to abstraction as idealization. This is, of course, characteristic of vulgar economy, and is built into the basic mathematical foundations on which Steedman relies so heavily.'[61]

4.3 *Fundamentalist Responses to the Choice-of-Technique and Joint-Production Arguments*

Steedman's demonstration of how cases of joint production render value magnitude analyses either indeterminate or flatly contradictory is based upon a particular conception of how capitalists *choose* the techniques they employ in

61 Shaikh 1981, p. 294.

production, as supported by a mathematical example of the results of a joint-production model. We shall first consider Shaikh's argument concerning the 'choice of technique' issue, and then turn to Emmanuel Farjoun's critical dissection of Steedman's joint-production model.

Steedman predicates his 'choice of technique' argument on the correct observations that (a) capitalists can choose amongst a number of possible methods of production, and (b) they will tend to choose the method promising the highest possible rate of return on capital invested. But how will this choice be made? Steedman assumes that the method chosen will be the one that yields the highest rate of profit, as determined by existing prices and wages. Significantly, however, these prices are assumed to be exactly *equal* to prices of production, and all prevailing rates of profit *equal* to the 'uniform rate of profit'. Furthermore, and consistent with these assumptions, a situation of 'perfect competition' and 'ideal equilibrium' is posited. Hence, if a *new* method of production is chosen, it *must* introduce a profit rate higher than the capitalist's existing rate of profit and therefore higher than the uniform rate. The logical conclusion is that new methods of production will only be adopted if they contribute to raising not only individual rates of profit but the uniform rate of profit as well.

Shaikh regards this argument, together with its implications for the 'logical ordering' of profit-rate determination and value-magnitude determination, as 'a résumé of the characteristic confusions of the neo-Ricardian school'.[62] First, Steedman fails to consider the full significance of the fact that 'market prices and profit rates can never exactly equal prices of production and the uniform rate of profit'. Because this is so, and because calculations are not being made in terms of prices that 'embody' the uniform rate of profit, it is quite possible for a new technique of production in a *particular* industry to raise that industry's profit rate while also lowering the average or 'general' rate of profit: 'A production method that yields a higher than average rate of profit at one set of prices need not do so at some other set.'[63] This argument is a simple extension of Shaikh's earlier debunking of the purported 'real significance' of the uniform money rate of profit relative to the value rate of profit. Again, Shaikh is not proposing to throw out 'prices of production' or the 'uniform rate of profit' as analytical constructs; he merely wishes to underline their necessarily abstract and tendential character, while also highlighting the misleading and even patently false conclusions that can be generated when these

62 Shaikh 1981, pp. 295–6.
63 Shaikh 1981, p. 296.

TABLE 3 Farjoun's example of joint production

	Machines	Cars	Labor units	Machines	Cars
Process I	25	0	5	30	5
Process II	0	10	1	3	12

EMMANUEL FARJOUN 1984, P. 17

concepts are employed in a different methodological spirit (one corresponding to notions of 'ideal equilibrium' and so forth).

Emmanuel Farjoun, a founding member of a theoretical tendency that has sought to excise the notion of the 'uniform rate of profit' from Marxian political economy, offers a detailed analysis of the conceptual assumptions and anomalous mathematical properties of Steedman's Sraffian model of joint production. While his attitude toward the uniform rate of profit concept is certainly different – and more controversial – than Shaikh's, his discussion of joint production does not rely on the rejection of profit-rate uniformity.

Farjoun takes Steedman's example of joint production and alters it in one way only: by stipulating that 'commodity 1' will be machines and 'commodity 2' cars.[64] Thus, following Steedman, Farjoun's example is taken to represent an extremely simple capitalist economy with only two products: machines and cars. It is also assumed that there are two different industrial processes in use in the production of these two commodities, and that each of these processes produces both machines and cars jointly and simultaneously. The material flow of production for such an economy is represented in Table 3.

Farjoun notes that this appears to be a perfectly reasonable table and that, within the Sraffian framework, such an economy could function flawlessly. It is also quite apparent, after a little calculation, that if one tries to assign any reasonable numerical values in the above table to the concept of 'total labour time socially-necessary to produce one machine', a positive solution is unattainable. Some of the labour values will turn out to have negative numbers – a patently unacceptable result. Thus, Steedman's conclusions that cases of joint production can be inconsistent with 'positive values' and that positive profits can coincide with negative surplus-value appear to be confirmed.

Farjoun agrees that the example shows that labour values are not 'well defined' under *arbitrary circumstances*. But this invites another question: Does

64 See Steedman 1981, p. 153; Farjoun 1984.

this constitute a drawback or an advantage to analysis? Farjoun considers it an advantage, arguing that the situation depicted by Steedman is *unreal* – not because it involves joint production, but because it posits two processes that *could never co-exist* in a real capitalist economy.

Consider first that the economy depicted in Table 3 has a very peculiar characteristic: 'If one stops using the first process altogether and applies only the second process then one can increase all the outputs while using a smaller amount of total social labour, i.e. using less than six units of labour.'[65] Consider also that Steedman's hypothetical economy is assumed to be in a state of equilibrium guaranteed by 'perfect competition' and that capitalists are motivated solely by the rational goal of selecting technical processes that can maximise their rates of profit. Given such conditions, Farjoun asks, 'What company can long survive in the market if it uses process I while a competitor uses process II'?

Pointing out that Steedman's production table is not 'on the frontier', Farjoun draws the following compelling conclusion:

> Using exactly the same techniques as are used by other firms, each firm which has shares in process I can increase its output while reducing its input by moving even a small amount of labour to process II. In fact, for each unit of labour moved from process I to process II, we shall get a net product free of charge of two machines and one car. In other words, by a reallocation of labour and without introducing any new production techniques, in Steedman's counter-example one can increase the total net output (the total net product at the end of each production process).[66]

We can also compare the net output per unit of labour for each production process, and if this is done it becomes clear that process I allows for (5 machines + 5 cars)/5 units of labour = (1M + 1C)/1 unit labour, while process II allows for (3M + 2C)/ 1 unit labour. The upshot is that it is completely *unrealistic* to assume that any rational capitalist would use process I. And yet this example – involving a patently absurd assumption – is employed by Steedman to question the applicability and 'consistency' of a value-magnitude analysis with cases of joint production.

These considerations suffice to establish Farjoun's fundamental point as against Steedman: 'Not every hypothetical production table is acceptable for economic matrix manipulations. Some tables must be regarded as either con-

65 Farjoun 1984, p. 17.
66 Ibid.

tradictory or incomplete.'[67] This certainly applies to Table 3, and for just this reason the 'proof' it offers against the use of labour values turns out to have no force whatsoever.

The combined effect of these critiques of Steedman by Shaikh and Farjoun is to expose how hidden theoretical and methodological assumptions can come to be disguised by apparently rigorous mathematical equations and superficially 'reasonable' models. As Shaikh puts it, Steedman 'takes refuge in algebra in order to obscure the profound silence on the question of method'.[68]

4.4 *Should the 'Uniform Rate of Profit' Be Abandoned?*

It is fitting to conclude this summary of fundamentalist value theory with a brief consideration of a question that has been recurrently entertained and debated within the fundamentalist camp: should the concept of the uniform rate of profit be abandoned as a tool of analysis? This question acquires special urgency to the extent that the discussion of Marx's value theory is couched in terms of a debate with the followers of Sraffa: for if the concept of 'value' is fundamental to Marxist political economy, the notion of a uniform rate of profit is no less fundamental to the Sraffian 'alternative'. In this connection, we need only consider the testimony of Sraffa himself, who, after discussing a 'reasonable economy' that gives rise to 'infinite prices', remarks: 'It is perhaps as well to be reminded here that we are at all times concerned merely with the implication of the assumption of a uniform price [of production] … and a uniform rate of profits on all the means of production.'[69]

Farjoun is quite justified to note that in Sraffa's hands the concept of the uniform rate of profit has a purely *formal* significance and a rather weak relation to reality. However, there is an unfortunate tendency on his part to simply *identify* the Sraffian (and neo-classical) conception of the uniform rate of profit with Marx's 'general' or 'average' rate of profit. Whereas Shaikh has sought to differentiate the Sraffian and Marxist understandings of the concept, while also illuminating the methodological reasons for doing so, such theorists as Farjoun and Machover, together with Robert Langston, have sought to render such an exercise superfluous by insisting that the concept – however it is understood – lacks a strong scientific foundation.[70]

67 Farjoun 1984, pp. 19–20.
68 Shaikh 1981, p. 290.
69 Sraffa 1960, p. 91.
70 See Farjoun and Machover 1983, and Mandel and Freeman (eds) 1984.

While it is neither possible nor necessary to enter into a detailed evaluation of the Farjoun-Machover-Langston thesis here, the consequence of excising the concept of the general rate of profit from the body of Marx's theory of value, and of substituting for it the concept of a 'probabilistic profit rate perceived as a random variable', should be well noted: it is to render somewhat *indeterminate* a crucial phase of the transformation of the value form, namely the phase associated with the macro-economic results of competition, capital mobility, and surplus-value redistribution. What's more, while one may agree with Farjoun's argument that 'Sraffian models are critically dependent on a very rigid notion of uniformity', the associated implication that the Marxian 'general rate of profit' is essentially equivalent to a 'very rigid' uniform rate of profit ought to be rejected. The former, it should be emphasised, is a *tendential* phenomenon, one that reflects *only one* of the fundamental social production relations of capitalism – the *competitive* relation between individual capitals – and one that is necessarily countered, modified and blocked from full realisation by relations and processes that prevent 'perfect competition' from ever obtaining in the real world.

5 Trends in the Value Controversy since the 1990s

One of the many regrettable consequences of the restoration of capitalism in the Soviet Union and Eastern Europe in the late 1980s and 1990s, together with the defeat of the Western working class in a number of significant class battles of the 1980s, was a general retreat on the part of left-wing intellectuals from Marxism, both as a theory of capitalist society and as a programme for transformative social change. Just as the leftist youth radicalisation and relatively high levels of class struggle that marked the 1970s and early 1980s gave an immense impetus and politically charged urgency to debates surrounding Marx's theories of value and capitalist crisis, so the recession of class struggle, the end of the Cold War and the rise of 'new social movements' (typically remote from and often antagonistic toward class politics) had a major debilitating effect on the value controversy. To be sure, the debates amongst value theorists continued, sometimes along innovative lines but more often in basic continuity with the major themes and disputations articulated before 1990. Even so, as Kicillof and Starosta pointed out in 2007, the 'vitality of the debate' appeared to have faded away by the late 1990s and 'the issue came again to be increasingly consigned to oblivion, as evidenced by its loss of importance in academic journals and conferences.'[71]

71 Kicillof and Starosta 2007, p. 9.

By the time that a severe and in many ways unprecedented financial crisis broke during the 2007–08 period, it was clear that the task of attracting a broad audience for a Marxist value-theoretic analysis of the resulting economic malaise would be a formidable one. 'Objective' historical circumstances certainly played a decisive role here, but so too did a habitual subjective proclivity on the part of many Marxist intellectuals to pursue theoretical debates of a particularly dense and arcane nature. As Kicillof and Starosta pointed out, the failure of many of the more recent contributions to the debate on value theory to 'establish a firm link with the concrete forms of the political action of the working class generated the appearance that the debate was an abstract scholastic dispute, irrelevant for those outside academic circles.'[72]

Even for many Marxists operating within academic circles, however, the interminable debates over how value is constituted, Marx's method in *Capital*, and, of course, the perennial 'transformation problem' recalled quarrels amongst medieval religious scholars over the number of angels dancing on the head of a pin! Not only did these debates seem remote from the practical, strategic problems confronting the working class, they also appeared intractable, sectarian and resistant to resolution. Ironically, the more the larger world turned a disinterested eye to these debates, the more convinced some value theorists became that a 'correct resolution' to the various disputes was a *sine qua non* for reconnecting Marxist theory to the struggles of the working class and the socialist left. That said, very few seemed to recognise that such a reconnection would depend much more on 'bringing politics back into value theory', to use the formula of Kicillof and Starosta, than the vain hope of unifying Marxists on the basis of a common understanding of value theory – or, less likely still, persuading bourgeois economists that the 'standard' critiques of Marx are spurious.

In *Global Capitalism in Crisis: Karl Marx and the Decay of the Profit System* – my own attempt to demonstrate to a wider audience the relevance of Marx's theory to analysing the factors behind the financial crisis of 2007–08 – I wrote:

> The test of history – of practice – has turned out to be a much more reliable arbiter of the 'truth' of Marx's theories of value, capital and crisis than all the esoteric theoretical disputations that have absorbed the energies of so many Marxist intellectuals over the past century … [To] believe that it is possible to win the war for Marx's ideas within the disciplinary domain of academic economics or public policy by solving specific

72 Kicillof and Starosta 2007, p. 10.

> theoretical problems, or that such a victory is in any sense an important condition for building a mass socialist movement, would be foolishly naïve … However we choose to evaluate Marx's prediction of proletarian socialist revolution in the core of world capitalism or to judge the 'actually existing socialism' constructed in his name in the 'Communist world', we can only be astonished at how well his main predictions concerning the course of capitalist development have held up. It is with respect to these predictions that Marx's theories will need to be popularized to a broad audience of working people, students and intellectuals – most of whom are unlikely to take much interest in the finer points of dispute in the value controversy.[73]

These considerations inform the plan for the remainder of this chapter and indeed the rest of this book, as we begin to consider the operational significance of value theory to the analysis of capitalist crisis. More useful to this agenda and certainly more tractable than a comprehensive summing up of the plethora of 'new positions' in value theory that have sprung up since the 1990s will be a 'broad stroke' sketch of how the main lines of the controversy have evolved.[74] This approach should provide some additional 'data', beyond that already compiled, for an overall assessment of the value controversy in relation to its philosophical-methodological, substantive-theoretical, and political-programmatic dimensions, which is the subject matter of the next chapter.

5.1 *Continuities and New Departures*

Although subject to many qualifications, the heuristic device upon which we have hitherto relied of dividing the Marxist or neo-Marxist participants in the value controversy into four broad currents – Ricardian-Marxist, neo-Ricardian, neo-orthodox and fundamentalist – undoubtedly had greater theoretical purchase in the 1970s and '80s than it does today. Some of the more prolific and influential value theorists of the past quarter century (for example, Fred Moseley, Andrew Kliman, Guglielmo Carchedi, Chris Arthur and Geert Reuten) do not fit readily under any of these labels, either because they have formulated

73 Smith 2010, pp. 60–1.

74 Readers interested in more detailed overviews are referred to Kliman 2007 and Carchedi 2012, who provide complementary but also distinctive perspectives from the standpoint of the 'temporal single-system interpretation' school of value theory; to Nicholas 2011, who offers a more traditional, generally Ricardian-Marxist overview and assessment; and above all to Moseley 2015, who reviews many of the debates in great detail from the perspective of his 'macro-monetary' interpretation of Marx's theory.

very distinctive positions on certain questions while still invoking the authority of Marx's own 'original position' (Carchedi, Moseley and Kliman) or because they have broken from Marx in significant ways while continuing to insist on the importance of developing 'value-form' theory in a fashion germane to Marx's larger project (Arthur and Reuten).[75]

We are thus presented today with a remarkably complex terrain of controversy, one marked by continuities with its past but also by certain discontinuities and new departures. All the same, three sets of questions continue to define the main parameters of debate: 1) the origin, nature and determinants of value; 2) the purpose, pertinence and coherence of 'value-theoretic' analysis; and 3) the distinctive character and validity of the epistemological, ontological and methodological principles informing Marx's *Capital*. Following a brief sketch of the evolution of the 'main currents' since the 1990s, the more recent debates pertaining to the first and second sets of questions will be addressed in the remainder of this chapter. A discussion of some of the issues raised in the debate over the third set will be deferred to Chapter 6, where an assessment of the philosophical-methodological dimension of the value controversy will be highlighted.

5.2 *Neo-Ricardianism, Ricardian-Marxism and 'Physicalism'*

Earlier in this chapter, 'left neo-Ricardianism' was characterised as encompassing the 'varied attempts of Marxist or neo-Marxist economists either to reconcile Piero Sraffa's (1960) critique of neoclassicism with Marxian political economy or to revise the latter substantially in light of the former'.[76] By the late 1980s it had already become clear that none of those attempts had been successful. Even more clearly, the value controversy as a whole had not been 'settled' in favour of what had been the most influential attempt: Steedman's argument that Marx's labour theory of value was not only logically untenable but also redundant to Sraffa's parsimonious procedure for deriving a consistent set of relative prices from 'physical data'.

Nevertheless, the 'physicalist' approach to conceptualising an 'economic surplus' in ways that differed from Marx but that still called for a class analysis of its distribution (and the role of class struggle in its allocation) has remained a major pole of attraction for several currents of radical political economy that may loosely be characterised as 'neo-Ricardian', 'Sraffian' or 'post-Sraffian'. This has allowed for a continuing dialogue and even convergence between some

75 See Arthur 2004; Kliman 2007; Moseley 2015; and Reuten 1993.
76 Smith 1994, p. 83, reproduced on p. 98 of this edition.

neo-Ricardian/post-Sraffian theorists and some remaining adherents of the traditional, Ricardian-Marxist orthodoxy, especially those who entertain a pronounced 'physicalist' understanding of Marxian value theory. This rapprochement has by no means cohered a new school of Marxian political economy, but it has erected a broad 'physicalist' tent for leftist political economists (whether nominally Marxist or not) who are either sceptical of value theory in general or still committed to the more 'orthodox' interpretations of Marx descending from the 'classical era' of the Second and Third Internationals.

Clearly, this very broad and inchoate 'physicalist camp' within Marxian political economy is defined far more by its distance from non-physicalist value theory (and a related penchant for empirical analysis of the 'phenomenal forms' of capitalist dynamics) than by any shared understanding of the strengths and weaknesses of Marx's own theory. It includes representatives of the *Monthly Review* School like John Bellamy Foster, Samir Amin and Michael Yates; neo-Ricardians like Geoff Hodgson and Ernesto Screpanti; heterodox theorists of a falling rate of profit theory of crisis like Robert Brenner, and, in a different vein, Gerard Dumenil and Dominique Levy; world-system analysts like Minqi Li; and such economists as David Laibman, Paul Cockshott, Allin Cottrell, Ian Wright and David Zachariah, who have shown a particular interest in the modelling and analysis of capitalist dynamics using physical measures of labour value, sometimes with a view to exploring their potential utility in developing models of socialist planning.

Many others could be added to this list, of course, but the point of this cataloguing is to suggest that 'non-physicalist value theory', whether of the neo-orthodox or the fundamentalist persuasion, constitutes a *minority* camp within contemporary Marxist political economy, even if it now also dominates Marxist 'value-theoretic analysis'. Despite their diversity, however, the theorists occupying this camp seem also to stand on the far left wing of contemporary Marxism, often endorsing positions highly critical of the two main *political currents* of twentieth-century ostensible Marxism: Social Democracy and Stalinism. This suggests an important connection between their efforts to critically interrogate the 'value dimension' (and thereby resist the *reduction* of economic processes to 'the physical' or 'the phenomenal') and a refusal to worship before the altar of 'accomplished facts', whether the social-democratic 'welfare state', bureaucratically-centralised versions of 'state socialism', or various models of 'market socialism'.

5.3 *Neo-orthodoxy and the Value-Form School*

As already implied in our previous discussion but also confirmed by the subsequent evolution of the value controversy in the 1990s and beyond, the neo-orthodox current was and remains a *sub-set* of a broader camp of 'non-physicalist value theory' that also includes many fundamentalist value theorists. What united the neo-orthodox and fundamentalist theorists was their reassertion of Marx's value-form analysis as central to a critique of both Ricardian-Marxist value theory and neo-Ricardianism, while what differentiated them were their respective attitudes toward Marx's value-magnitude analysis. The neo-orthodox theorists of the 1970s and '80s tended to dismiss the macroscopic 'quantitative' dimension of Marx's value theory in favour of an exaggerated emphasis on 'qualitative' value-form analysis. Over time, however, some neo-orthodox theorists moved closer to fundamentalist value theory, with a few (notably Simon Mohun) even embarking on ambitious empirical studies of the classical Marxian determinants of the average rate of profit. Meanwhile, the more qualitatively oriented neo-orthodox theorists began a process of clarification and differentiation that produced what is today commonly referred to as 'value-form theory'. Contemporary value-form theory, however, is *not* comprehensively defined by the earlier neo-orthodox 'tendency to go beyond the correct perception that "interaction" occurs between production and the other moments of economic reproduction (circulation, exchange, consumption) to the conclusion that, under capitalism, exchange emerges as the predominant moment.'[77] As we shall see, several major exponents of contemporary value-form theory, notably Fred Moseley and Patrick Murray, explicitly reject such a standpoint. Given this, it seems appropriate to abandon the 'neo-orthodox' descriptor in favour of 'the value-form' designation, even while keeping in mind that, to varying degrees, fundamentalist value theory too remains concerned with the 'form of value'.

Moseley's high profile within the camp of value-form theory calls for some special comment.[78] A major proponent of Marx's law of the tendency of the rate of profit to fall, Moseley has long shown a keen interest in empirical Marxist analysis, in particular the quantification of Marx's principal value categories with a view to testing Marx's law of profitability. One could say that this places Moseley near the boundary between value-form and fundamentalist theory. All the same, his distinctive conceptions of Marx's method and his innovative 'macro-monetary' interpretation of Marxian value theory separate him from

77 Smith 1994, p. 102; reproduced on p. 119 of this edition.

78 Moseley was one of the initiators of the International Symposium on Marxian Theory, which has long been the most prominent forum for value-form theory debates. He has also edited a number of Symposium volumes, highlighting various issues in value-form theory and Marx's method in *Capital*.

the fundamentalists in important ways, while also problematising his place within the camp of value-form theory.

5.4 *Fundamentalist Value Theory: 'the Unity of Value-Form and Value-Magnitude Analysis'*

The fundamentalist current was characterised earlier as an 'inchoate and somewhat amorphous group that shares certain positions in common with both the Ricardian-Marxist orthodoxy and the neo-orthodox school', and as generally 'more concerned with the overall coherence of Marx's political economy than with the "letter" of Marx's analysis.' Moreover, 'the fundamentalist project involves a commitment to reviving interest in Marx's analysis of the value-form at least in part in order to *strengthen* his value-magnitude analysis, rather than to abandon it in the neo-orthodox fashion.' Accordingly, fundamentalist value theory represents 'a return to *both* aspects of Marx's fundamental theoretical program: the analysis of the form *and* the magnitude of value.'[79]

In our earlier discussion, considerable attention was given to Anwar Shaikh's contribution to the development of the fundamentalist critique of neo-Ricardianism and the elaboration of a framework for empirical Marxist analysis that surpasses the errors and limitations of the Ricardian-Marxist tradition. Shaikh remains an important figure within the fundamentalist current, but it should be noted that he has contributed relatively little to the debates amongst value theorists since the 1980s, concentrating instead on his own ambitious research agenda and the critique of mainstream economics. Much the same can be said for some other fundamentalist or proto-fundamentalist theorists of the 1970s and '80s, notably Ben Fine and Duncan Foley.[80]

The most striking new development within the broad fundamentalist camp has been the emergence and growing prominence of the Temporal Single-System Interpretation (TSSI) school of Marxian value theory, which burst onto the scene in the early 1990s. Although not theoretically homogeneous, the TSSI School is most often associated with the works of Guglielmo Carchedi, Andrew Kliman and Alan Freeman.[81] The contribution of TSSI to defending the theoretical coherence and logical consistency of Marx's theory will be discussed shortly.

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79 Smith 1994, pp. 84–5; reproduced as p. 100 of this edition.

80 One must note, however, the interesting collaborative work of Fine and Alfredo Saad-Filho (2004, 2008) in recent years, including their important debate with Kinkaid (2007, 2008). Saad-Filho 2002 represents another significant contribution from a fundamentalist perspective.

81 Progenitors of TSSI in the 1980s include Ernst (1982) and Kliman and McGlone (1988).

Many adherents to the fundamentalist current support the view that the law of the tendency of the rate of profit to fall is foundational to Marx's theory of capitalist crisis, typically rejecting approaches to the latter that emphasise 'underconsumption', disproportions or imbalances between 'departments of production', 'profit-squeezes' stemming from a 'rising strength of labour' and inter-capitalist competition, or problems of 'surplus-value realisation'. This particular orientation toward crisis theory is not at all accidental, as fundamentalist value theorists regard value and surplus-value as *definite quantitative magnitudes* originating in capitalist production and subject to diminution over time as a result of the displacement of living labour from the production process. It is worth noting in this connection that Henryk Grossman, the early twentieth century's principal exponent of the falling rate of profit theory of capitalist crisis, rejected criticisms of Marx's procedure for the transformation of values into prices of production, while reproaching the critics for a failure to grasp the place of the transformation process in the logical structure of *Capital*.[82] In a general sense, one can say that Grossman's critique anticipated approaches to the value-price transformation issue pursued later by the TSSI fundamentalists Carchedi and Kliman, as well as the value-form theorist Moseley.

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Having completed this brief survey of the evolution of the value controversy since the 1990s, we can now turn our attention to two of the major fields of debate involving fundamentalist and value-form theorists: the first pertaining to competing conceptualisations of the origin, nature and determinants of value, and the second pertaining to the purpose and logical coherence of 'value-theoretic' analysis, as problematised by the debate surrounding Marx's value-price transformation procedure.

5.5 *The Origin, Nature and Determinants of Value*

The inaugural issue of *Critique of Political Economy*, the journal of the TSSI-inspired International Working Group on Value Theory, featured a symposium in 2011 devoted to a central question that distinguishes value-form theory from TSSI and fundamentalist value theory more generally: how is value determined

Carchedi (1986a [1984]) is sometimes credited with being the original TSSI theorist, although glimmers of temporalism (if not necessarily of a 'single-system' interpretation) are evident in the approaches taken to the value-price transformation by Mage (1963), Mandel (1981b), and Shaikh (1978) as cited earlier.

82 See Grossman 1992 [1929] and 2016 [1932] as well as Kuhn 2016.

or constituted, and how should abstract labour, understood as both the source and 'substance' of value, be conceptualised? A particularly illuminating contribution to the debate was an article by the philosopher Patrick Murray entitled 'Avoiding Bad Abstractions: A Defense of Co-constitutive Value-Form Theory'. The great merit of Murray's article is that, even where it errs, it is unfailingly instructive in its framing of the fundamental questions in dispute between value-form and fundamentalist value theory.

Although Murray references a number of distinctly different positions within the camp of value-form theory and engages with a variety of TSSI criticisms, his main argument lends itself very well to direct comparison with the fundamentalist position on the origin of value, as I defined it earlier in this chapter: 'when Shaikh refers to the "abstract labour *time*" required for the production of a given output, he sides with Marx on a substantive theoretical point that many neo-orthodox theorists appear perplexed by: the idea that value is created *entirely* within the sphere of production through the expenditure of labour that, under conditions of commodity production, is *both* abstract and concrete.'[83] A little later, I expanded on this claim as follows:

> [B]y following Rubin in identifying a 'physiological expenditure of labour' entirely with the concrete aspect of labour, [Himmelweit and Mohun] effectively sever the concept of abstract labour from its *general* basis in the production of commodities. Once this is done, there is a strong tendency to associate concrete labour with the production process and abstract labour with the exchange process. Since abstract labour is conceived as both the creator and the substance of value, such reasoning can only attenuate the proposition basic to Marx's theory that value is *created* in production.
>
> Yet one does not need to deny that values are 'purely social' or that 'not an atom of matter enters into the objectivity of commodities as values' in order to affirm that a 'physiological' expenditure of human labour is value-creating *provided* that this expenditure is subject to a process of real abstraction, *occurring in production* even though framed and conditioned by exchange. It is precisely *because* exchange effects a process of 'equalization of products of labour on the market' (that is, involves a real abstraction) that *production oriented toward exchange* must take account of the fact that 'physiological labour' is both utility-shaping and value-creating – that is, both concrete and abstract at one and the same time.[84]

83 Smith 1994, p. 97; reproduced on p. 114 of this edition.

84 Smith 1994, p. 98; reproduced on pp. 114–15 of this edition, with emphasis added in this citation.

Murray's own argument begins with the claim that every specifically Marxian value-form theory (as opposed to the value-form theory of Samuel Bailey, an early proponent of the view that value is created *only in exchange* and who was criticised by Marx on that account) *must hold* that value is 'co-constituted' by production and exchange. This postulate clearly contradicts the proposition that 'value is created entirely within the sphere of production' – a position TSSI theorists also defend, albeit in ways that may or may not accord with my expanded discussion of it. Murray then attributes to the TSSI contributors to the *COPE* symposium a 'production-only' theory 'according to which value and price are determined in production alone', a view that he counterposes to the co-constitutive value-form theory that he attributes to Marx.

In contrast to Bailey, argues Murray, 'Marxian value-form theory holds that value and the magnitude of value are co-constituted in production and circulation. It takes what I call a *co-constitutive* view. Value is a supersensible social property intrinsic to the commodity as a potential that arises out of production and whose magnitude is not fully determinate until that potential is actualized with the final act of social validation, the sale of the commodity.'[85] It is important to be very clear on what is being said here. According to Murray, Marx proposed a theory of the co-constitutive role of production and circulation/exchange in the determination of the value magnitude of 'the commodity'. This claim is the starting point for a long discussion during which Murray remains exclusively concerned with the 'magnitude of value' of a single commodity and *never refers to the magnitude of the total value represented by all the commodities produced in a given period*. This point is extremely important, because it confirms the basic continuity of Murray's value-form theory with the neo-orthodox approach of the 1970s and '80s, as defined earlier.

To support his position, Murray quotes the following passages from Marx's 1859 work, *A Contribution to the Critique of Political Economy*:

> [The] different kinds of individual labour represented in these particular use-values, in fact, become labour in general, and in this way social labour, only by actually being exchanged for one another in quantities which are proportional to the labour-time contained in them. Social labour-time exists in these commodities in a latent state, so to speak, and becomes evident only in the course of their exchange. The point of departure is not the labour of individuals considered as social labour, but on the contrary the particular kinds of labour of private individuals, i.e.,

85 Murray 2011, p. 220.

> labour which proves that it is universal social labour only by the supersession of its original character in the exchange process. Universal social labour is consequently not a ready-made prerequisite but an emerging result. Thus, a new difficulty arises: on the one hand, commodities must enter the exchange process as materialised universal labour-time, on the other hand, the labour-time of individuals becomes materialised universal labour-time only as the result of the exchange process.[86]

As a follow-up to this quotation Murray remarks that 'Marxian value theory reverses the logic of Heisenberg's Uncertainty Principle: only through *the measurement of value in money effected in the sale of the commodity* is value actualized and the magnitude of value finally determined.'[87] Once again, Murray evinces a laser-like focus on the 'valuation' of an *individual* commodity. For him, the sale of 'the commodity' *effects* (allows for?) the measurement of its value in money, permitting the actualisation of the (potential) value it contains and finally determining its magnitude. The entire process of 'value constitution' is considered solely from the standpoint of the individual commodity – its travels and vicissitudes – as it circulates in the sphere of market exchange and tries to pass the ultimate test of attracting a magnitude of money to itself adequate to validate its 'intrinsic' (but only 'potential') value. (If I may be permitted a small joke, all this sounds like a pretty good premise for an animated children's movie!)

Later in the article, Murray concedes the point that Marx made statements that seem plainly to contradict the co-constitutive view. Thus, in *Capital I*, Marx wrote: 'The Value of a commodity is expressed in its price *before* it enters into circulation, and it is therefore a pre-condition of circulation, not its result.'[88] This observation is quickly dismissed, however, with a reminder to the reader of 'where we stand in Marx's presentation' and with the (as-yet unproven) assertion that 'Marx has already made the case that money and circulation are co-constitutive – with labor – of value: the substance, magnitude and form of value are inseparable.'[89]

86 Marx 1970, p. 45.
87 Murray 2011, p. 221.
88 Marx 1977, p. 260, emphasis in original.
89 Murray 2011, p. 235. In a footnote, Murray quotes a little-known passage from Marx referring to the 'decisive importance' of uncovering 'the inner, necessary belonging together [*inneren notwendigen Zusammenhang*] of value-*form*, value-*substance*, and value-*magnitude*.' Murray is quite right to underscore the inseparability of these three aspects of Marx's theory of value; however, as I shall argue in the next chapter, this requires the elaboration of an ontology of abstract labour that conceives of the latter as *both* an aspect of

Murray's co-constitutive position is well argued and even compelling so long as we follow him in narrowing our focus to the mutual exchange relations of individual commodities in the formation of market values and prices. He even seems close to the fundamentalist position when he avers that his own particular account of the co-constitution of values and prices is 'production-centred' and recognises the ontological primacy of production over exchange.[90] In the end, however, Murray's arguments that Marx himself takes a co-constitutive view and that, in any case, a 'production only' conception of the constitution of value is untenable are less than convincing, and for three reasons.

First, Marx's formulations in *A Contribution* are ambiguous and can be regarded as perfectly consistent with the view that 'a "physiological" expenditure of human labour is value-creating *provided* that this expenditure is subject to a process of real abstraction, *occurring in production* even though framed and conditioned by exchange' and that 'production oriented toward exchange must take account of the fact that "physiological labour" is both utility-shaping and value-creating – that is, both concrete and abstract at one and the same time.'

Second, the textual evidence in *Capital* for attributing a co-constitutive theory to Marx is even slighter than in *A Contribution*. This is because, between the writing of these two works, there had been a *development* of Marx's thinking with respect to 'abstract labour' as 'the substance of value' – a concept not yet fully formulated in *A Contribution*. In other words, the conceptual transition from Marx's 'universal social labour' (in *A Contribution*) to 'abstract social labour' (in *Capital*) is significant and needs to be more carefully specified.

Third, Murray's suggestion that Marx, in Chapter 10 of *Capital III*, 'reminds' us that 'values and prices are both preconditions and results of circulation' seems confused. Murray observes correctly that 'For most of the three volumes of *Capital*, Marx is assuming that commodities are selling at their values, that supply and demand match.'[91] But the dropping of those assumptions by Marx

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the 'physiological expenditure of labour' and a real macro-economic structure of commodity relations mediated by money. There are inklings of the need for such an ontology in Murray's discussion of 'the two *kinds* of concepts of abstract labor in play in Marx's theory of value' (Murray 2011, p. 225), but his apparent resistance to methodological *holism* and ontological *realism* prevails in the end as he resumes his focus on 'the commodity'. Despite certain strengths, Carchedi's own earlier critique of Murray (and Chris Arthur) on the question of abstract labour also suffers from this theoretical deficit (Carchedi 2011, pp. 60–78).

90 Murray insists that the 'mainstream of value-form theory, from Marx, through Rubin, to the present is production-centered' not 'market-centered', though he does admit to a few exceptions (2011, p. 223).

91 Murray 2011, p. 235.

in that chapter (which is entitled 'The Equalisation of the General Rate of Profit through Competition, Market Prices and Market Values. Surplus Profit', and which immediately follows the chapter on the formation of a general rate of profit and the transformation of values into prices of production) does *not* lead to a 'co-constitutive' conclusion.

Marx's discussion in this chapter is concerned, *inter alia*, with how the market prices of *particular* commodities are initially defined by 'price givers' who are capable of 'subjective error'. To be sure, a seller (price giver) can make a mistake in assigning a market price to a particular commodity offered for sale. But a failure to sell a commodity at the original asking price – or at any subsequent price for that matter – signifies only that this particular commodity's *asking price* has not received 'social validation' for any one of a number of reasons. It does *not* signify that the value represented by that commodity has been 'lost' or in any sense 'deducted' from the *total value magnitude* represented by *all* the commodities emerging from the sphere of production. Some of the intrinsic value of that 'failed' commodity might be redistributed/ transferred to the selling price of other commodities (as rates of profit between capitals of varying composition are equalised). In some cases, a micro value-price divergence may occur reflecting a change in the parameters of socially necessary labour time required for a particular commodity's production and the effects of a fall in the average rate of profit. In still other cases, a commodity may not find a purchaser simply because it is unable 'to satisfy a newly arisen need' or 'to bring forth a new need on its own account',[92] in which case it might only be vendible at a price well below its cost of production or not vendible at all. Such an eventuality, which represents an unambiguous loss from the standpoint of one capitalist, could produce a gain for other capitalists, who are now facing reduced competition as they seek to attract monetary 'purchasing power' to their own commodities. The magnitude of this purchasing power (represented in money) is constituted in part by the costs incurred by the capitalist who produced the failed commodity, as the value of the labour power and raw materials previously purchased remains in circulation and forms a component of effective demand. Finally, there are certain instances in which the value of commodities is simply destroyed and in which there is a real net loss to the social capital as a whole. However, more often than not such losses stem from major failures at the level of *use-value* production: for example, the production of salmonella-contaminated foodstuffs that are then immediately withdrawn from the market, forcing a plant closure. In such cases, 'value' cannot be said to have been

92 Marx 1977, p. 201.

created in the first place, despite the expenditure of a good deal of (wasted) physiological labour, precisely because such useless expended labour will play no role in the determination of the abstract socially necessary labour time required to produce viable (uncontaminated) versions of the same commodity.

The postulate of 'co-constitution' of value in production and exchange sheds no light on how individual values and prices may deviate from one another in any of these cases. On the contrary, this postulate conflates what needs to be distinguished: the relatively autonomous constitution of *market prices* and the constitution of *the magnitude of value of total commodity output*, which sets limits on the extent to which the final market price of a commodity can deviate from its intrinsic value (or its 'direct price' as it initially emerges from production).

Murray concludes his critique of TSSI by noting 'how difficult it is to get free of *Verstand* thinking, or what Marx called "the bourgeois horizon"', and that to do so one must avoid 'separating what is only distinguishable'. But in failing to adequately articulate the dialectical relation between the universal (the mass of commodities, the totality of social labour, and the magnitude of total value) and the particular (the individual commodity, its intrinsic value and its final market price) – and therewith the inseparability of abstract labour and concrete labour within capitalist production, Murray tends to conflate the substance, form and magnitude of value in a fashion that makes the 'magnitude of value' an essentially micro-economic phenomenon, subject to the vagaries of market forces.[93] The effect is to compromise his ability to deploy value theory in the way that Marx intended: as the foundation for disclosing capitalism's fateful laws of motion and inevitable decay. These questions will be explored further in Chapter 6.

5.6 *The Purpose and Coherence of Marxian 'Value-Theoretic' Analysis: Rehearsing the 'Transformation Problem'*

The preceding discussion should serve to remind us that the main purpose of Marx's theory of value is not to determine how individual commodity prices are constituted, but to disclose how the evolution of the capitalist division of

93 It might be added that, since it encourages the view that the magnitude of total value is simply the sum of realised market prices, Murray's approach could also mislead us in our use of national income accounts in empirical Marxist research. As we shall see later, we cannot assume uncritically that the measured magnitude in these accounts of gross output in money-price terms is truly *equivalent* to the magnitude of total value. Indeed, there are factors at work (credit, fictitious profit) that can produce a growing discrepancy between these two magnitudes over time.

labour creates an increasingly acute conflict between the forces and the relations of production within capitalism. Marx's main 'value categories' (constant capital, variable capital and surplus-value) refer to real, macro-economic forces whose interactions and contradictory relations define the laws of motion of the capitalist mode of production. That 'macroscopic' analytical purpose should be clear enough in the first and second volumes of *Capital*, but it can be lost sight of in the third volume where Marx addresses various issues concerning the formation of prices under theoretical presuppositions that now allow for the effects of inter-capitalist competition and redistributions of value (prices of production and market prices).

The question we need to return to now is whether Marx's particular procedure for the transformation of values into prices is 'logically' coherent, and if not, to what extent this strikes a fatal blow against his fundamental theoretical postulate that labour is the sole source of new value. Much of the literature on the 'transformation problem' up to the 1970s and '80s was reviewed earlier in the chapter. However, in light of some influential recent contributions to the debate that we will consider shortly, we need to begin by considering some questions pertaining to the *limitations* of Shaikh's early fundamentalist attempt to defend Marx against the 'standard critique' of his value-price transformation procedure.

In his most recent major work, *Capital: Competition, Conflict, Crises*, Shaikh provides a useful summary of his own thinking on what he continues to call 'the transformation problem'. Here are a few excerpts:

> Marx keeps the total money value of gross output (the sum of prices) constant [in his transformation procedure – MS] in order to focus on the effects of the redistribution of profits, and since costs are unchanged, the latter step does not change the sum of profits either. But once costs also reflect the new set of relative prices … the sum of profits will also change. This phenomenon is the point of departure for the huge literature on the Marxian 'transformation problem'.
>
> I have argued in this chapter [Chapter 6 on 'Capital and Profit' – MS] that the problem is generic because it obtains in every school of thought which deals explicitly with the question of aggregate profit. The real issue is that there are two sources of aggregate profit, profit on production and profit on transfer, and it is their combination which accounts for this particular phenomenon (and for others which are almost never broached). This was Steuart's crucial insight which Marx explicitly incorporates into his plans to distinguish profit on surplus-value from profit on alienation. This duality disappears from the literature, leaving behind what seems to

> be in intractable puzzle: the money value of aggregate profit, or indeed of aggregate net output, can vary with relative prices …
>
> [Bortkiewicz] showed that one could treat the problem as a simultaneous solution for prices of production applied to both costs and outputs. But then if one holds the latter constant to keep the price level constant the new sum of profits differs from the sum of direct profits … Morishima and Shaikh showed that Marx's 'first step' could be taken to be just that, a first step in an iterative process which could converge to the full Bortkiewicz solution … Finally, Shaikh [1984 – MS] develops the idea of transfers of value as the source of variability of aggregate profits in the face of changes in relative prices …[94]

This summary accords with the account given earlier in the chapter of Shaikh's views on the value-price transformation and the important role of value transfers (between the circuit of capital and the circuit of revenue) in explaining how aggregate surplus-value and aggregate profit can diverge. But what it also reveals is that, today as then, Shaikh sees no need to break decisively from the Bortkiewicz method of simultaneous equations, since all that is called for, in his view, is an extension of Marx's 'first step' into an iterative process that leads back to Bortkiewicz's 'solution', one that is *unable* to accommodate both of Marx's aggregate equalities (total values equalling total prices, total surplus-value equalling total profit). Shaikh remains satisfied with this handling of the transformation problem, which, while acknowledging the insufficiency or incompleteness of Marx's original procedure, nevertheless shows that there is no 'logical inconsistency' involved once iteration is effected and *value transfers* are taken into consideration.

Even so, when discussing the Cambridge Capital Controversy further on in his book, Shaikh notes that both sides of this controversy (that is, both the Sraffians and the neoclassical economists) share a 'common ground' that he rejects, one 'defined by perfect competition, equilibrium prices, optimal choices, and costless and timeless moves from one technique to another'.[95] There are suggestions here, as elsewhere in his book, that Shaikh recognises the need not only for a 'more' temporalist approach to economic analysis, but also for a break with equilibrium assumptions and with what the TSSI theorists call 'simultaneism' in the interpretation of the value-price transformation. All the same, that break is never actually made by Shaikh.

94 Shaikh 2016, p. 240.
95 Shaikh 2016, p. 438.

What all this points to in the end is that, from the standpoint of both TSSI and Moseley's macro-monetary value theory, Shaikh continues to operate within a 'dual systems' and 'simultaneist' framework – albeit one that is perhaps straining in a temporalist direction – and this in turn means that Shaikh's approach remains altogether too 'physicalist'. For Shaikh, the values of the commodity inputs to production are *physical* values (measured in units of labour time or 'materialised labour') as are the outputs, until such time as they reach the sphere of exchange where they are then denominated or represented as money. But as these values re-enter production (embodied in means of production and labour power), they are once again conceived in physicalist terms. For the more determined critics of 'physicalism', this way of conceptualising the process of capitalist production and reproduction, and the relationship between values and use-values, perpetuates a dual-systems framework that renders it impossible to sustain Marx's aggregate equalities within what is actually his 'single system', thereby keeping alive the 'myth of the transformation problem'.

Shaikh's commitment to a 'physicalist' interpretation of Marx – not in the sense that he ignores the role of money or the value-form, but in the sense that he regards the labour actually expended in production as regulative of capitalist reproduction – finds clear illustration in Figure 3 presented earlier in this chapter. The commentary accompanying that figure included the following quote from Shaikh: 'labour involved in the production of commodities produces value, while exchange merely realizes it in money-form. It is only because of this that Marx can distinguish between the amounts of value and surplus-value created in production and the generally different amounts realized through exchange.'[96] Later in the same article, Shaikh wrote: '… both "inputs" and "outputs" are the use-forms of materialized value, and we can then say that in the *real* process it is values that determine the "physical production data" … [I]t is values that also determine prices, in a double sense: prices are the forms taken by values in exchange, and the magnitude of these values dominate and regulate the movements of their price forms.'[97]

These early fundamentalist arguments from Shaikh are worth recalling because they have a direct bearing on both of the contemporary debates that we are now considering: the debate surrounding a 'production only' theory of the constitution of value, and the debate on the value-price transformation. One should also note that none of the more recent debates on the transforma-

96 Shaikh 1981, p. 274.
97 Shaikh 1981, p. 280.

tion problem has moved Shaikh to alter his position. Indeed, in his latest work, he ignores them all, with the exception of the debate surrounding the 'New Interpretation' originated by Dumenil and Foley, an approach that enjoyed a brief vogue in the 1990s and early 2000s and that Shaikh dismisses.[98]

Shaikh's general interpretation of Marx is a powerful one, and his own distinctive (if somewhat indirect and less-than-'orthodox') strategy for demonstrating the coherence of Marx's approach to the value-price transformation may well provide a 'technically' adequate foundation for sustaining the key postulates of Marx's theory of value. Moreover, even where he may depart from Marx, he opens up fruitful lines of inquiry concerning questions that Marx (owing to the incomplete nature of *Capital*) never addressed. One example is Shaikh's exploration of *value transfers* in explaining how an underlying or hidden 'value rate of profit' can differ from a 'money-price rate of profit'. More troubling, perhaps, is Shaikh's turn toward substituting what is effectively a 'labour theory of price' for Marx's theory of value as the basis for empirical Marxist research. As we shall see shortly, this has opened Shaikh up to some incisive criticism from the TSSI theorists. And yet if we define the *core position* of fundamentalist value theory as involving the defence of Marx's postulate that living labour performed in production is the sole source of all new value, Shaikh's approach to value theory remains fully fundamentalist, despite 'physicalist' tendencies that converge, to some degree, with the traditional Ricardian-Marxist orthodoxy and even the Sraffa school.

Elsewhere in the fundamentalist camp, and closer in some respects to the value-form school, are the proponents of the 'temporal single-system interpretation' (TSSI), represented most prominently by Guglielmo Carchedi and Andrew Kliman.

Carchedi's stance, which was referenced earlier, is informed by a strong commitment to *dialectical* analysis. It is vigorously temporal, anti-equilibrium and opposed to any conceptualisation that posits a system of values independent of money prices. While conceding that there are several ways in which Marx's transformation procedure can be interpreted as logically consistent (or not), Carchedi argues that all sides in the debate, temporalism and simultaneism

98 For the New Interpretation, see Dumenil and Levy 2000, Foley 2000, and Fine, Lapavitsas and Saad-Filho 2004. Shaikh (2016, p. 242) points out that the 'double-redefinition methodology' of the New Interpretation theorists 'was first used by Mage 1963, as shown in Shaikh and Tonak 1994', and concludes that the New Interpretation 'is a purely accounting "solution" to the transformation problem which simply changes a standard national accounting identity into different units and then proceeds to re-label the components.' A more detailed consideration of the NI approach would distract us from the main issues of our present discussion.

alike, 'should move on from being only a critique and counter-critique of each other, applying only formal logic to the issue of consistency, towards showing how their view of consistency fits into a wider theory of radical social change, thus grounding the choice of their initial postulate into labour's perspective.'[99]

In terms of his own understanding of the theoretical issues, Carchedi writes: 'The transformation seen as a dialectical process is a temporal succession of transformations, from potential to realised values and vice versa, and from determinant to determined values and vice versa.'[100] In this regard, he offers the following précis of the 'dialectics of the relation between abstract labour and value':

(i) If the capitalist production-process has been started but is not yet finished, the labourers are performing abstract labour and are thus creating the commodity's value embodied. However, that abstract labour is not yet realised value, it is, rather, value in formation, potential embodied value, because the commodity itself, not being finished, is being created and thus it exists only potentially.

(ii) If the production-process is completed and thus the commodity is finished (but not yet sold), the abstract labour which has gone into it becomes the value *contained* or *embodied* in it, whose material substance is abstract labour. Since a commodity must be sold in order to realise its value, its value contained is also its potential realised value.

(iii) When the commodity is sold, the value embodied in it becomes *realised* value (either tendentially or actually realised value) whose substance is the value contained in it. The labour embodied determines the value realised, because the former calls into existence the latter from the realm of its potentialities and because the latter reacts upon the former but in the following period.

(iv) Since commodities are produced in order to be sold for money, the labour-value realised (labour-price) becomes itself a substance that takes necessarily the *monetary form* of value. Money is the form of existence of, and thus represents value.

(v) The realised value (price) of the output becomes the non-realised value, or value contained, or potential realised value of the same commodity as an input of the following period. Here, too, the former determines the latter for similar reasons.

99 Carchedi 2012, p. 123.
100 Carchedi 2012, p. 122.

(vi) Finally, this potential value becomes again realised when the following period's output containing that input is sold. Here, too, the same reasons hold. It is from this point that the cycle of determination starts again.[101]

Many readers, no doubt, will find this summary convoluted and difficult to follow, and yet it is well supported by a battery of arguments too detailed to recount here. In its own way, Carchedi's TSSI perspective, emphasising the 'dialectics of value and knowledge' in Marx's theory, is compelling, offering an alternative to Shaikh that allows us to vacate the formalist, static and mechanical premises of 'the standard interpretation/critique' of Marx once and for all. However, like all the other schools of value theory reviewed in this chapter, it is in need of a firmer grounding in an explicitly *realist* 'ontology of value'. Carchedi's reference to abstract labour as the 'material substance' of value, for instance, suggests a surprisingly 'physicalist' conception of what Marx himself refers to as the 'social substance' of value. While there are hints of a holistic and 'social-relational' understanding of abstract labour and value, and of an ontology of 'non-particular' entities (for example Carchedi's reference to how 'the labour embodied determines the value realised, because the former calls into existence the latter from the realm of its potentialities and because the latter reacts upon the former but in the following period'), this understanding remains murky, often raises more questions than it answers, and is not developed in any consistent fashion.

Where Carchedi's complex, dialectical argumentation can seem unduly obscure at times, Kliman's discussion, by contrast, is a model of clarity and accessibility, albeit achieved through a quite strict (even proud!) adherence to the rules of formal logic. Kliman writes: '... we have continually stressed that our demonstrations are not efforts to prove that Marx's theory is true, but efforts to prove that the theory can be interpreted in a manner that renders it logically consistent ... And the way in which one proves this latter claim is *precisely* by showing that Marx's conclusions follow from his premises (as we interpret them).'[102] There are two problems with this, however. The first is that it is not at all clear that TSSI is the *only* way to defend Marx's theory against the charge of logical inconsistency (since, with some qualifications, Shaikh's approach might be said to do the same thing, as does Moseley's); and the second is that it is unclear that the way in which Kliman interprets Marx's 'premises' are always correct. Indeed, there does not seem to be complete unanimity even among TSSI authors regarding a number of Marx's theoretical premises (as

101 Carchedi 2012, pp. 121–2.
102 Kliman 2007, p. 168.

revealed, for example, by inconsistencies in the way TSSI authors have gone about critiquing Moseley and value-form theory).[103] That said, one can only agree with Carchedi that 'Kliman does an excellent job' within the framework of a 'temporalism immersed in formal logic' in defending the logical integrity of Marx's treatment of the value-price transformation and thereby upholding key Marxian postulates (such as 'living labour is the sole source of new value') as at least *possibly true* (albeit pending empirical verification).

Essentially, the TSSI approach espoused by Kliman in his book *Reclaiming Marx's Capital* is the same as that of Carchedi. Marx is acquitted of the charge of error in his value-price transformation scheme on the grounds that his critics fail to appreciate that he regards values and prices as belonging to a 'single system' (rather than to parallel, dual systems) and that his approach is temporalist. Unlike neo-classicism, Sraffian economics, and much 'modern' Marxian economic analysis (including Shaikh's), 'Marx did not pose the problems in terms of the properties of static equilibrium states, and he therefore had no need to value inputs and outputs simultaneously.' Only when his theory is 'transformed into a theory of static equilibrium states, and thus into a simultaneist theory' do internal inconsistencies appear.[104]

Kliman proceeds with great care to demonstrate that these TSSI assumptions are supported by an abundance of textual evidence in Marx. Like Carchedi and Moseley, Kliman regards the 'single system' of values and prices as a monetary system. Marx starts with money and ends with money, as clearly suggested in the formula for the circuit of capital: M – C (MP & LP) – P – C′ – M′.[105] But this circuit is also a temporal process of the *expansion* of the value represented in the initial money-capital investment. The production phase of the circuit involves the exploitation of living labour as the latter works with means of production to create new commodities and additional new value that finds expression in the value of the output. When the full value of that output is

103 See the TSSI-sponsored symposium on value-form theory in *Critique of Political Economy*, Vol. 1, available at www.copejournal.com.

104 Kliman 2007, p. 11.

105 From both the TSSI and 'macro-monetary' perspective of Moseley, there is a telling absence in Shaikh's depiction (illustrated in Figure 3) of the regulative role of labour values in the process of capitalist reproduction: it neither begins nor ends with *money*. Instead, it begins with inputs to production conceived as 'materialised labour' and ends with the exchange of products that also represent 'materialised labour'. Money – the necessary form of appearance of value, according to Marx – finds no explicit reference in Shaikh's account. This speaks to a bias toward 'physicalism' but also of course to the fact that Shaikh was seeking to rebut the far cruder physicalist representation of Marx deployed by Steedman.

realised through its sale, a larger magnitude of money capital (M′) is now available to the capitalist class for further investment and/or personal consumption.

Kliman applies his temporalist insights to a variety of contentious issues in Marxist economics, and he marshals some strong arguments against several important objections to Marx's theory, notably the Okishio Theorem (discussed later in Chapter 7 of this volume). He is also highly critical of Shaikh, not simply on the grounds of his simultaneism, but also because Shaikh has sought to defend 'a labour theory of price' on largely empirical grounds. Noting that Shaikh's iterative solution to the transformation problem failed to preserve 'two of Marx's three aggregate equalities' (values = prices; surplus-value = profit; value rate of profit = price rate of profit), Kliman writes:

> Still searching for a way to uphold 'the labor theory of value', Shaikh turned to the data. He suggested that 'variations in prices [across industries] are dominated by variations in values' (Shaikh 1984: 64). In other words, industry-level prices do not deviate *systematically* from values. If one industry's value is x% higher or lower than another's, its price will be approximately x% higher or lower as well. I shall call this the labor theory of price (LTP).
>
> Shaikh and Ochoa's statistical results appeared to confirm the theory. Subsequent studies, using data from various countries and various years, seem to confirm it as well. The *correlation* between values and prices – a measure of the degree to which they vary together – has frequently been found to exceed 0.95, a figure quite close to the maximum value of 1.[106]

Kliman, however, is not as impressed with these empirical findings as many other Marxist (and Sraffian) economists. Indeed, he argues that the results of these studies *do not* support Marx, inasmuch as the LTP is *at odds* with Marx's own value theory. In support of this contention, he cites Shaikh himself, who states: 'It is worth recalling that neither Marx nor Ricardo argue that cross-sectional variations are negligible. Indeed, they both emphasize that at any moment in time prices of production may significantly differ from values.'[107] Kliman also points out that one of the implication of Shaikh's LTV is that, other things being equal, profits will tend to be lower in industries in which a greater proportion of the capital invested is constant rather than variable, even though Marx explicitly recognises the possibility of their being higher.[108] One

106 Kliman 2007, p. 194.
107 Shaikh 1984, p. 64.
108 Marx 1977, p. 421. It should be noted though that Marx's discussion of this occurs in

can argue, however, that Kliman rather overstates matters when he concludes that 'evidence that supports the LTP does not serve to confirm Marx's value theory.'[109] This point is arguable, but what should be clear is that such evidence cannot be said to undermine the *core fundamentalist postulate* referred to earlier: that living labour is the source of new value. If anything, the plausibility of that postulate is strengthened by these empirical studies.

Finally, we arrive at Fred Moseley's 'macro-monetary' interpretation of Marx's theory. As previously mentioned, this interpretation has both value-form and fundamentalist features. On the one hand, Moseley maintains a resolute theoretical focus on *money* as 'the necessary form of appearance' of value and is insistent that Marx's *Capital* is concerned, not with 'the determination of the labor-values of individual commodities', but first with 'the determination of the total increment of money, or total surplus-value, produced in the capitalist economy as a whole' (in *Capital I*) and then later with the circulation and distribution of that total surplus-value (in *Capital II* and *III*).[110] This points toward a relatively unique genre of value-form theory, one focused on *macro-economic* quantities of money and prices rather than on the changing value-forms of 'the individual commodity'. On the other hand, this macro-economic orientation and focus on 'total value and surplus-value' allows Moseley to circumvent many 'micro-economic' issues that have led other value-form theorists to distance themselves from the proposition that 'new value is created solely by living labour in production', a core fundamentalist claim. Moseley's approach also allows him to understand value and surplus-value as 'definite quantitative magnitudes', another core fundamentalist postulate.

What separates Moseley from the fundamentalist camp is not his insistence on Marx's own proposition that money is the necessary form of appearance of value (a position shared by fundamentalists even though interpreted in a variety of ways), but rather his insistence that all 'labour value' interpretations of *Capital* are mistaken:

Volume I of *Capital*, where he abstracts from inter-capitalist competition and where the tendency toward the equalisation of rates of profit between different branches is not yet considered.

109 Kliman 2007, p. 195. Kliman, relying on Freeman 1998, goes on to suggest that 'strong price-value correlations may not be valid evidence, owing to the problem known as spurious correlation.' One can only be surprised by such strenuous efforts on the part of Marxist value theorists to *dispute* empirical evidence showing that variations in units of concrete labour-time can so strongly account for variations in money prices!

110 Moseley n.d., p. 1. I am relying here on a monograph entitled 'Money and Totality: Marx's Logic in Volume I of *Capital*', which seems to reflect Moseley's most recent views. It is available at: https://www.mtholyoke.edu/~fmoseley/working%20papers/MONEYTOT.pdf.

> … money magnitudes and prices are *determined by* quantities of labor-time, which are taken as given. In logical terms, money magnitudes and prices are the *explanandi*, the variables that are to be explained or determined, and quantities of labor-time are the *explanans*, the givens in terms of which the *explanandi* are explained or determined. Money magnitudes and prices in [*Capital*] Volume I are not inessential illustrations or shorthand for labor-values, but are themselves the variables that are determined or explained in Volume I.[111]

Many theorists would suggest that, by treating labour time simply as a 'given', Moseley is not entirely true to Marx's analysis. Fundamentalists like Shaikh, as well as neo-Ricardians like Steedman and Ravagnani,[112] consider the real starting point of Marx's analysis to be not the money-quantities invested but the physical quantities of the means of production and the means of subsistence, from which Marx then derives the money quantities of constant capital and variable capital respectively. There is considerable textual support for this in Marx, just as there is support for Moseley's interpretation. For Carchedi, the reason for the ambiguity engendered by this debate between more 'physicalist interpretations' like Shaikh's and Moseley's version of value-form theory is that 'the two opposite interpretations capture only one aspect of Marx's theoretical richness', with both still remaining in a 'simultaneist' framework.[113]

In the concluding section of his paper 'Money and Totality', Moseley summarises the implications of his approach for addressing the transformation problem:

> With regard to logical consistency, this macro-monetary interpretation implies that there is no logical contradiction in Marx's determination of prices of production in Part 2 of Volume III. There is no contradiction

111 Moseley n.d., p. 2.

112 Ravagnani 2005.

113 Carchedi 2011, p. 117. Carchedi continues: 'In an attempt to find common ground with the neo-Ricardians, Moseley submits the following: "I would suggest that we revise Marx's theory, or 'reconstruct' it, along the lines of … the 'monetary' interpretation presented here: that the magnitudes of constant capital and variable capital are initially presupposed in the theory of surplus-value and then are eventually explained in successive stages by the values and the prices of production of the presupposed quantities of means of production and means of subsistence" (Moseley 2008, p. 118). Given that this is Marx's position, it is surprising to read that "With this one revision, which is entirely reasonable and for which there is substantial textual evidence, Marx's theory would be transformed from a logically contradictory mess to a logically coherent whole" (ibid.).'

> between the 'value rate of profit' in Volume I and the 'price rate of profit' in Volume III. There is only one rate of profit in Marx's theory, the price rate of profit. The price rate of profit is derived in Volume III from the total surplus-value which is determined in Volume I, and is then taken as given in the determination of prices of production in Volume III. Marx did not 'forget to transform the inputs' of constant capital and variable capital from values to prices of production, because the same quantities of money constant capital and money variable capital are taken as given in the determination of both values in Volume I and prices of production in Volume III ... Marx's determination of prices of production is logically consistent. Therefore, the very widespread reason for rejecting Marx's theory – logical inconsistency – is not justified. The further evaluation of Marx's theory should focus on its empirical explanatory power, compared to the explanatory power of other economic theories.[114]

It is clear from this that Moseley and TSSI achieve an almost complete convergence in their conclusions regarding claims of Marx's logical inconsistency. There is, however, an important difference, one already mooted by Carchedi. Moseley's interpretation of Marx, from the standpoint of TSSI, is neither temporalist nor free of problematic 'physicalist' implications. Thus, Kliman argues that Moseley's is a 'simultaneist single-system interpretation' (SSSI), which obtains 'the same rate of profit (and the same relative prices of production) as other simultaneist models'. The reason for this characterisation is as follows:

> Moseley's 'givens' are not given in any meaningful sense. Although he claims that his interpretation is non-simultaneist, because its value magnitudes are determined prior to its price magnitudes, 'The constant capital that is taken as given and transferred to the price of the final product is the *current replacement cost* of the existing means of production' (Moseley 1993a: 168, emphasis in original). Thus the sum of value transferred is not the actual, given cost of the means of production when they entered into their production process, but what it would cost to replace them when the output is sold. In other words, the constant capital is retroactively revalued at post-production prices, as in every other simultaneist model ... If Moseley's interpretation seems to produce Marx-like results, that is only because his 'given' sums of value mask the changes in technological and real wage coefficients that actually determine his rate of

114 Moseley n.d., pp. 22–3.

> profit … That he expresses his rate of profit as the ratio of surplus-value to capital advanced, instead of as a ratio of physical coefficients, makes no difference. *It is all value-form and no value-substance*.[115]

Suffice it to say here that one does not need to subscribe to Kliman's view about the need for 'historical-cost' accounting to agree that Moseley's whole interpretation of Marx, in particular his treatment of quantities of labour time as simple 'givens', elides the key issue of 'value-substance'. Indeed, what Carchedi calls the 'dialectics of the relation between abstract labour and value' are conspicuously absent from Moseley's account, replaced entirely by the 'phantom-like objectivity' of the money value-form. Those very dialectics, however, can only begin to be clarified on the basis of a coherent 'ontology of abstract labour and value'. This is a major topic of our next chapter, which is devoted to assessing some significant but often overlooked aspects of the value controversy.

115 Kliman 2007, pp. 171–2, 174, emphasis added.

CHAPTER 6

An Assessment of the Value Controversy

> All theory is gray, my friend. But forever green is the tree of life.
>
> – JOHANN WOLFGANG VON GOETHE, *Faust*, 1808

• • •

> I never once made a discovery … I speak without exaggeration when I say that I have constructed *three thousand* different theories in connection with the electric light … Yet in only two cases did my experiments prove the truth of my theory.
>
> – THOMAS ALVA EDISON, 1878

1 Preliminary Thoughts on the Road Just Travelled

Following the long (and no doubt, for many readers, increasingly tortuous) discussion of the value controversy in the last chapter, it should now be abundantly clear that complete agreement amongst those who defend some version or interpretation of Marx's theory of value is an elusive goal. The attempt to forge one through highly abstract theoretical debates, hermeneutic-style analyses of Marx's texts, and appeals to 'Marx's own original position' can only serve to divert a great deal of intellectual energy from more pressing tasks. Plainly, Marx is open to a variety of interpretations, and several reasonable and illuminating approaches to defending the core postulates of his value theory, and applying them in the analysis of capitalist reality, are on offer.

The 'transformation problem' in particular should not be seen as a sort of theoretical Rubik's Cube; it can be approached in a variety of ways and no single solution or 'refutation of the myth of Marx's inconsistency' in dealing with it will ever allow everyone interested in Marxist political economy, to view it in precisely the same way – or, for that matter, prevent bourgeois economists from using it as a stick with which to beat 'the dead dog Marx'. To be sure, some interpretations can make stronger claims to fidelity to 'Marx's own position' than others; but it should go without saying that greater fidelity to Marx on specific

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issues in no way guarantees a scientifically correct position on them. Marx was not infallible; nor did he solve or even fully consider, from every possible angle, all the problems that he encountered, much less anticipate every problem identified by those who came later. What's more, it is vitally important to recognise that the dialectic of programme and theory is at work in the controversy among Marxists no less than in the wider controversy between pro-capitalist and anti-capitalist theorists. One's conception of what needs to be achieved in order to put the world aright will inevitably inform the questions one is interested in asking about it and therefore the answers one finally reaches through research and reflection. By no means does this suggest that studying the 'value controversy' is a futile exercise; but what it does mean is that it is *ideological reflex* and not the spirit of scientific discovery that animates those who would simply dismiss the 'labour theory of value' (and with it the laws of motion of capital disclosed by Marx) as a guide to human action. Marxists should continuously remind themselves (and others) that, whatever theoretical gaps or problems may still haunt the Marxian analysis of capitalism, they pale in comparison to the fallacies of the leading schools of bourgeois economics.[1]

Where then does that leave us? Many, perhaps most, recent participants in the value controversy agree that Marxian value-theoretic analysis is not at all incompatible with empirical analysis of the concrete realities of contemporary capitalism, and that, indeed, value theory is indispensable to penetrating the phenomenal forms of capitalist economy and disclosing its essential relations and 'hidden' laws of motion. No doubt, the application of value theory to empirical Marxian analysis of the real dynamics at work will reveal many differences in theory and method between researchers; but perhaps it is precisely on this plane that the results and implications of these differences will not only become more evident but more susceptible to political assessment and scientific adjudication as well.

The controversy surrounding Marx's theory of labour value can be approached and assessed at three relatively distinct levels: the philosophical-methodological, the substantive-theoretical, and the political-programmatic. This chapter is mainly concerned with the philosophical-methodological dimension of the value controversy. However, brief assessments of the theoretical and political dimensions of the controversy are also undertaken by way of offering some final reflections on its apparent intractability and reorienting our thinking toward issues of capitalist crisis and their empirical investigation.

1 Shaikh (2016) does a magisterial job of reminding us of that. And though hardly a supporter of Marx's theory of value, Keen (2011) has also done an admirable job in his book *Debunking Economics*.

2 Some Philosophical and Methodological Considerations

Reference to the distinctive methodological aspects of Marx's theory of value is *de rigueur* for defenders of that theory. Dialectics are counterposed to formal logic; Marx's holism (or anti-reductionism) is invoked against the methodological individualism (or 'atomism') of the positivist tradition; abstraction and contradiction are located in 'the real' rather than being viewed as purely 'mental' constructs. Yet, discussion of the scientific method that guided Marx's elaboration of his theory of value has often been confused or inadequate, and the salience of the above-mentioned methodological principles to the value controversy has remained obscure. This has led many of Marx's critics – and some of his more 'positivistically' oriented defenders – to dismiss them as either 'obscurantist' or 'metaphysical'. Such characterisations, it must be said, are wholly unfounded. Far from being obscurantist, Marx's views on scientific method are vital sources of illumination concerning his theory of value; and far from being metaphysical, Marx's concept of science is formulated and applied in a consciously *anti-metaphysical* spirit. These points are well established in Patrick Murray's important study *Marx's Theory of Scientific Knowledge* (1988), which, despite some important weaknesses and lacunae, will serve as a useful point of departure for our discussion.[2]

2.1 *Patrick Murray on Marx as Scientist*

An overarching theme of Murray's study is that Marx's concept of scientific knowledge stands outside and against the positivist tradition, reflecting not only the enduring influence of Hegel's dialectical method on his thought but also the results of his early critique of Hegel's absolute idealism. Marx's anti-positivism, however, is not at all of a piece with any neo-Kantian insistence upon an epistemological gulf between the natural and the socio-cultural sciences, and therefore has little in common with the putative anti-positivism of twentieth-century 'critical theory', despite the latter's Marxist overtones. As Murray points out, 'Marx disavows any radical separation of natural science

2 As we have already seen, Murray is a prominent member of the value-form school and its main forum for discussion, the International Symposium on Value Theory. Several other members of the latter have contributed significantly to debates pertaining to Marx's method in *Capital* and other aspects of his philosophical orientation. Many subscribe to the view that Marx was a practitioner of 'systematic dialectics' – a subject that will not be discussed here. For a variety of views on Marx's method and systematic dialectical logic, see Arthur 1998, 2004, 2005; Callinicos 2005, 2014; Ilyenkov 1977, 1982; Moseley (ed.), 1993; and Tony Smith 1990.

from human, social or cultural science.'[3] Rather, what distinguishes his theory of scientific knowledge from all positivist versions is its 'attention to the practical, historical rootedness of the concepts of science, as well as the values which guide it.'[4] In this, as in so much else, Marx owes a considerable intellectual debt to Hegel:

> Marx accepts Hegel's demand for a unity of form and content in scientific knowledge. Method ought not to be some abstract, formalised procedure hovering over the specific content of a science. Rather, method needs to take its shape from the specific objects under scrutiny … Marx views science as a matter of getting at the logic of things in themselves. Since this logic is not ascertainable *a priori*, purely formal methodologies have no place in Marx's conception of scientific knowledge.[5]

Murray neglects the point, but it is instructive to register it, that an aversion to methodological formalism is also one of the hallmarks of contemporary 'realist' theories of science.[6] Among the scientific realists, Ted Benton in particular has argued that the methodological diversity of the sciences establishes no epistemological fault-lines either within or between the natural and the social sciences. To establish any formal methodological principle as inviolable – as Karl Popper did with 'methodological individualism', for example – betrays an appetite not for scientific rigour but for a truly metaphysical and dogmatic approach of the sort that positivists routinely condemn. In this sense, Marx's aversion to formal methodological precepts attests to a highly 'up-to-date' regard for the methodological pluralism celebrated by scientific and critical realism.

For Marx, it is precisely the methodological open-endedness of the materialist dialectic that makes it a powerful tool of scientific analysis and a necessary antidote to both naïve impressionism and speculative metaphysics. On this view, the methods of scientific analysis are, of necessity, internally related to the real objects of analysis – objects involving 'abstractions that take shape according to the specificity of that object itself.'[7] Murray refers to this methodological strategy as Marx's 'logically well-bred empiricism' or, alternatively, his 'empiricism in second intension'. And it is not to be confused with either

3 Murray 1988, p. 75.
4 Murray 1988, p. xx.
5 Murray 1988, p. 110.
6 Benton 1985; Bhaskar 1979; Creaven 2000, 2005; Keat and Urry 1982; Andrew Sayer 2000; Sean Sayers 1985. See also Meikle 1985 and Workman 2014.
7 Murray 1988, p. 113.

the dogmatic determinism associated with some versions of 'dialectical materialism'[8] or the eclecticism and subjectivism of purely 'social-constructionist' accounts of the scientific enterprise.[9]

Key to an appreciation of the scientific principles underlying Marx's theory of value is his distinction between general and determinate abstractions, as well as his understanding of the 'logic of essence'. Both derive from a critical encounter with Hegel's philosophy and with classical political economy, that is, with bodies of thought that Marx linked to the 'deep structures' of capitalist society.

Marx's methodological injunction to ascend from the abstract to the concrete is well known and is properly regarded as fundamental to his analytical strategy. Frequently, however, the hurried invocation of this formula has served as a substitute for a careful recovery and specification of Marx's understanding of such notions as 'abstraction', 'abstract', and 'concrete'. In the first place, says Murray, 'Hegel's logic educates Marx to realize that abstraction is the medium of thought, and that the medium has a message which needs to be thoroughly heeded'.[10] In science, abstract categories of thought cannot simply be dispensed with in favour of 'empirical facts'; yet science *does* demand that abstractions that are 'prefabricated and subjectively applied to a particular object of scientific inquiry' should be replaced with abstractions that emerge from the specificity of the object itself. Thus, the movement from the abstract to the concrete does not refer to a movement from cognitive abstractions to a description of the empirically concrete; rather, the terms 'abstract' and 'concrete' are applicable to abstractions – as categories of thought – *themselves*. The movement from the abstract to the concrete corresponds to the development of ever-more concrete abstractions – of concepts that the labour of thought endows with increasingly complex determinations. As Murray puts it: 'On the one hand, Marx uses "concrete" to distinguish the actual from the conceptual [real versus ideal abstractions – MS], while on the other, he uses "concrete" and "abstract" within the sphere of the conceptual to distinguish concepts that are more or less synthetic.'[11] (This also points directly to a key aspect of Marx's rupture with Hegel: 'Marx faults absolute idealism for failing to keep these two senses separate; Hegel superimposes onto reality the movement of thought from the abstract to the concrete.' Such a superimposition is precisely what Marx's *materialist* dialectic enjoins us to avoid).

8 For example, Stalin 1972a.

9 See, for example, Kuhn 1970 or Feyerabend 1988.

10 Murray 1988, p. 113.

11 Murray 1988, p. 115.

These principles contrast in the starkest of ways with the procedures of positivism, that is, with what Hegel referred to as 'scientific empiricism'. Murray avers: 'The logical training that Marx gleaned from Hegel, in particular from the *Science of Logic*, taught him to demand a clear ordering of scientific categories in terms of their conceptual concreteness, and to respect the differences among them.'[12] It was precisely the failure of the political economists to respect these 'differences of form' and to avoid the premature positing of 'concrete' categories in the scientific elaboration of more abstract categories that moved Marx to reproach them for putting 'the science before the science'.

Marx is most emphatic on these themes in the introduction to the *Grundrisse*, where he highlights the methodological salience of the distinction between general and determinate abstractions. General abstractions consist of those abstract concepts ('abstract abstractions') that are minimally 'synthetic', short on determinations, and relatively unladen with 'forms'. Typically, they are concepts that refer to phenomena abstracted from definite historical or social settings: for example, use-values (objects of utility), division of labour, social organisation, population, means of production, and so on. These notions have *general* applicability in the description of a wide variety of historically constituted forms of human social existence. Yet it is impossible to find very much of scientific value to say about any of them without considering the (determinate) forms in which they are necessarily manifested. Hence, while it may be true that a 'division of labour' is a general presupposition of any human society, an expression of an imperative on the part of human beings to mediate their collective relation to nature through definite social arrangements governing the allocation and distribution of social labour, it is also the case that the division of labour assumes many different forms (communal, trade-based, centrally planned, and so on) and that no division of labour exists *apart* from such forms.

Just as soon as *real*, historically and geographically variant social forms are taken into account in scientific analysis, general abstractions are transformed into *determinate* abstractions, albeit of varying degrees of concreteness. The general abstraction 'product of labour' divides into the determinate abstractions 'potlatch', 'tribute', 'rent-in-kind', 'tithe', 'commodity' – each a definite socio-historical form of 'products of human labour'. The matter does not end here, however, since, from another point of view, at least some of these determinate abstractions may require further analytical concretisation. The forms taken by commodities as means of production, for example, need to

12 Murray 1988, p. 116.

be distinguished from the forms assumed by commodities as 'wage-goods' or 'luxury-goods'; and all of these forms need also to be distinguished from the 'money-commodity'. From a certain point of view, then, 'commodity' is one socio-historical form of 'the product of labour', but from another, 'commodity' (as a unity of use-value and value) subsumes a variety of specific social forms, finding concrete expression through one or more of them.

'The most demanding point of all', says Murray, 'is that Marx's concept of scientific knowledge requires us to ascertain which are the determinate abstractions appropriate for a particular object of study and how to order them properly among themselves, moving from the abstract to the concrete.'[13] To do this, the scientist must uncover the object's *logic of essence* – that is, the ways in which '*essence* must appear as *something other than itself*'.[14] Marx regards the logic of essence as 'logic of division, of alienation' under conditions in which essence is concealed by misleading appearances. Indeed, scientific method becomes necessary only where appearances serve to obscure or distort reality, and this is as true in political economy (where the law of labour value appears vitiated by the multiple determinants of individual commodity prices) as in natural science (where gravitational law may seem to be 'modified' by atmospheric events). Thus, for Murray, Marx's 'mature theory of value shows that the logic of value is the logic of necessarily appearing in something other.'[15]

Value *must appear* and *find expression* in the money prices attaching to individual commodities. At the same time, this necessarily diverts attention from the structure of social relations outside of which value could have no existence whatever. Hence, 'Hegel's emphasis on the *immanence* of the law of appearance to the appearances themselves carries over into Marx's theory of price.'[16] This understanding of the essence-appearance relation is fundamental to Marx's analysis of the fetishism of commodities and to his distinctly *anti-metaphysical* theory of value. As Murray observes:

> Complaints such as Joan Robinson's about the metaphysical character of Marx's theory of value rest on a serious misunderstanding of Marx's model of essence and appearance. Is not the burden of Marx's critique of the 'fetishism' of commodities precisely to attack the metaphysical understanding of value on the model of a natural, sensuous object or quality? Marx's theory of value is not non-metaphysical; it is *anti-metaphysical*. In

13 Murray 1988, p. 128.
14 Murray 1988, p. xvii.
15 Murray 1988, p. 161.
16 Murray 1988, p. 165.

> criticizing value, he criticizes the functioning of capitalist society according to the logic of 'appearing in an other'. Marx stresses that his theory of value is not intended to uncover some abstract essence existing behind the veil of appearances, but rather to characterize the relations of capitalist society as determined by the dualistic, third party logic of 'appearing in an other'.[17]

In his eagerness to rid Marx's theory of value of all 'metaphysical' tropes, Murray eventually falters in his analysis by insisting that Marx does not 'ontologise' value and by asserting that 'value does not exist as an actual tangible thing, but as the reflection of actual things'.[18] But this formulation erroneously suggests that something can exist *only* as a 'tangible thing' *or* as a reflection of such things. What's more, Murray is inconsistent when he insists that value should not be 'ontologised' even while also suggesting that it *exists* as a reflection of things – for to say that value has a *real existence*, in any sense, is to pose the question of its precise ontological status, and thereby to 'ontologise' it.

2.2 *The Ontology of Abstract Labour and Value*

In Chapter 4, we considered Böhm-Bawerk's argument that Marx has no justification for positing labour – even 'labour in general' – as the sole common property of commodity values. Böhm-Bawerk insisted against Marx that one can just as easily, and perhaps more reasonably, adduce 'utility' as such a common property. We then considered Geoffrey Kay's counter-argument according to which the category of abstract labour differs from utility in that the former is not a 'particular', while the latter can only exist in particular forms. Kay maintained that because it can achieve a form of existence independent of particular concrete expressions of labour, abstract labour is not a mere *mental generalisation* of the sort that the category of abstract utility can only be. Abstract labour is something more than a mental generalisation because it has a *real existence*, grounded in the labour process and expressed in money. Thus, for Kay, 'in searching for the form of existence of abstract labour we are merely looking for the value-form.'

The philosopher Norman Fischer has extended Kay's argument, beginning with an important observation about its incomplete character:

17 Murray 1988, p. 231.
18 Murray 1988, p. 165.

> [Kay] argues that abstract labor (labor in general) *does exist* both in the commodity, and in money. But cannot Böhm-Bawerk make the same claim with respect to utility? Kay's analysis is incomplete insofar as he does not make it clear whether or not the existence of abstract labor in the form of the commodity or as money is the existence of a particular.[19]

Fischer insists that an argument against Böhm-Bawerk along these lines can only be completed by rendering explicit a key difference between Böhm-Bawerk's empiricism and Marx's *realism*, a difference pertaining to whether or not 'universals' or 'generalities' can be said to have a *real existence*, and further, whether these universals can be regarded as having ontological priority over individual particulars. Fischer adds that this question needs also to be considered in conjunction with Elson's thesis that abstract labour and value are *internally related* to one another. The question posed by Fischer, then, is quite simply this: Is the category of 'abstract labour' an abstract universal or an abstract particular?

Fischer's answer is that Marx regarded abstract labour as an *abstract universal*, as the kind of 'general social structure' that is posited in an ontology of 'social, non-particular entities'. Whereas empiricist or positivist conceptions of science are *two-tiered* (admitting only general laws and particular entities, and defining 'laws pertaining to particulars' as the primary objects of science), Marx's ontology is *three-tiered* and posits *real structures* that mediate the relationship between general laws and particular entities (Murray's 'tangible things'). On this view, a scientific explanation of social reality must disclose the existence and explain the nature of these intangible yet actually existing structural entities. Abstract labour, the 'substance' of value, is precisely one such structure – and yet the question remains: *How* can it exist other than as a mental generalisation or ideal abstraction?

Fischer observes that 'what characterises Marx's philosophy within those that are three-tiered is its holistic interpretation of the entities mediating laws and particulars.'[20] Within Marx's theoretical construction, there are several social-structural entities that enjoy holistic-ontological status, among them abstract labour, value and 'the world of commodities'. In our initial reconstruction of Marx's theory of value in Chapter 4, the *holistic* inflections of Marx's analysis in the first chapter of *Capital I* were deliberately stressed, particularly in the discussion of the distinction between 'value' and 'exchange-value', where

19 Fischer 1982, p. 29.
20 Fischer 1982, p. 30.

Marx implicitly establishes value as a 'general' or 'universal' concept corresponding to a real social process. But it is unnecessary to 'read between the lines' of Marx's texts in order to discover his commitment to a 'holistic' ontology; we need only consider the rather explicit holism of the following passage from his appendix to the first German edition of *Capital I*:

> Within the value relationship … the abstract universal is not considered to be a property of the concrete sensuously real, but on the contrary, the sensuously concrete is considered to be the form of appearance of the abstract universal. The labor of the tailor, which, for example, is contained in the equivalent coat, does not possess the universal property of being human labor. Rather, the opposite is the case. It is its essence to be human labor. To be the work of the tailor is only its apparent form … This *quid pro quo* is unavoidable because the labor which is represented in the product is only the creator of value insofar as it is undifferentiated labor. Thus, the labor which is objectified in one product is completely undifferentiated from the labor which is objectified in the value of a different sort of product. This reversal, whereby the sensuously concrete is considered as only the form of appearance of the abstract universal, as opposed to the case where the abstract universal is a property of the concrete, characterises the value expression. At the same time it makes its understanding difficult.[21]

Marx's observations here would seem to support the notion that abstract labour – a real structure – finds expression *through* the concrete particulars of the products of labour. Thus, to conceive of abstract labour as a 'universal structure' (or, more dynamically, as a 'universal process') is *not* to deny that it finds particular expressions or concrete forms (in which, indeed, it is apprehended as a 'property of the concrete'); it is to insist that it *also* has an existence that is independent of these concrete particulars. The quantitative dimensionality of abstract labour is, therefore, not confined to concrete particulars (the money-form), but exerts itself *also* at the level of its social-structural existence: precisely, as socially necessary labour-time. On this conceptualisation, Marx's theory of value constitutes the unity of a *qualitative* treatment of the value-form (exchange-value/money-price) and a *quantitative* concern with the magnitude of the 'substance of value'. Moreover, the conceptual nexus of the theory is revealed to be *abstract labour* – a category that bridges the divide

21 Marx 1953, p. 271; translated by Fischer 1982, p. 31.

between value's 'particular' and 'universal' aspects. Key to this interpretation, as the cited passage from Marx suggests, is an extension of the ontological reversals described by Marx in his *Capital I* discussion of the value-form (use-value/value, concrete-labour/abstract-labour, private-labour/social-labour) to include the relation between commodities as sensuously concrete particulars and abstract labour as a real universal structure, whose necessary form of appearance is money. As Marx makes clear in his discussion of the fetishism of commodities, these reversals are not illusory, but essential aspects of the social relations of a commodity-based economy. The holistic social structures 'abstract labour' and 'value' are *real*, not because they are empirically tangible, but because they reflect and project determinate social relations of production and reproduction.

This points to an important error in Patrick Murray's application of Marx's theory of scientific knowledge to his theory of value. Murray notes correctly that, for Marx, 'method needs to take its shape from the specific objects under scrutiny'. But if the specific objects scrutinised by Marx possess a social-structural dimension distinguishable from but internally related to their particular manifestation as 'tangible things', then Murray is quite wrong to insist that Marx's 'theory of value is not intended to uncover some abstract essence existing behind the veil of appearances.'[22] For if the social phenomenon/structure of abstract labour is the 'abstract essence' in question, then *of course* Marx wanted to tear away its veil of appearances and expose this essence to the light of day. What's more, in doing so, Marx wanted not only to 'characterise the relations of capitalist society as determined by the dualistic, third party logic of "appearing in an other"', but to show that this 'third party logic' has a real and persistent basis in the determinate social relations of production of capitalism. Only by overturning these social relations could the *reality* of economic regulation by the law of labour value be dissolved.[23]

The root of Murray's error here is a failure to *consistently* resist a 'formal methodology' – that of methodological individualism. Indeed, implicit in his treatment of Marx's theory of value is an unacknowledged ontological privileging of individual particulars and a general failure to acknowledge any 'holistic' aspects in Marx's dialectical-monistic analysis. Small wonder then that in defining the differences between Marx's and positivist approaches to scientific inquiry he neglects to mention positivism's dogmatic insistence upon ontological *nominalism* – that is, the doctrine that only particulars exist. Little

22 Murray 1988, p. 231.
23 Smith 2014, Chapters 4 and 7.

wonder, too, that he labelled Marx's theory of scientific knowledge as 'empiricist in second intension' rather than as 'realist'. For one of the central differences between realism and all versions of positivism/empiricism is precisely the former's commitment to the kind of 'three-tiered' and 'holistic' approach described by Fischer.

Fischer's clarification of the ontological status of abstract labour and its relation to value has several important implications for the debate between the neo-orthodox/value-form and fundamentalist value theorists. Within the neo-orthodox/value-form camp, there exists a strong tendency to either reduce abstract labour to a particular 'aspect' of social labour, an aspect finding expression only at the level of particular commodities (as an 'immanent measure' of value) and/or in particular money-prices (as an 'external measure' of value); or to regard abstract labour as a 'substance' that finds expression or 'embodiment' only in money. The first tendency, typified by Elson, results, as Fischer notes, from an apparent unwillingness to 'pursue the issue of whether or not … abstract labor is actual', or to probe 'the ontological division between empiricist and non-empiricist approaches'.[24] The second tendency, typified by Himmelweit and Mohun and carried to its furthest extreme by Eldred, is to deny that abstract labour finds any kind of embodiment or expression at the level of the individual commodity, and that it can only be meaningfully measured at the level of individual money-price. The proponents of this position *also* elide the issue of the ontological status of abstract labour; indeed, it is noteworthy that, like Murray, their thinking appears to be influenced by a residual empiricism expressed as a tacit adherence to nominalist ontology. The practical result of both of these neo-orthodox tendencies is to evacuate Marx's theoretical framework and to approach positions remarkably reminiscent of the neoclassical tradition.

Although Fischer argues that the holistic conceptualisation of abstract labour lends itself to an improved version of Elson's 'value theory of labour', such a conceptualisation is, in my view, already the *implicit* ontological basis of the *fundamentalist* account of value theory. As we have seen, fundamentalist value theory stresses the importance of *both* the 'magnitude of value' and the 'form of value'. The magnitude-of-value problematic directs attention to the macro-level and to the measurement of value in terms of socially necessary labour-time. The form-of-value problematic directs attention to the micro-level issue of the quantitative relations between particular, individual commodities as expressed through the money-form.

24 Fischer 1982, p. 31.

The *dissociation* of these problematics can only lead to a *dualism* of the universal and the particular, that is, to a denial of their dialectical unity. In practical terms such a dualism must eventuate in the sort of methodological privileging of 'the particular' that is characteristic of all theories of value that focus on 'the individual commodity' at the expense of an understanding of 'the world of commodities'. Such an approach informs Ricardo's theory (despite his concern with the macro-economic issue of the distribution of income between classes), Mill's 'cost of production' theory, and neo-classical marginal utility theory. 'Orthodox' (Ricardian-)Marxist value theory is characterised by an uneasy, and ultimately untenable, compromise between a dualistic and a dialectical (monistic) handling of the universal/particular relation, while neo-Ricardianism represents a bold reassertion of a dualistic position, but one that accords an analytical privilege to macro-level economic phenomena (abstracted from any theory of value). Neo-orthodox or 'pure' value-form theory, in this context, can be interpreted as a reassertion of the 'micro-economic side' of Marx's value theory (the function of which is to 'remind' us that the product of labour is valorised only by virtue of the existence of determinate social relations) within a larger theoretical space that presupposes a dualistic framework and a macro-level analysis that eschews any 'value-magnitude' theory.

What needs to be stressed by the Marxist fundamentalists in relation to the neo-orthodox school is that *money* (that privileged neo-orthodox 'measure of value') becomes the form of value in its role as the *universal equivalent*. To cite Marx: 'Since all other commodities are merely particular equivalents for money, the latter being their universal equivalent, they relate to money as particular commodities relate to the universal commodity.' Money, as the universal commodity, is the expression of undifferentiated abstract labour. Significantly, Marx goes on to say that 'the money-form is merely the reflection thrown upon a single commodity by the relations between all other commodities'.[25] This can be expressed otherwise as follows: money is the form of appearance or 'reflection' of a structure of abstract labour that mediates the myriad relations existing between commodities. Yet to understand this structure's mediating role, one must begin by positing the *pre-existing* ontological status of the 'total magnitude of value' as it emerges from production. Hence, *abstract labour needs to be conceived as a structure (of relations) grounded in production but reflected by individual commodities in the sphere of circulation* – and this is precisely the general position of fundamentalist value theory as we defined it in Chapter 5. It seems to me that it is solely on this basis that the fundamental postulates of

25 Marx 1977, p. 184.

Marx's value theory can be sustained: that living labour and living labour alone is the source of all newly produced value (including surplus-value), and that value exists as a definite quantitative magnitude at the level of the capitalist economy as a whole. In other words, what is most *operationally significant* in Marx's theory of value – as it lays the basis for his larger theory of capitalism's laws of motion – can be defended only on a fundamentalist and not a neo-orthodox or narrowly 'value-form' basis.

We are now in a strong position to specify a key difference between the neo-classical (marginalist) and Marxist accounts of 'economic value'. When the marginal-utility theorist Böhm-Bawerk argues that abstract utility can as easily serve as the 'common factor' shared by all commodities as abstract labour, he sidesteps the question of the *ontological status* of utility. As Kay observes, abstract utility is merely a mental generalisation, an *ideal* abstraction rather than a 'real structure' of relations. Furthermore, utility is a property of commodities, which, as Marx insists, must be 'abstracted from' in the exchange process. The use-value of a commodity is *always* a 'particular' use-value. While this hardly makes it irrelevant to the price it can fetch, it does make it irrelevant to a specification of the larger social processes in which value is enmeshed, and that set definite *limits* on 'purchasing power', profits, and the realisability of set prices.

The methodological difference between Marx and Böhm-Bawerk, so often commented upon yet inadequately defined by the 'orthodox' tradition of Marxian political economy, turns then on very different conceptions of the ontology of social life: Böhm-Bawerk's positivism reflecting a thoroughly nominalist outlook, Marx's dialectical method a profoundly realist one that allows for the existence of *both* individual and holistic entities. The necessary upshot of this difference is that the marginalist account of value expresses an indefinite and quantitatively indeterminate relation between two incommensurable spheres: an ideal sphere of human predilections, norms and 'rational calculations', and a material sphere of scarce 'economic resources'. Marx rejects such a psychologistic-naturalistic reduction of value, insisting that the value relation is irreducibly a *social relation among people* – one that forms part of a dialectical-monistic reality in which *the material-natural, conscious activity* (*encompassing 'the ideal'*) *and the social* (as well as the concrete and the abstract, and the universal and the particular) are seen to be 'internally-related' aspects of an ontologically unified totality.[26]

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26 Smith 2009, reprinted in Smith 2014, elaborates on this dialectical-monistic ontology and its importance to Marxism both theoretically and practically.

From this monistic (and therefore anti-dualistic) 'single-system' perspective, values and prices do not belong to two distinctly different realms or realities. Their relationship is that of content (value and its social substance, abstract labour) to form (money price), where 'the law of value' in turn is understood to be a historically particular social form with a 'natural' content – the universal human imperative to organise a division of labour to satisfy human needs.

It follows from this that the value rate of profit and the money rate of profit are not 'parallel' yet ontologically separated entities. Instead, they are two ways of apprehending and distinguishing conceptually the major determinants of human economic activity under the sway of the capitalist law of value: the first in terms of the 'essential relations' governing economic production and reproduction (relations defining the *parameters* of economic action), the second in terms of the *concrete choices* made by conscious economic actors operating at the 'surface' of economic life.[27]

The foregoing considerations are also germane to a response to the logico-analytical argument deployed by G.A. Cohen in support of neo-Ricardian and 'Analytical Marxist' critiques of Marx's theory of value. The following passage is the core of Cohen's critique: '[Marx's] theory entails that past labour is irrelevant to how much value a commodity now has. But past labour would not be irrelevant if it created the value of the commodity. It follows that *labour does not create value, if the labour theory of value is true*.'[28]

As we have seen, however, Marx's position is not that 'labour creates value' in some direct and unmediated sense, but rather that *abstract labour creates value*. Let us therefore consider Cohen's criticism as it would need to be amended to address Marx's actual position (that is, the position of 'fundamentalist' value theory): 'The theory entails that past *abstract* labour is irrelevant to how much value a commodity now has. But past abstract labour would not be irrelevant if it created the value of the commodity. It follows that abstract labour does not create value, if the labour theory of value is true.'

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27 As we will see later, the temporal dimension of both the value rate of profit and the money rate of profit concerns not only the 'problem' of the transformation of values into prices of production (the metamorphosis of the value form as we move from one level of analysis to another), but also the *temporal modalities of value*: new value, previously existing value and anticipated future value. The money rate of profit mystifies the underlying, essential relations of the value rate of profit as this exists 'in the here and now' precisely because the former is subject to human activity that seeks to wrestle with the contradictory *results* of those relations.

28 Cohen 1981, pp. 209–10.

Cohen's legerdemain can now be more easily exposed. It is of course quite true that past abstract labour does not create the value that a commodity presently represents. But it in no way follows from this that 'abstract labour does not create value' if one understands abstract labour as a real structure of relations determining the value of that commodity on the basis of the social production norms *currently* required for its (re-)production. Cohen's argument is therefore an entirely specious one, predicated on a serious misunderstanding of Marx's theory of value as well as an unaccountable refusal to appreciate the distinctive social ontology and method informing it.

2.3 *Alienation and Value Theory*

No discussion of the philosophical dimension of Marx's theory of value should overlook the need to articulate the latter with his essentially humanist philosophy of praxis and his critique of alienation. Marx's humanism is grounded on an insight enunciated in *The German Ideology*: 'The premises from which we begin are … the real individuals, their activity and the material conditions of their life, both those which they find already existing and those produced by their activity.'[29] In the course of 'making their own history', human beings must, before all else, secure the material conditions of their existence. 'The first historical act is thus the production of the means to satisfy these needs, the production of material life itself.'[30] This in turn leads to new needs, since the satisfaction of such elementary requirements as food, clothing and shelter (the means of subsistence) necessitates the continuous creation and development of new means of production, forms of cooperation, and determinate, yet changeable, social relations of production and reproduction (including family forms).

By *objectifying* their labour, Marx asserts in his Paris manuscripts of 1844, human beings embark on a project of transforming nature through *praxis* (purposive, self-directing activity), thereby affirming their 'species being'. Accordingly, Marx rejects Hegel's idealist view that the *material* objectification of human capacities (labour) is the source of human alienation. He proposes instead that such objectification entails the alienation of 'the worker' (that is, the direct producer) only under well-defined and historically specific *social* conditions. Thus, the alienation of labour arises where labour is 'external' to the worker in the sense that it 'belongs to another', is 'coerced' or 'forced' labour, and is performed only as a *means* 'to satisfy needs external to it'; where the

29 Marx 1989a, p. 22.
30 Marx 1989a, p. 23.

worker experiences the product of labour as 'an alien object exercising power over him and the objects of nature as an alien world inimically opposed to him'; where the worker experiences the labour process as an 'activity which is turned against him, independent of him and not belonging to him'; and where human beings are generally estranged from their 'species life' and from one another due to a compulsion to transform their capabilities into a *means* of 'individual existence'.[31] In short, for the young Marx, the alienation of labour is not an eternal anthropological condition, but is bound up with the presence of *class-antagonistic* social relations of production, above all those associated with capitalism.

What needs to be demonstrated in response to the many 'Marxological' commentaries that have insisted upon a basic disjunction between the 'young' and the 'mature' Marx is that the methodological and philosophical precepts informing Marx's youthful writings on alienation and human history (most of them written before his espousal of a labour theory of value) are substantially the *same* as those that inform his later critique of political economy.[32]

In *The German Ideology*, Marx and Engels write: 'The production of life, both of one's own in labour and of fresh life in procreation … appears as a twofold relation: on the one hand as a natural, on the other as a social relation – social in the sense that it denotes the co-operation of several individuals, no matter under what conditions, in what manner and to what end.'[33] The twofold relation involved in the 'production of life' (the 'first premise of human existence') is here defined as embracing both a natural aspect and a social aspect (involving different forms of human cooperation). With this statement, Marx and Engels announce that the study of the concrete forms of human existence (modes of life) must take as its starting point a focus on the internal dialectical relation between the *natural and the social*.

Such an approach fundamentally distinguishes Marx's analytical project from the great majority of social theories that begin with a focus on a presumed external opposition between 'the material' and 'the ideal' (or, relatedly, 'the objective' and 'the subjective'). Marx's dialectical social ontology stands irreconcilably opposed to the ontological dualisms sponsored by this material-ideal opposition – dualisms that posit discrete 'levels of reality' or even 'different worlds' as they problematise the relationship between facts and values, subjects and objects, structure and agency, noumena and phenomena, what is

31 Marx 1964, pp. 111–12, 114.

32 For an in-depth interrogation of two such commentaries, see Smith 1994, reprinted as Chapter 3 of Smith 2014.

33 Marx 1989a, p. 23.

and what ought to be, science and philosophy, and so on. It was precisely in light of such a dialectical social ontology that Marx berated Proudhon in 1847 for 'a *dualism* between life and ideas, between soul and body – a dualism which recurs in many forms'.[34]

Of course, Marx does not deny that dualities are a persistent feature of human existence. But he nevertheless insists upon approaching these dualities (use-value/exchange-value; intellectual-labour/manual-labour; and so on) with due regard to their singular (monistic) foundation: the 'materialist connection of men with one another, which is determined by their needs and their mode of production, and which is as old as men themselves'.[35] This 'materialist connection' holds pride of place in Marx's social ontology because it, and not 'consciousness' or 'ideas' springing from a realm considered 'independent' of the material world, is the real basis upon which the nature-society relation is mediated: 'This connection is ever taking on new forms, and thus presents a "history," irrespective of the existence of any political or religious nonsense which would especially hold men together.'[36]

This concept of an internal, dialectical relation between 'the natural' and 'the social' is the actual starting point of Marx's critique of political economy, a point he makes abundantly clear in *Notes on Adolph Wagner*. As previously noted in Chapter 4, Marx asserts here that his analysis does not begin with 'the concept of value' but with the 'simplest social form in which the labour-product is presented in contemporary society … the commodity', something which is revealed to have both a 'natural form' (a use-value) and a 'form of appearance' (an exchange-value) that is the 'autonomous mode of appearance of the *value* contained in the commodity'.[37] Thus, 34 years after *The German Ideology*, Marx explicitly restates the methodological principle that consistently guided him in his historical-materialist critique of political economy: that the objectifications of human praxis simultaneously express a relation to nature (a natural form) and a relation to society (a social form). If the inner anatomy of capitalism is to be fathomed, the elementary form in which human praxis (labour) is manifested in capitalist society, the commodity, must be seen for what it is: a contradictory unity of natural and social aspects, an expression of the concrete (mental and manual) labour that fashions its natural form and an individual manifestation of the larger social processes that define its value (its status in

34 Marx 1989a, p. 12.
35 Marx 1989a, p. 24.
36 Ibid.
37 Marx 1989a, pp. 41–2.

relation to all other products of labour) and its price (its power to command remuneration in exchange).

The Marx of *Capital* no less than the Marx of 1844 understood only too well the immanent tendency of capitalist production to subordinate the 'subjective' aspects of the process to the 'objective'. But if there is a shift in Marx's thinking it surely concerns the fact that the Marx of 1844 is far more concerned with the 'subjective experience' of the individual worker than is the Marx of *Capital*. In *Capital*, the human subjectivity requisite to *use-value* production (the physical labour process) is now assigned to the 'collective worker' (that is, to a workforce increasingly characterised by segmentation and a divorce between mental and manual functions). At the same time, however, the 'subjectivity' requisite to securing surplus-value production (the valorisation process) is assigned to the agents of capital – if only tenuously. 'Tenuously' because these agents (from corporate directors to workplace supervisors) are unable to comprehend or fully control the Invisible Leviathan: the overall, macro-economic processes governing the magnitude and rate of surplus-value production and capital accumulation. Indeed, the mutual powerlessness of labour and capital alike in the face of 'unconscious' market forces – forces that remain 'free' to dominate and exert a tyranny over human agency under capitalism – is the necessary point of departure of any attempt to adequately articulate Marx's theories of alienation and value on the basis of his philosophy of praxis.

On this view, the 'decentring' of the human subject in *Capital* involves no repudiation of humanism or praxis – that is to say, of the idea that human beings are purposive, reflexive agents with the capacity to consciously transform their circumstances. Rather it is a theoretical expression of the consequences of a human 'alienation' from a condition of mastery over the societal division of labour – of a fragmented and necessarily *partial* praxis. Indeed, the whole of *Capital* can be read as an extended analysis of a phenomenon of 'objective alienation' that is much more profound and far more encompassing than the phenomena discussed by Marx in 1844. The alienation of the producer from the (appropriated) product, from other human beings, from nature and from 'species life' (praxis) constitute the dimensions of an alienated condition *apprehended from the point of view of the producer as a 'real living individual'*. In the *Grundrisse* and in *Capital*, however, Marx shows that these are aspects of a more comprehensive 'alienation' – the alienation of human beings from a condition of mastery over their social and economic life-processes: what might be called the 'collective alienation of the species' from a truly free and authentic human praxis.

'Abstract labour' – the social substance of value – is precisely alienated labour, as Colletti long ago pointed out; it is 'labour separated or estranged with respect to man himself.'[38] But abstract labour, as a determinate abstraction, also bridges and mediates the subjective-particularistic and objective-holistic aspects of alienation. The young Marx's theory of alienation remained incomplete to the extent that it failed to identify the dialectical unity of these aspects, a task conforming to the methodological imperative to overcome any dualism of the general and the particular. The implicit theory of value of the Marx of 1844 was an obstacle to this task, not because he rejected *Ricardo's* labour theory of value (for this theory too posits a dissociation of the particular and the general) but because any value theory other than that fashioned by Marx on the basis of his later *transformation* of Ricardo's theory must focus on the value of the individual commodity in abstraction from the 'world of commodities'. It must therefore tend toward a simple conflation of 'price' and 'value' rather than encourage an exploration of their complex, dialectical interrelationship. In elaborating his own, distinctive labour theory of value, then, Marx did not abandon his 'philosophical' standpoint of 1844; on the contrary, he radically transformed the content of labour value theory in light of the results of his critique and critical appropriation of Hegel's and Feuerbach's philosophies.

Marx's analyses of the fetishism of commodities, the value-form and the alienated social power of money (the universal equivalent) are replete with observations strongly reminiscent of the alienation critique of 1844. This suggests not only the obvious fact of 'continuity' but also establishes that *Capital* represents a more *finished* version of this critique. The alienation of 'the producer' is revealed to be a manifestation of the alienation of *all* human beings from control over their own affairs, and this *collective alienation* results from economic laws rooted in principles of social organisation that are by no means immutable. By exposing the historically specific character of the pillars of human alienation, Marx points the way to an historical resolution of the problem of alienation and to a future in which the field of praxis will be generalised – for collective humanity no less than for the individual human being.

3 Theoretical Considerations

3.1 *Dialectical-Monist versus Dualistic Approaches to 'Economic Value'*

In general terms, we can delineate three broad approaches to the theorisation of 'economic value': the physicalist, the subjectivist and the dialectical-monist. Physicalism (encompassing classical political economy *à la* David Ricardo, as

38 Colletti 1972, p. 84.

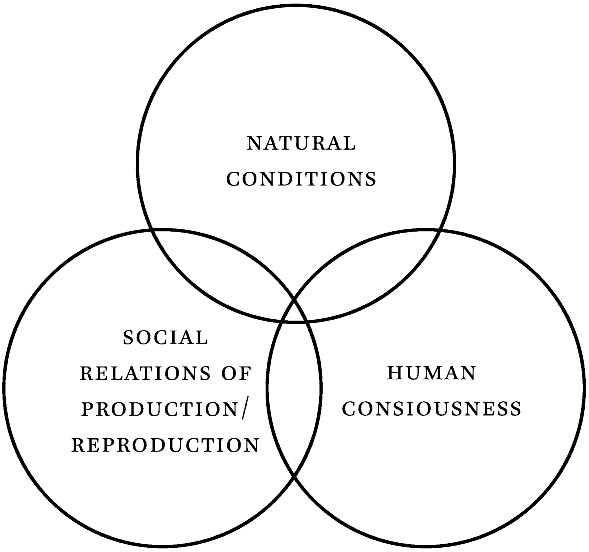

FIGURE 4 Marx's dialectical-monistic social ontology

well as Sraffa and neo-Ricardianism) and subjectivism (neo-classical marginalism) are both grounded in a broadly dualistic, nominalist and static ontology; they are symbiotic poles of a common problematic, with physicalism emphasising 'the material-natural' determinants of value and subjectivism 'the ideal'. The dialectical-monist approach (toward which Marx was striving in his uncompleted *oeuvre*) is temporalist, anti-dualist, and realist – focussing heavily on 'the social', without, however, ignoring the natural-physical dimension or the role of conscious human activity ('the ideal').[39] (See Figure 4 for a visual aid to grasping the triadic structure of Marx's social ontology as explicated here).

In 'ideal-typical' terms (to borrow a heuristic device from Max Weber), the physicalist approach treats 'economic value' as an objective relation of things to things; the subjectivist approach regards it as a subjective relation of people to things; and the dialectical-monist approach considers it a social relation of people to people. The first two approaches are united in conceiving economic value as rooted in a material world governed by unalterable natural laws. Hence, value is considered eternal – a category necessarily present in all conceivable human societies. In classical political economy, human labour itself is treated as a thing, a force of nature, which is related to other things within the

39 The next few pages are adapted from Smith 2009, pp. 378–83, reproduced in Smith 2014, pp. 140–4.

economic life process in a purely objective way (that is, on the basis of a common measure for determining the costs of production). Value theory, from this perspective, is a way of determining 'natural prices' on the 'supply side' – that is, from the standpoint of costs incurred or resources expended in the material production process. To the extent that subjectivity or consciousness enters into this approach at all, it pertains mainly to the decisions made by capitalists or their managerial agents with respect to micro-level investments, choices of technique, and the management of labour processes.

In the marginalist theory of value, the problem of determining the 'natural prices' of commodities is displaced and an attempt is made to specify the mechanisms that determine actual market prices. Since the level of demand is regarded as based on subjective perceptions of the uses to which commodities can be put, marginalists propose a subjectivist theory of value. On this view, the production of a commodity may entail definite costs that have their basis in a material-physical 'object' world characterised by scarcity, but the actual price of a commodity cannot be predicted solely or even mainly by 'supply side' considerations. Rather, given a determinate level of supply, actual prices are finally determined on the demand side, that is, by the psychological relation of prospective buyers to particular goods or services. From this standpoint, the value of a commodity is pre-eminently a function of its marginal utility (the intensity of consumer preference for it), and value is conceived to be an essentially subjective category, detached from any 'material' or properly 'social' determinations.

The subject-object dualism that is either latent or openly expressed in classical and marginalist theories of value follows ineluctably from a more fundamental dualism that considers 'the ideal' (ideas in people's heads, including their subjective preferences) and 'the material' (the physical use-values produced and consumed by people) as *unmediated* by specifically social relations and forms. This leads to *a common micro-economic focus* on the formation of individual prices. In both of these 'bourgeois' approaches to value, the constitution of individual prices is considered in isolation from the historically determinate forms and processes that imbricate commodities in a structure of specifically social relations. Value and price are treated essentially as either 'material-natural' or 'ideal' categories.

These two approaches to the question of economic value have long dominated mainstream economic thought. To be sure, some economists have sought to dispense with a theory of value entirely while continuing to account for the formation of prices in allegedly more 'concrete' ways. But the predominant tendency within non-Marxist economic thought has been to embrace one or both of the approaches just outlined.

What, then, does it mean to regard value, in the Marxist, dialectical-monist way suggested here, as a 'social relation of people to people'? As discussed in Chapter 4, Marx defined his own conceptual starting point in *Capital* as 'the simplest social form in which the labour-product is presented in contemporary society … the commodity'. The commodity reveals both a 'natural form' (a use-value) and a 'form of appearance' (an exchange-value) that is the 'autonomous mode of appearance of the value contained in the commodity'.[40] Thus, in adopting the commodity as his starting point, Marx was guided by a fundamental principle of his social ontology and materialist conception of history: a focus on the internal dialectical relation of 'the natural' (material/physical labour process and use-value production process) and 'the social' (exchange process and social-relational reproduction process) to the scientific analysis of a concrete socio-economic formation and its laws of motion. Indeed, it seems clear that Marx selected the real abstraction 'commodity' as his starting point in *Capital* because the commodity constitutes the simplest expression of the dialectical unity and opposition of the categories 'use-value' and 'value', the first corresponding to the material/natural/physical content (the 'wealth') of human societies and the second corresponding to the social forms and 'social substance' of capitalist production – the specific production relations of 'people to people' under capitalism.

Yet another rehearsal of Marx's analysis of the value-form is hardly necessary to establish that specifically capitalist social relations of production are a presupposition of that analysis. Before turning to the question of money (the fully developed form of value), Marx had already identified the 'social substance' of value as 'abstract labour', and the measure of this value-creating substance as 'socially necessary labour time'. Moreover, in his discussion of the relative and equivalent forms as the two poles of the simple expression of value, Marx had already identified three 'peculiarities' of the value relation: the appearance of use-value as value, the appearance of concrete labour as abstract labour, and the appearance of social labour as private labour. The ontological inversions or reversals revealed by these peculiarities presuppose the presence of the social conditions and relations of a system of generalised commodity production and exchange, that is, the capitalist mode of production.

Once again, Marx's theory of value yields two postulates that are central to his critical analysis of capitalism: 1) living labour is the sole source of all new value (including surplus-value); and 2) value exists as a definite quantitative magnitude that establishes parametric limits on prices, profits, wages and all

40 Marx 1989b, pp. 41–2.

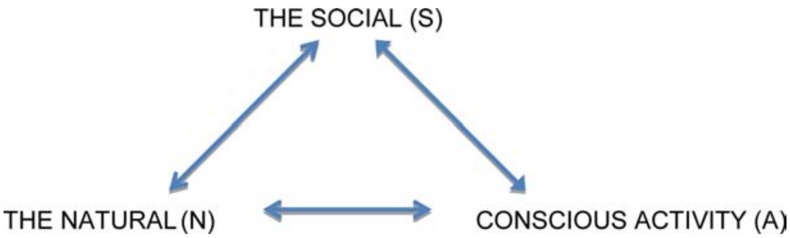

FIGURE 5 The historical-materialist triad

other expressions of the ‘money-form’. The ‘law of value’ can predominate only where capitalist relations of production (capitalist exploitation of wage-labour, the competitive interaction of ‘many capitals’, etc.) mediate the relationship between the satisfaction of human needs (as registered by consciousness) and the creation of use-values (the material-natural production process). Value (in its fully developed form) can have neither theoretical pertinence nor concrete existence outside of these relations.

From even this very brief synopsis we can readily see that Marx’s value theory is fully in accord with a focus on the historical-materialist ‘triad’ represented in Figure 5.

This triad can be represented more conveniently as N<–>S<–>A. *Here, S is the dominant, mediating term.* For purposes of historical-materialist inquiry into ‘economic value’, this focus is the necessary ‘starting point’, since the predominant purpose of Marx’s theory of value is to disclose the historical laws of motion of a determinate social totality, the ‘capitalist mode of production’, and not the mechanisms of individual price formation.

That being said, it would be a disservice to Marx’s historical-materialist theoretical agenda to stop there, for historical-materialist analysis must also involve S<–>A<–>N and S<–>N<–>A, albeit in ‘supporting roles’. The first of these suggests, among other things, the need to recognise the role of conscious activity in mediating the relationship between the material-natural ‘costs’ of production and the imperatives of capital (accumulation, systemic reproduction, the exploitation of wage-labour, etc.). This places on the agenda the traditional marginalist preoccupation with the immediate subjective determinants of price formation – a subject taken up but not fully explored by Marx.

The second supporting triad focuses attention on the role of N in mediating between S and A: among other things, the ways the ‘physical co-ordinates’ and ‘natural conditions of production’ mediate the relationship between capitalist imperatives and human consciousness/activity. In doing so, it places on the research agenda a range of issues pertaining to ‘choices of technique’, as well as the ‘hidden costs’ of capitalist production, among them: damage to the biosphere, unsustainable consumption of natural resources, the injuries inflicted on wage labourers by capitalist production, and the uncompensated domestic labour performed by women in the social reproduction of the commodity labour power.

Hence, a historical-materialist research agenda proceeding from this *system* of 'dialectical triads' is, in principle, capable of addressing many of the central concerns and preoccupations of non-Marxists in relation to the problem of economic value. But because it also (and uniquely) addresses the dominant role of the capitalist relations of production in mediating 'the natural' and 'conscious activity', and exposes the growing contradiction between the social and the natural under capitalism (above all, between the imperatives of valorisation and productivity growth), it yields the conclusion that 'value' must be *abolished* as the central organising principle of social life. It is precisely on this point that it parts company with all agendas that seek merely to reform or 'fine-tune' the capitalist price mechanism, whether from a marginalist, an ecological, an institutionalist or a feminist perspective.

All this points to how historical materialism and a properly specified Marxian theory of value can illuminate 'physicalist', ecological and feminist concerns while also highlighting the crucial role of specifically *capitalist* social forms in stimulating or retarding specific types of technological innovation, exacerbating environmental problems, and sustaining 'family values' as the ideological bulwark of a structure of unpaid female domestic labour. In principle, this type of analysis can be extended and applied to a wide range of contentious issues in social theory, 'public policy', and socialist strategy, serving always as a reminder that the supersession of capitalist social relations constitutes a *necessary condition* of human progress.

Marxist value theory, and the many different interpretations of Marx's own articulation of it, has inevitably been subject to the influences (and pressures) of the physicalist and subjectivist approaches, with the best and most fruitful versions – those that emphasise the need for analysis of the substance, magnitude and form of value – all *approximating* a dialectical-monist articulation. But precisely because a dialectical-monistic theorisation involves a highly complex articulation of three distinguishable (though not autonomous) ontological fields (the natural, the social and conscious activity) – fields that interpenetrate one another and whose relationships are at once mediated, mutually conditioning, and contradictory – a *myriad* of such theorisations should be expected (and even welcomed), with subtle and not-so-subtle differences in emphasis leading to divergent conclusions over many 'concrete' issues. Overdetermining *how* a specific theorist will view many of the disputed questions in Marxian value theory – and cognate issues, such as the law of the falling rate of profit and the dimensions of capitalist economic crisis – will also be that theorist's political-programmatic interests and orientations, a matter we will turn to shortly.

There is, of course, no *a priori* basis upon which one can judge the 'truth' of Marx's social ontology as against the nominalism and dualism that pervade not only non-Marxist thought but much ostensibly Marxist thought as well. As Marx remarks in his (eminently humanist) second thesis on Feuerbach: 'Man must prove the truth, i.e., the reality and power, the this-worldliness of his thinking in practice.'[41] If the fundamental postulates of Marx's theory of value can be sustained only on the basis of a realist-holistic and dialectical-monistic ontology, this in itself does not establish the probity of that theory. Rather, it is that ontology which acquires credence to the extent that the theory and methodology that it informs demonstrate their power to *explain* social reality, precisely with a view to *changing* it.

3.2 *Substantive Implications of Marx's Value Postulates*

What then are the *substantive* implications of the Marxian postulates that 'living labour is the sole source of new value' and that 'value exists as a definite quantitative magnitude at the macro-economic level'? Apart from the considerations just canvassed, the real power of these postulates stems from their ability to breathe life into Marx's account of the *historical limits* of capitalism. Taken together they constitute the essential presuppositions of Marx's 'law of the tendency of the rate of profit to fall' – a law that Marx regarded as central both to his theory of cyclical crisis and to his account of the historical-structural crisis of capitalism. In a nutshell, this fundamental law of capitalist economy dictates that the tendency of the social capital to increase its organic composition (that is, to replace 'living labour' with the 'dead labour' embodied in an increasingly sophisticated productive apparatus) must exert a downward pressure on the rate of profit, the decisive regulator of capitalist accumulation.

To be sure, Marx's law of value is merely a 'necessary presupposition' of this law of profitability, not a *sufficient* one. Yet, there is a sense in which the latter stands as a corollary to the former, even if not a theoretically ineluctable one. For capitalism is a mode of production in which the goal of 'economic activity' is only incidentally the production of particular things to satisfy particular human needs or wants, while its real, overriding goal is the reproduction of capitalist social relations through the production of *value*, that 'social substance'

41 Marx 1989a, p. 8.

which is the flesh and blood of Adam Smith's powerful yet also fallible 'invisible hand' – of our 'Invisible Leviathan'.

In the end, Marx's theory of value is concerned with the historical promise and fateful implications of a labour process that has assumed the social form of a 'valorisation' process. Marx's theory awakens us to the reality that the imperative to produce value is a *social* imperative, an imperative of *capitalist social relations*, and not a technical or natural necessity inherent in the metabolic relation between humanity and nature. Only a society burdened by the need to 'produce value' can give birth to so absurd, and monstrous, a phenomenon as a 'crisis of overproduction'. And only such a society can transform the benefits flowing from labour-saving technological innovation into ecological devastation, declining living standards, unemployment, bitter trade rivalries, depression, and war. Marx's theory of value, in sum, provides a compelling basis for the conclusion that capitalism is, at bottom, an 'irrational' and historically limited system, one that digs its own grave by seeking to assert its 'independence' from living labour even while remaining decisively dependent upon the exploitation of living wage-labour for the production of its very life-blood: the surplus-value that is the social substance of private profit.

4 Value Theory and Programme

Neither Marx's theory of value, nor the controversy surrounding it, is divorced from – 'innocent' of – practical, 'programmatic' considerations. The various interpretations and positions pertaining to it not only generate programmatic perspectives, but tend to reflect them as well. Alternatively expressed, value theory, as all theory, is shaped by the dialectic of theory and practice; a powerful tendency is perennially at work for programme (what one wishes to achieve in the world) to generate theory (how one goes about analysing and understanding it).[42]

Let's begin by considering neo-Ricardian political economy. The latter has often been associated with vaguely left wing currents that seek to establish micro-economic foundations for Keynesian and post-Keynesian macroeconomic theories. In this regard, Lebowitz, following the example of Bukharin's classic critique of marginalism, has located the 'social roots' of neo-Ricardian theory in the requirements of the managerial functionaries of capital for an *objective* understanding of price and profit formation: 'Neo-Ricardian

42 This dialectic is a major theme of Smith 2014.

theory in general is an attempt to analyse *all* of the concrete forms that appear on the surface of society. It does so from the perspective of the technostructure, and in this sense may be described as a new "vulgar economy"'.[43]

'Marxist' neo-Ricardianism (really a species of 'neo-Marxism') has essentially the same analytical agenda, even while claiming to pursue its analysis on behalf of labour against capital. Typically, it emphasises the role of *working-class struggle* in not only altering the political relation of forces between capital and labour but also *engendering* the crisis tendencies of the capitalist economy in a very 'direct' sense. Since the division of the (Sraffian) 'surplus' between wages and profits is said to reflect the balance of forces in the class struggle, and since this division 'determines' the limits of capital accumulation, neo-Ricardians often echo the arguments of bourgeois economists according to which capitalist economic crises are often the result of a 'wage-push/profit-squeeze' and/or declining rates of productivity growth resulting from labour strength or resistance at the point of production. However, whereas pro-capitalist economists deplore the 'irresponsible and unrealistic' demands of labour, 'left neo-Ricardians' – historically at least – have tended to celebrate them as harbingers of consciously anti-capitalist struggle, which brings them into proximity with the 'Ricardian-Marxist' orthodoxy.

Marxist fundamentalists take a different view, even while arguing that capitalist economic crises serve to both instigate and necessitate anti-capitalist action by workers. According to this view, such crises are not exclusively or immediately attributable to (the generally defensive or even offensive) struggles of workers for improved terms and conditions of employment (the focus of trade-union struggles pertaining to wages, benefits, workplace safety, and so on), but are rather the result of *an ensemble of structural contradictions* endemic to capitalism, as evoked in Marx's pithy observation that 'the barrier to capital is capital itself'. 'Capital itself', in this context, encompasses a whole set of social production relations that increasingly ensnares bourgeois economy in a contradictory logic and movement. A proper understanding of specific, conjunctural economic crises as well as the long-term 'historical-structural crisis' of the capitalist mode of production requires a profound scientific analysis of this contradictory movement.

Fundamentalists do not deny that the class struggle, even as this might manifest itself in tepid 'business unionism', plays a role in articulating the crisis tendencies of the capitalist economy. But most would emphatically reject the implicit neo-Ricardian/post-Keynesian notion that capitalism could enjoy a

43 Lebowitz 1973–74, pp. 400–1.

(relatively) crisis-free evolution if the class struggle could somehow be 'rationally' contained, managed or suspended. Such a notion is a pure fantasy, in the first place because no economic, political, or managerial policy can eliminate the class struggle under capitalism, and secondly because it involves a fundamentally false understanding of capitalism, its endemic contradictions, and the sources of its economic crises.

Neo-Ricardians have frequently reproached fundamentalists for having a 'fatalist' outlook – for underestimating the role of human agency and unjustifiably pinning their hopes for a 'general crisis' (or even a 'final breakdown') of capitalism on deterministically conceived 'laws of motion' – that is, laws that unfold inexorably toward an anti-capitalist 'negation of the negation' independently of human praxis.[44] Since the 1970s, fundamentalists have almost always denied this charge, while nevertheless insisting upon the need to base political practice, education and programme on the results of Marx's scientific analysis of capitalism's laws of motion. On this view, any socialist political programme or anti-capitalist strategic perspective that ignores or rejects this analysis must tend toward an accommodation with *bourgeois reformism* – that is, with the view that real human progress remains possible within the framework of capitalism.

The programmatic views of the neo-orthodox and value-form theorists are more difficult to pin down, with some appearing close to the neo-Ricardian perspective, others to the fundamentalist. To some extent this reflects the theoretical heterogeneity of the neo-orthodox school, in part, a characteristically 'anti-determinist' understanding of capital's 'laws of motion'. Thus, even such exponents of the law of the tendency of the rate of profit to fall as Ben Fine, Laurence Harris and John Weeks, who in the 1970s and '80s, at least, combined neo-orthodox and fundamentalist inclinations, tend to place this law on a *co-equal* footing with tendencies that counteract the fall in the rate of profit. This theoretical move attenuates any notion of the *inevitability* of capitalist economic crisis, potentially opening the door to the notion that the social capital can contain or at least strongly mitigate crises through the adroit mobilisation of the requisite 'counteracting tendencies'.

There is another matter of theoretical and practical interest that should be considered an important programmatic touchstone in the value controversy, namely how the transition from capitalism to socialism, as well as the content of the future socialist society, should be envisioned. It can scarcely be stressed too strongly that the actual experiences of 'socialist construction' in

44 See, for example, Hodgson 1975.

the twentieth century have weighed heavily on the ways would-be Marxists have interpreted the theory of value and differed, often fundamentally, as to its meaning.

Suggestions have already been made that mid-twentieth-century 'orthodox' value theory had a strongly Ricardian inflection; and, as we have seen, Ricardo regarded the law of value as 'eternal', as a 'natural' constraint on all conceivable human economies. Against this, Marx maintained that the socialist society of the future could and should dispense with the law of value and substitute for it methods of allocating social labour based on conscious planning and the satisfaction of human need. In light of this, an intriguing question is posed. What were academic Marxist economists (such as Dobb, Meek and Sweezy), who were either sympathisers or members of pro-Moscow Communist parties, to think when Joseph Stalin proclaimed in 1936 that socialism had been fully realised in the Soviet Union? Moreover, what were Marxist economists (of such Stalinist persuasion) to make of the following opinion expressed by Stalin in the early 1950s: 'It is sometimes asked whether the law of value exists and operates in our country, under the socialist system. Yes, it does exist and operate. Wherever commodities and commodity production exist, there the law of value must also exist.'[45]

To those inclined to accept Stalin's assertion that a 'socialist system' was already in place in the Soviet Union, the 'admission' that commodity production occurs and that the law of value operates under 'socialism' could only open the way to a Ricardian embodied-labour theory of value – for it was obvious (to most) that the Soviet economy lacked the production relations requisite for the *social-structural* existence of 'abstract labour'.[46] For many theorists (of a broadly fundamentalist bent), however, Stalin was simply wrong to have claimed that a 'socialist system' prevailed in the Soviet Union, and the fact that commodity production existed and the law of value operated in its economy (in however attenuated a fashion) only confirmed that the Soviet Union was *not* fully socialist. Most Trotskyist fundamentalists in particular have argued that the Soviet economy was *at best* 'in transition' between capitalism and socialism, while conceding that the law of value must continue to operate at some

45 Stalin 1972b, pp. 458–9.

46 In criticising the theorisation by Resnick and Wolff (1994) of the Soviet Union as a 'state capitalist' social formation, I pointed out that 'it is impossible to demonstrate the existence of "generalised commodity production" and the operation of the capitalist law of value in an economy where means of production and labour-power are not freely exchanged in a market; where wages and labour-power do not assume the form of variable capital; and where no structural imperative exists to measure social wealth in terms of abstract social labour time' (Smith 2014, p. 241).

level in a post-capitalist transitional economy until such time as conscious, democratic planning becomes the exclusive principle of labour and resource allocation, entirely dispensing with market allocation.[47]

With all this in mind, it could be said that the Ricardian/'physicalist' propensities of both the 'old orthodoxy' (Dobb, Meek, Sweezy) as well as some within the neo-Ricardian/post-Sraffian school or close to it (Cockshott and Cottrell) can be explained in good part by an appetite to develop a Marxist 'labour theory of price' as the point of departure for constructing models of 'socialist economy' (whether market-socialism or central planning).[48] The early 'neo-orthodox' and contemporary value-form theorists have shown an opposite tendency: to treat value theory as simply a 'critique' of bourgeois economic theory, and as a means to 'negate in thought' the conditions of capitalist alienation, reification and exploitation. One might also say that TSSI stands somewhere between 'pure' value-form theory and fundamentalist theory with respect to its programmatic commitments. For example, Kliman (influenced by Raya Dunayevskaya), Harman (by Tony Cliff), and Freeman (by Ernest Man-

47 See, for example, Mandel 1967 and Seymour 1977, the former a long-time leader of the United Secretariat of the Fourth International, and the latter a leading theoretician of the 'Spartacist' International Communist League (Fourth Internationalist). See also various publications of the International Bolshevik Tendency, including the introduction to Trotsky 1998. 'Post-Trotskyist' Marxist-Humanists (a Dunayevskaya-inspired trend, which includes Kliman) and revisionist 'state-capitalist' Trotskyists (like Walter Daum's League for the Revolutionary Party in the US and Alex Callinicos's Socialist Workers Party in Britain) have also proved capable of defending fundamentalist value-theoretic approaches, often more unambiguously than did Mandel. For an excellent study of various Marxist theorisations of Soviet 'actually existing socialism', see Van der Linden 2009.

48 Cockshott and Cottrell 1993. As we have seen, Shaikh's research has sometimes pointed in this direction as well, although his political orientation has seldom been clearly in evidence in his writings. It is worth noting that the subject index of his 2016 magnum opus does not include 'planning' or 'socialism', although there is a very large entry for 'crisis'. This suggests a greater interest in studying the dynamics and problems of capitalism than in imagining a socialist alternative. One could add that it is surprising, and quite ironic, that this long-time supporter of Marx's law of profitability chose to endorse the meekly Keynesian economic platform of the 'democratic socialist' Bernie Sanders in his bid for the Democratic presidential nomination in 2016. Such a position sits uneasily, I think, with the very last lines of Shaikh's book: 'Official unemployment measures indicate that even without adjusting for part-time and discouraged workers there are currently almost 200 million people in the world without jobs, and almost 900 million workers living in dire poverty (ILO 2013). Even if capitalism recovers soon from the crisis, can it grow fast enough to offset the steady march of mechanization of all sorts of labor activities? Can it even absorb the new labor coming from population growth, let alone the already existing large pool? Whatever form it may take, capitalism will remain bound by the laws of real competition on which it rests' (2016, p. 761).

del) all seem wary (likely to varying degrees) of constructing models of socialist economy, and are therefore loath to consider the role 'prices' might play in a post-capitalist economy.

Fundamentalist Marxian value theory, however, is concerned with both the form and the magnitude of value, and is therefore quite capable of conceiving of a post-capitalist economy that, while no longer dominated by the law of value and moving toward socialism, remains in need of markets. Insofar as it can provide insight into how the measurement of wealth in a 'transitional' economy would still rely to some extent on the allocation of social labour through money/price signals, Marx's value theory can indeed be deemed a useful resource for socialist economic planning. In very general terms, it seems, this is the stance of both Mandel and Seymour.[49]

In a critique of Stalin's argument about the law of value operating in the 'socialist' Soviet Union, the neo-orthodox theorist John Weeks observed in 1981 that 'the confusions and internal contradictions in [Stalin's] *Economic Problems* derive from considering the law of value as the "law of embodied (concrete) labor" '.[50] Yet, while Weeks's argument has real merit as far as it goes, it neglects to identify Stalin's characterisation of the Soviet Union as a 'socialist system' as *the most important* faulty premise of his argument. By failing to do this, Weeks may have helped open the door, perhaps unwittingly, to the notion that the kind of market phenomena that Stalin subsumes under a 'socialist law of value' are actually compatible with the operations of an authentically socialist economic system. His argument may therefore lend itself to support for 'market socialism' as a viable alternative to the bankrupt Stalinist model of bureaucratically centralised planning. From Marx's own standpoint, however, 'market socialism in one country', no less than Stalin's model, can only be regarded as an obstacle to the realisation of a socialism that will finally *transcend* the law of value, a matter to be considered in greater detail in Chapter 11.

49 See Mandel 1986, 1988, 1992; Seymour 1973, 1988.

50 Weeks 1981, p. 94.

CHAPTER 7

Value, Economy and Crisis

> On the basis of *communal* production, the determination of time remains, of course, essential. The less time the society requires to produce wheat, cattle, etc., the more time it wins for other production, material or mental. Just as in the case of an individual, the multiplicity of its development, its enjoyment and its activity depends on economisation of time. *Economy of time, to this all economy ultimately reduces itself*. Society likewise has to distribute its time in a purposeful way, in order to achieve a production adequate to its overall needs; just as the individual has to distribute his time correctly in order to achieve knowledge in proper proportions or in order to satisfy the various demands on his activity. Thus, economy of time, along with the planned distribution of labour time among the various branches of production, remains the first economic law on the basis of communal production. It becomes law, there, to an even higher degree. However, this is *essentially different* from a measurement of *exchange values* (labour or products) by labour time.
>
> – KARL MARX, *Grundrisse*[1]

The law of value, relative to the general abstraction 'economy-of-time', is a *determinate abstraction* that enforces and regulates the distribution of labour-time among economic branches and units through processes of the social equalisation of labour. Even in situations where it operates only to a limited degree, at least *some* economic reproduction is governed by the exchange of commodities representing socially equalised labour. But wherever socially equalised labour assumes the still-more determinate (and complexly determined) form of *abstract labour*, the law of value is further concretised as the *capitalist law of value* – and as *the dominant principle of socio-economic reproduction.*

1 Marx 1973, pp. 172–3, emphasis added.

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Historically, what distinguishes the capitalist law of value from that which operates under conditions of simple commodity production is that the latter stimulates progress in productive technique and exacerbates the internal contradictions of pre-capitalist societies, while the former – constituting the governing principle of labour and resource allocation, and subsuming under itself the dominant mode of surplus appropriation (class exploitation) – is subject to a historical limitation stemming from its own achievements. The logic of the law of value – its systematic promotion of technical-scientific rationality and associated gains in labour productivity – becomes increasingly incompatible with the appropriative imperatives of the capital-labour relation.

In Chapter 2, I argued that Marx regarded the drive to increase the productivity of labour as deeply rooted in the humanity-nature relation and that history could be said to possess a developmental pattern to the degree that this drive manifested itself in real and enduring developments in general human capacities. In this connection I also pointed to commodity-value relations as the social relations that have hitherto most consistently promoted a logic of technical rationalisation conducive to 'progressive' (that is, truly labour-saving) advances in labour productivity. This is so for at least two reasons, both of which are logically and historically prior to the capital-labour relation. First, production for exchange (at first 'accidentally' and later with increasing deliberation and forethought) encourages the phenomena associated with what Söhn-Rethel calls the 'exchange abstraction': that is to say, cognitive faculties and forms of thought conducive to scientific breakthroughs and technological innovation. Second, production for exchange involves production for society rather than production for personal consumption, and, as such, it stimulates a competitive dynamic between commodity producers – one that promotes/facilitates product diversification, cost-cutting production innovations, and numerous technical departures that serve to enhance the productivity of labour. It is true that such competition is severely circumscribed in pre-capitalist formations due to the presence of guild monopolies and other forms of social regulation of the activities of independent commodity producers. But competition is not entirely suppressed, and, with the extension of markets and the emergence of a world market, the competitive dynamic immanent in simple commodity production becomes altogether uncontainable.

What is distinctive about the capitalist law of value is that it operates through the *generalisation* of commodity production and the value-form, and thereby as the overwhelmingly dominant principle of labour and resource allocation. And since it also operates in a largely unconstrained way (that is, no longer in contradiction or opposition to 'competing' social forms), it is able to give much freer expression to its underlying drives and imperatives – perhaps most importantly, from the historical standpoint, to the drive to enhance labour productivity.

Much of the first volume of *Capital* is devoted to answering the question: what is the *source* of the formidable historical dynamism of the capitalist mode of production? The burden of the third volume of *Capital* is to answer a different question: what are the *limits* of capitalism's historically progressive mission? The elements of Marx's answer to the first question can be briefly stated. The historical dynamism of the capitalist mode of production stems from the insatiable appetite of individual capitals to continuously *accumulate*. This drive toward capital accumulation is not primarily a function of personal avarice, or of any subjective proclivity to 'save' or to postpone personal consumption to the future. Such personal, subjective traits may play a more or less important role in the behaviours of individual capitalists. But what must compel all capitalists to accumulate is their *objective* role and position within capitalist relations of production.

All capitalists must contend with two basic conditions of their activity: an antagonistic relation with the workers they employ (resulting in a tendency to displace living labour from production in favour of labour-saving machinery), and a competitive relation with other capitalists (resulting in a continuous striving for larger 'market shares' through price reductions made possible by cost-cutting). Both of these relations compel individual capitalist firms to seek out methods to enhance labour productivity. At the same time, each complements the other in promoting the use of such methods. Thus, it is only because an individual capitalist firm can realise (that is, 'capture') the surplus-value produced by workers employed in other firms (through the process of surplus-value redistribution) that the displacement of living labour from production is a viable micro-level tactic for capitalists seeking to achieve greater 'independence' from recalcitrant workforces and attempting to cut labour production costs per unit of output.

At the same time, the pressure of inter-capitalist competition is a key factor in pushing individual firms to secure their positions in relation to the vicissitudes of the class struggle. By becoming less dependent on living labour, individual capitalists are better positioned to cut costs, expand markets, and meet the many challenges of competition.

The upshot is this: the fundamental social production relations that define capital in general push inexorably toward an enhancement of labour productivity *at the level of the individual capitalist firm*. At the level of the 'social capital', however, matters are much less straightforward. Indeed, a value-theoretical specification of the 'law of increasing productivity' within the capitalist mode of production requires a 'holistic' analysis of the contradictory developmental tendencies of capitalism – both its progressive role in developing the forces of production during its ascendant stages and its retrograde role in restraining such development during the stage(s) of its historical decline.

1 Capitalist Development and Its Cyclical Crises

Capitalist production is production for *profit*, and profit of productive enterprise is necessarily a money-form of surplus-value, realised through exchange in the sphere of circulation. At the macro-level, surplus-value must first be produced before profits can be realised. But the production of surplus-value is not the self-conscious aim of individual capitalists in the micro-level production processes under their direction. Rather, the capitalist's aim is to produce the greatest amount of product that 'the market' can bear at the lowest cost. By reducing the costs of production, the individual capitalist is positioned to more successfully compete in the market and to realise the largest possible magnitude of profit. Thus, in the subjective calculations of the individual commodity-producing capitalist firm, what is uppermost is not whether the rate of return on invested capital is equal to the average rate of profit, for this rate is never precisely known. What is crucial is that the firm's rate of profit remain on a par with that of its competitors, that its *mass* of profits be just as large as possible, and that its 'market share' not be sacrificed on the altar of profitability (or vice versa). *All* of these considerations are taken into account when capitalist firms deliberate about the techniques they should employ in the production of their commodities. In general, choices pertaining to productive technique will tend to favour increases in labour productivity – that is to say, new investment in capital stock (building structures, machinery, and so on) will be directed primarily toward reducing costs per unit of output (and thereby increasing 'profit margins') through *labour saving* innovation. The advantage of such innovation over so-called 'capital saving' innovation is that it allows the individual capitalist firm to *simultaneously* reduce unit costs and its dependency on what Marx called the 'limited basis' of capitalist expansion: the working population.

The subjective micro-economic decisions of individual capitals seeking to navigate the perilous waters of the capitalist market have major implications for what is transpiring at the level of commodity values. Labour-saving innovation has the objective effect of changing the forms of surplus-value production: for the logics of inter-capitalist competition and capital-labour antagonism promote a continuous 'revolution' in these forms.

The historical presupposition and structural prerequisite for the production of surplus-value is what Marx termed the 'formal subsumption of labour by capital', which involves the *separation* of the direct producer from ownership of the means of production, the 'commodification' of labour power, and the intervention of the capitalist into the production process as its 'director' or 'manager'. For formal subsumption to occur, 'it is enough … that handicraftsmen, who previously worked on their own account, or as apprentices of a master, should become wage-labourers under the direct control of a capitalist'.[2]

In contrast to formal subsumption, Marx defines the 'real subsumption' of labour by capital as an ongoing and distinctive feature of what he terms the 'developed form' of the capitalist mode of production. This process involves not only a change in the situation of the agents of production but also a revolution in the 'actual mode of labour and the real nature of the labour process as a whole'. With every improvement in labour productivity comes a change in the parameters of socially necessary labour-time and therefore in the social-structural properties of abstract labour and value. To keep pace with these changes – which create 'competitive' challenges for individual capitalist firms as well as a diminishing relative magnitude of surplus labour for the social capital as a whole – capitalists must be prepared to repeatedly revolutionise the labour processes under their direction.[3]

Marx's distinction between the formal and the real subsumption of labour by capital is closely related to the distinction he draws between the production of *absolute* and *relative* surplus-value. The former corresponds to a form of capitalist exploitation that relies on a lengthening of the working day in order to reduce the proportion of necessary labour time required for the social reproduction of the labourer in relation to the surplus labour time expended. Accordingly, absolute surplus-value may be conceived as an extensive magnitude, an expansion of which depends upon increasing the total quantity of labour time performed. Relative surplus-value, on the other hand, is an intensive magnitude, which arises from 'the curtailment of the necessary labour-time, and from the corresponding alteration in the respective lengths of the two components of the working day'.[4]

2 Marx 1977, p. 1019.

3 Marx's theory has been substantially borne out by the actual history of capitalist development. Fixed-capital stocks tend to become technologically obsolescent *before* they become physically 'worn out'. Moreover an actual 'acceleration of technological innovation' has occurred over the course of the history of capitalism. On this, see Mandel 1975, Chapter 8.

4 Marx 1977, p. 432.

Since work time cannot be indefinitely extended, absolute surplus-value faces a clear limit in the length of the working day and in the maximal intensity of the labour process. Relative surplus-value, however, faces limits set only by the level of development of labour-saving technology. Consequently, relative surplus-value techniques constitute an increasingly important method of raising the rate of surplus-value over the course of capitalist development – especially in the face of successful struggles by working people for a shorter workweek with no loss in pay.

Precisely because such techniques allow individual capitalists to produce more output with less labour, productivity improvements are sought through increases in what Marx called the 'technical composition of capital'. The problem, argues Marx, is that such increases find a value expression in the diminishing relative role of living labour in the overall process of production. Living labour is displaced by labour-saving machinery representing a proportionally expanding magnitude of invested constant-capital values, and this signifies a relative diminution in the role of living labour in the process of production. At the level of the social capital as a whole, this displacement must entail a fall in the average rate of profit (the fundamental regulator of capitalist accumulation), since what is involved in this increased 'value' or 'organic' composition of capital is an overaccumulation of constant capital in relation to the volume of surplus-value being produced by living labour. This argument is squarely based on what is the key postulate of Marx's theory of value: that living labour and living labour alone generates the new value from which surplus-value arises.

The upshot of all this is that capital 'moves in contradiction' – compelled by the imperatives of the accumulation process to adopt relative surplus-value techniques, even though these techniques tend to produce a decline in the average rate of profit and, therewith, crises of accumulation. The crisis tendencies associated with declining profitability exert both short-term (cyclical) and long-term (secular) influences upon regimes of accumulation. Yet the key to understanding both of these expressions of capitalist crisis is the 'law of the falling tendency of the rate of profit', a law that stands as something of a corollary to the capitalist law of value. This law and its relation to capitalism's crisis tendencies will be considered in greater detail in the next section. For now, it will suffice to consider its intimate relation to the drive toward *increasing productivity* under capitalism. Concerning this Marx writes:

> The barriers to the capitalist mode of production show themselves as follows: 1) in the way that the development of *labour productivity* involves a law, in the form of the falling rate of profit, that at a certain point confronts this development itself in a most hostile way and has constantly

> to be overcome *by way of crises*; 2) in the way that it is the appropriation of unpaid labour in general … that determines the expansion and contraction of production, instead of the proportion between production and social needs, the needs of socially developed human beings.[5]

Marx presents the law of the falling rate of profit in this passage as a precipitant of conjunctural interruptions of the accumulation process. In this connection, capitalist economic crises are conceived to be the mechanism whereby a rate of profit adequate to resumed accumulation can be *restored*. In a sense, then, Marx is arguing that a fall in the rate of profit, involving a *development* of labour productivity, is the *cause* of capitalist crises; at the same time, however, he suggests that (cyclical) crises produce the conditions in which the rate of profit can experience an upswing and accumulation can proceed.

The above passage also establishes very clearly that, for Marx, the capitalist process of promoting the productivity of labour is 'internally related' to the tendency of the rate of profit to fall. The technical composition of capital, expressing the *material* relationship between accumulated and living labour in production, is an index of labour productivity, while the *value* expression of this composition, Marx's 'organic composition of capital', is an index of profitability. Capital promotes increased labour productivity through labour-saving and labour-displacing innovation and *in this way* undermines profitability.

When profitability suffers, a crisis occurs characterised by economic contraction, reduced capacity utilisation, unemployment, and other well-known phenomena that, at the level of the social capital as a whole, signify a massive decline in aggregate productivity. But the ultimate function of such cyclical crises is to bring about a *restructuring* of the regime of accumulation through a 'slaughtering of the values of capitals'. As capital *values* fall, reflecting the inability of capital stocks to sustain an adequate level of valorisation, the organic composition of capital falls and the average rate of profit begins to rise. Recovery is based substantially upon a devalorised stock of capital operating at a higher rate of return. As employment and capacity utilisation are restored to pre-crisis levels, the *technical* composition of capital, together with labour productivity, may remain as high as ever, but the composition of capital will also have a *value* expression that is no longer immediately inimical to 'production for profit'.

While Marx is often concerned to establish how the 'overaccumulation of capital' associated with a falling rate of profit is a mere 'barrier' to capitalist

5 Marx 1981b, p. 367.

production, one that is surmountable through 'temporary' short-term crises, he also regarded the law of the falling rate of profit as the expression peculiar to capitalism of a historical-structural crisis reflecting the growing *incompatibility* of the social relations and material forces of production. Indeed, 'the Law' may be regarded from this standpoint as establishing a *limit* to the 'progressive mission' of capitalist development. Marx's analysis of the law of the falling rate of profit and of its counteracting tendencies provides the necessary basis for addressing this question; but, for reasons already outlined in Chapter 1, this analysis needs to be further developed if it is to adequately explain the concrete manifestations of capitalism's 'historical-structural crisis' as this has unfolded since Marx's own time.

2 The Falling Rate of Profit and the Dimensions of Capitalist Crisis

As conceived by Marx, the law of the falling rate of profit is an ineluctable concomitant of the capitalist process of accumulation. Capital's drive to augment the physical means of production (especially the fixed constant capital represented by increasingly sophisticated labour-saving machinery) *without* a corresponding augmentation of the 'living' workforce that sets them in motion can only signify a relative diminution of the role of living labour in the overall process of accumulation. Such a pattern of accumulation *must* precipitate a fall in the average rate of profit, since it entails an increase in the total capital advanced for production without a corresponding increase in the magnitude of surplus-value produced.

Contrary to the interpretations of some critics,[6] Marx's law of the falling rate of profit is not at all predicated on a 'constant rate of surplus-value'. On the contrary, Marx explicitly states that the 'law of the falling rate of profit, as expressing the same or even a rising rate of surplus-value, means … an ever greater portion of [average social capital] is represented by means of labour and an ever lesser portion by living labour.'[7] The same point is made in his following succinct formulation of 'the law':

> The progressive tendency for the general rate of profit to fall is thus simply the expression peculiar to the capitalist mode of production of the progressive development of the social productivity of labour. This

6 See in particular Robinson 1942.
7 Marx 1981b, p. 322.

> does not mean that the rate of profit may not fall temporarily for other reasons as well, but it does prove that it is a self-evident necessity, deriving from the nature of the capitalist mode of production itself, that as it advances the general rate of surplus-value must be expressed in a falling general rate of profit. Since the mass of living labour applied continuously declines in relation to the mass of objectified labour that it sets in motion, i.e. the productively consumed means of production, the part of this living labour that is unpaid and objectified in surplus-value must also stand in an ever-decreasing ratio to the value of the total capital applied. But this ratio between the mass of surplus-value and the total capital applied in fact constitutes the rate of profit, which must therefore steadily fall.[8]

Marx's contention that an increasing rate of surplus-value finds expression in a falling general rate of profit merits underscoring here given the enormous confusion surrounding the interpretation of the rate of surplus-value (s/v) and the organic composition of capital – C/v or $C/(s+v)$ – as *co-determinants* of the average rate of profit. Both Robinson and Sweezy, along with many others, have detected a telling *indeterminacy* in Marx's theorisation of the falling rate of profit – an indeterminacy stemming from the notion that a rising rate of surplus-value could *negate* the depressing effect of a rising organic composition of capital on the average rate of profit. But this indeterminacy is conceivable *only* when the organic composition of capital is defined inadequately. Before this issue can be examined more closely, a few preliminary observations are in order.

In the preceding paragraph, the uppercase 'C' was used to denote the constant capital in the formula(s) for the composition of capital. Up to this point, the quantitative relationships of Marx's theoretical system (the rate of surplus-value, the rate of profit, and the composition of capital) have been specified in the same way Marx did for purposes of simplified arithmetical illustration – that is to say, as relationships between *flow* variables. However, while it is appropriate to treat variable capital and surplus-value *exclusively as flows*, compelling grounds exist for distinguishing between stock and flow expressions of constant capital. Indeed, in both theoretical and empirical investigations of the organic composition of capital and the movements of the rate of profit, constant capital should be treated as a *stock* subject to long-term depreciation as well as short-term consumption.

8 Marx 1981b, p. 319.

A crucial element of Marx's theory of the falling rate of profit is the *fixed* constant capital embodied in technologically sophisticated machinery, the value of which is not completely consumed in a single production period. The uppercase 'C' in the formulas C/v and $C/(s+v)$ refers, then, to the total value of the constant capital stock: the capital 'advanced' for purposes of capitalist production, to use Marx's own terminology. For mathematical as well as theoretical reasons, this conceptualisation of constant capital also enjoins us to redefine Marx's expression for the rate of profit in a particular way: instead of $s/(c+v)$, we now have s/C, where the capital 'advanced' or 'invested' in production is the value of the total constant capital stock (machinery, building structures, fuel, raw material stocks). This procedure, which involves the elimination of 'v' from the denominator of the rate of profit, might seem problematic given the crucial role played by variable capital in the accumulation process, but its advantages more than outweigh any disadvantages, particularly in the *empirical* analysis of trends in the rate of profit.[9]

With this matter clarified, we are better able to address the question of how 'determinate' the relationship really is between a rising organic composition of capital and a falling rate of profit. If the economy-wide OCC rises, *must* the average rate of profit fall? Sweezy, having defined the OCC as c/v (where the lowercase 'c' refers to capital used up) and the rate of profit as $s/(c+v)$, presents the following formula to express the 'co-determining' influences of the rate of surplus-value and the OCC on the rate of profit: r = (s/v)/ (1 – c/v).

9 In principle, it would seem appropriate to treat variable capital in the same way as constant capital – that is, by distinguishing between its stock and flow expressions. But any such procedure immediately points to a significant difference between constant capital and variable capital, namely that capitalists do *not* invest in labour-power in the same way as in means of production. Not only is the rate of turnover enormously different between constant and variable capital; one can realistically assume that variable-capital 'stocks' are actually nonexistent. The justification for this assumption is well stated by Mage: 'Most large businesses in practice segregate the "variable" portion of their circulating capital in a special payroll account, whose maximum size is slightly above the average payroll. But since production workers are generally paid *after* the close of the payroll period, the "stock of variable capital" is always equaled or even exceeded by the liability "wages payable", so that its *net* value is actually Zero or even negative! Marx was quite well aware of this, when in Volume I [of *Capital*] he wrote "the laborer is not paid until after he has expended his labor-power … [H]e has produced, before it flows back to him in the shape of wages, the fund out of which he himself is paid, the variable capital"' (Mage 1963, pp. 37–8). On this latter point, see also Reuten 2006. In the formula s/C, changes in the value of labour-power are reflected in the numerator, that is, in the aggregate surplus-value, which serves as an index of the total new value created by living labour in production. This index is determined at any given time by the rate of surplus-value.

On the basis of this formula he concludes, 'there is no general presumption that changes in the organic composition of capital will be relatively so much greater than changes in the rate of surplus-value that the former will dominate movements in the rate of profit'.[10] But this is correct *only* if Sweezy's formula for the rate of profit fully reflects Marx's understanding of the relationships between the quantitative ratios in question. This may be doubted for two reasons. First, Sweezy operates entirely within the conceptual ambit of flow variables and in this way sidesteps the crucial role of fixed capital in the law of the falling rate of profit. Second, his conceptualisation of the OCC as the ratio of constant to variable capital is questionable, since an excellent case can be made for conceptualising the organic composition of capital as the ratio of the constant capital stock to the total value newly created by living labour in production – that is, as C/(s+v).

Our revised formulas for the rate of profit and the OCC provide the basis for a different specification of the relationships between Marx's three fundamental ratios, one that renders the relationship between the OCC and the rate of profit far more determinate than does Sweezy's formula. This specification, originally proposed by Shane Mage,[11] proceeds as follows.

The rate of surplus-value is the ratio of two *flows* of living labour (L), which together comprise the 'net value' of the commodity product: surplus-value and variable capital. Hence, $s' = s/v$. It follows that $s = L - v = L - (s/s') = L/(1 + 1/s') = L(s'/1 + s')$. Now, if the OCC is Q and this equals C/(s+v), then $Q = C/L$, and the capital stock C equals $L \times Q$ ($C = LQ$). If the rate of profit is the ratio of surplus-value to the capital stock (s/C), then we arrive, through substitution, at the following formula:

$$r = L(s'/1 + s')/LQ = s'/Q(1 + s').$$

In this formula, changes in the rate of surplus-value will have an impact on *both* the rate of profit and the OCC, so that *if* the OCC increases, this *must* mean a fall in the rate of profit. An increase in the rate of surplus-value can contribute to maintaining or increasing the rate of profit only if it occurs without an increase in the OCC defined as C/(s+v).

Compelling theoretical reasons exist for specifying the OCC as C/(s+v) rather than as c/v or C/v. First, by positing a far more determinate relationship between the OCC and the average rate of profit, C/(s+v) allows a clearer view

10 Sweezy 1968, pp. 102–3.
11 Mage 1963, p. vii.

of the relationship between the law of the falling rate of profit and the tendencies counteracting it, for it is precisely in the *interaction* between the 'law as such' and these counteracting tendencies that many of the law's 'internal contradictions' can be located. Thus, an appreciation of these contradictions permits a clearer perspective on the 'real history' of the capitalist mode of production as shaped by the capitalist law of value. Second, by employing C/(s+v) in preference to C/v one can allow for a *non-constant* rate of surplus-value while retaining the element of *determinacy* in the relationship between the OCC and the rate of profit that is so vital to Marx's theoretical exposition of the law of the falling rate of profit. Finally, C/(s+v) is more faithful than C/v to Marx's own conceptualisation of the real impact of a rising OCC on the profit rate. In *Capital* I, Marx distinguishes between 'technical', 'value' and 'organic' expressions of the composition of capital as follows:

> The composition of capital is to be understood in a two-fold sense. As value, it is determined by the proportion in which it is divided into constant capital, or the value of the means of production, and variable capital, or the value of labour-power, the sum total of wages. As material, as it functions in the process of production, all capital is divided into means of production and living labour-power. The latter composition is determined by the relation between the mass of production employed on the one hand, and the mass of labour necessary for their employment on the other. I call the former the value composition, the latter the technical composition of capital. There is a close correlation between the two. To express this, I call the value-composition of capital, *in so far as it is determined by its technical composition and mirrors changes in the latter*, the organic composition of capital.[12]

This passage leaves little room for doubting that Marx saw the value-composition of capital as 'determined' by the proportions in which it is divided between constant and variable capital, that is, as c/v or C/v. But as capital *actually* functions within production, it has a technical composition (in 'material' terms) in which it is necessary to distinguish between 'means of production and living labour-power', or between 'the mass of means of production employed on the one hand, and the mass of labour necessary for their employment on the other'. But the 'mass of labour necessary for their employment' must be specified in relation to what the means of production are being

12 Marx 1977, p. 763, emphasis added.

employed to accomplish: the production of value and surplus-value. For the *organic composition* to be an expression of the value composition that 'mirrors' changes in the technical composition of capital, it must therefore be understood as a value expression of the constant and variable capital relationships *as these appear in production*, where variable capital is no longer identified with 'the sum of total wages' but rather with the living labour-force engaged in creating all new value.[13]

To summarise, the OCC is best conceptualised and measured as the ratio of dead to living labour in production understood in terms of value magnitudes, that is to say, as C/s+v. If and when this ratio rises, the rate of profit s/C *can only fall*.

3 Tendencies Counteracting the Fall in the Rate of Profit

In evaluating what Marx cites as counteracting tendencies to a falling rate of profit, we can begin by distinguishing those factors that contribute to an increase in the rate of surplus-value from those that pertain directly to the OCC. With respect to the former we can identify (1) 'increases in the intensity of exploitation', (2) 'reduction of wages below their value', and (3) 'relative over-population'. With respect to the latter we can identify (4) 'the cheapening of the elements of constant capital' and (5) 'foreign trade'.[14]

'Increasing the intensity of exploitation' encompasses two distinguishable modes of increasing exploitation, only one of which can counter a falling rate of profit. In this connection, Marx points to specific methods employed by capitalists to increase labour productivity that do not involve investments in labour-saving technology conducive to a rising OCC. Such methods are generally associated with the production of absolute surplus-value and include speed-up and prolongations of the working day – methods that run up against physiological limits, workers' resistance and pressures to increase wages. Marx also mentions productivity-enhancing technical innovations as these are applied by individual capitalists 'before they are universally applied' and, presumably, before they have an impact on the economy-wide OCC.

As with the measures employed to increase the intensity of labour exploitation, 'the reduction of wages below their value' is generally an *ephemeral* factor in countering the fall in the rate of profit; for any 'permanent reduction' would

13 Marx 1978a, p. 382.
14 Marx 1981b, Chapter 14.

amount to a lowering of the value of the commodity labour power, thereby compromising workers' performance within the labour process and eventually inciting serious worker resistance. Thus, a long-term reduction of wages below their value can be envisioned only under conditions of severe anti-labour repression.

'Relative overpopulation' can also have a positive impact on the rate of exploitation by pushing down wages, but it encounters a significant barrier in the limited size of the working population. Only where capitalism is in the process of uprooting non-capitalist modes of production and constantly replenishing a massive 'reserve army' of the unemployed is it likely to have anything more than a short-term impact as a counteracting factor.

Conjuncturally, all three of the above factors can play a role in increasing the rate of surplus-value without inducing a rise in the OCC. Even so, Marx's apparent expectation that the rate of surplus-value will display a *secular* tendency to rise is inseparable from his view that it will rise mainly due to an increased technical composition of capital (TCC). And such an increase, Marx assumed, will find a value expression in a rising OCC. Only if a rising TCC occurs without a concomitant increase in the OCC can this lead to a situation of rising productivity (and exploitation) with no falling rate of profit.

It is in just this connection that 'the cheapening of the elements of constant capital' assumes its exceptional significance as a counteracting factor. Marx writes: '[The] same development that raises the mass of constant capital in comparison with variable reduces the value of its elements, as a result of a higher productivity of labour, and hence prevents the value of the constant capital, even though this grows steadily, from growing in the same degree as its material volume, i.e. the material volume of the means of production that are set in motion by the same amount of labour-power.' Marx insists that the OCC will rise less impetuously than the TCC, but he does *not* assert that a rise in the OCC will be altogether *prevented* by 'a higher productivity of labour.' For a rise in the OCC to be fully blocked, the elements of constant capital must 'increase [in mass] while their total value remains the same or even falls.'[15] Marx is clearly alluding here to a range of possible 'capital-saving' innovations and techniques: for example, more durable fixed capital, increased efficiency in fuel and energy consumption, or the discovery and utilisation of less expensive substitutes for fuels or raw materials currently in use. As he suggests, however, such capital saving is only possible in 'certain cases.'

15 Marx 1981b, p. 343.

While the limits of 'constant capital saving' as a factor inhibiting the fall in the profit rate are not well specified by him, it is reasonable to assume that Marx considered labour-saving innovation a *greater priority* for capitalists. After all, the drive by capitalist enterprises toward labour-saving innovation is deeply rooted in the *totality* of social production relations in which they are enmeshed – relations that impel them to not only cut costs per unit of output to meet the challenges of competition, but to cut them in ways that strengthen capital's hand in relation to labour.

Marx's fifth counteracting factor is 'foreign trade and investment' – a factor that is clearly germane to the performance of national rates of profit, but much less so to an increasingly internationalised rare of profit (a matter to be taken up in Chapter 9). Even so, this factor can play a role in elevating the average rate of profit of particular national economies only to the extent that the terms of trade *continue* to improve and/or the rate of return on capital invested abroad *continues* to rise from the standpoint of a given 'national' social capital. Accordingly, the results of foreign trade and investment need to be viewed as a double-edged sword, capable of depressing as well as raising national rates of profit.

This survey of the tendencies counteracting the law of the falling rate of profit suggests that 'the law as such' and the counteracting tendencies to the law are not *co-equal* 'tendential laws,' as proposed by some theorists.[16] While the 'countertendencies' are unquestionably key components of capitalist dynamics, all of the counteracting tendencies cited by Marx – with the possible exception of the cheapening of the elements of constant capital – have clearly defined *limits* as means to stemming a fall in the average rate of profit. On the other hand, the 'law as such' – a rising OCC, accompanied by a falling rate of profit – finds its limit only in economic crises that bring about a devaluation of capital assets. In Marx's theory, it is *capitalist crisis* that creates the conditions for a recovery of the profit rate and resumed accumulation. Moreover, it is precisely the *recurrence* of capitalist crises that induces the capitalist class to deploy ever-changing 'tactics' to increase the rate of profit, ensure the conditions of accumulation, and mitigate the destabilising influences of severe economic dislocations on capitalist society's 'class equilibrium'.

16 See, for example, the approaches of Weeks 1981 and Fine and Harris 1979, respectively, as well as the more neo-Ricardian stance of Albo, Gindin and Panitch 2010. In the first edition of *Invisible Leviathan*, I referred to Fine and Harris as 'neo-orthodox' theorists, a characterisation that I now consider erroneous.

4 Theoretical Arguments Surrounding the Law of the Falling Rate of Profit

Apart from the Robinson-Sweezy 'indeterminacy' claim discussed above, three basic arguments have been associated with the attempt to refute Marx's theory of a rising OCC/falling rate of profit. These are: (a) the 'neutral technological progress' argument; (b) the 'rising technical composition/stable organic composition' argument; and (c) the 'choice of technique' argument (aspects of which were discussed in Chapter 6). Our limited purpose here is to summarise the broad contours of these arguments without entering into the 'algebra' of the controversies and to show that Marx's theory stands its ground against the major theoretical challenges that have been mounted against it. The question of the empirical actuality of a long-term fall in the rate of profit correlated with a rise in the OCC will be considered in Chapter 8.

4.1 *The Neutral Technological Progress Argument*

Marx's law of the falling rate of profit postulates that technological progress under capitalism has an inherently *labour-saving bias*. Against this, several of his critics argue that, *given a constant real wage*, there are no good reasons to believe that capitalists will economise more on labour than on constant capital.[17] Neo-Ricardians like van Parijs typically emphasise the assumption of a 'given real wage' precisely because they conceive of fluctuations in the rate of profit as deriving primarily, if not exclusively, from movements in the wage rate. Accordingly, a rising OCC/falling rate of profit scenario can be theoretically sustained only if one abstracts from changing wage-rates. However, a constant real wage is by no means a 'given' in the real world, and it is precisely the real-world possibility of wage increases that outstrip the growth of the labour productivity that ensures that technological progress must exhibit a labour-saving bias.

What needs to be emphasised here is that the labour-saving bias of capitalist innovation has its most fundamental basis in the 'real subsumption of labour by capital', a process involving the relegation of living labourers to mere detail functions of the production process, the deskilling of the labour-force to the greatest possible extent, and the denial of the primacy of living labour to capitalist production as a process of producing use-values. Labour-saving technical innovation – the utility of which is really to increase the production of *relative surplus-value* – strengthens capital's hand by rendering it as 'independent' as possible of living labour in general and skilled labour in particular. This is

17 See, for example, van Parijs 1980, p. 3.

the first 'functional' benefit accruing to capital from a rising technical composition of capital: the real subsumption of labour by capital is advanced and the mystification inherent in capital-labour relations is intensified.[18]

The second benefit of labour-saving innovation is more straightforward, and was alluded to earlier. Since the limited size of the working population is an obvious barrier to the accumulation process, capitalists must find ways to increase output in the face of labour shortages. Labour-saving technological innovation is by far the most effective solution to this problem. If technical change were to exhibit a neutral tendency or a constant capital-saving bias, capital's dependence on the available working population would become ever greater, depleting the reserve army of labour and forcing up wages.[19]

If Marx's TCC refers to 'what modern economists call "capital intensity," the quantity of capital goods in "real" terms co-operating with each worker at some "normal" level of full employment',[20] then the TCC can be defined as the ratio of means of production expressed in 'constant dollars' to the number of production workers, or, better still, as the constant-dollar value of capital stock employed per hour worked.

All theoretical speculation aside, empirical studies establish unmistakably that technological change does indeed exhibit a pronounced labour-saving bias in the long term and furthermore that this tendency entails a marked increase in the TCC.[21]

4.2 *The Rising TCC–Stable OCC Argument*

The most frequently encountered theoretical objection to the law of the falling rate of profit concerns Marx's expectation that a rise in the TCC (a ratio of use-value magnitudes) will be accompanied by a rise in the OCC (a ratio of value magnitudes).[22] As noted above, Marx acknowledges that the rise in the OCC will not be as pronounced as the rise in the TCC owing to productivity increases associated with the latter. His critics go further, however, arguing that

18 See Marx 1976, appendix.

19 As Mage observes, '"neutral" technological progress creates a full-employment situation in which there are irresistible pressures for a rapid increase in wages' (1963, p. 156).

20 Mage 1963, p. 72.

21 Wassily Leontieff (1982), the distinguished economist who introduced input-output theory into the neoclassical system, has furnished data on the long-term trend of this same ratio in US manufacturing from 1949 to 1977. His data indicate that the TCC ratio increased by a function of 1.9, that is, almost *doubled* over the 28-year period examined. See also Shaikh and Tonak 1994, and Webber and Rigby 1996.

22 Variants of this argument have been proposed by Hodgson 1974, Lebowitz 1976 and 1982, and van Parijs 1980, among others.

productivity increases in industries producing means of production in particular have the effect of reducing the value of constant capital, the numerator of the OCC.

It can be demonstrated, however, that productivity increases cannot *completely* negate the tendency of the OCC to rise along with the TCC. As we have already noted, the rise in the TCC is attributable to a labour-saving bias in capitalist technical innovation – a notion rooted in Marx's explicit recognition of the capital-labour relation as *antagonistic*. Such a notion is absent from the neoclassical theory of technical progress, and for just this reason it is difficult to see from the latter perspective that the use-value (or 'marginal utility') of a 'capital good' is a function not only of its 'capacity-increasing effect' but of its 'labour-saving effect' as well.[23] Once this *dual* function of capitalist means of production is recognised, it becomes clear that the TCC is neither proportional to nor quantitatively co-extensive with labour productivity.

Labour productivity is the ratio of *the mass of use-values produced* (output or capacity) to the number of hours worked. The TCC, on the other hand, refers to the ratio of *the use-value of the means of production* in relation to the number of hours worked. Accordingly, the use-value of the numerator of the TCC (the capital stock) encompasses *both* output/capacity-expanding effects and labour-saving effects. If technical innovation displays a labour-saving bias, for all the reasons pointed to by Marx, then the numerator of the TCC should increase at a faster rate than the numerator of labour productivity – since all positive changes in the latter will be reflected in the former but not all positive changes in the former will find expression in the latter.[24]

Since the OCC is the 'value expression' of the TCC, it follows that a rise in the OCC will be restrained by increased labour productivity, but not entirely blocked.

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23 Mage 1963, p. 159.

24 This argument can be illustrated as follows. If the capacity for production is the sole criterion for the use-value of means of production (machines), then this use-value is equal to the output of the machines. Therefore, if a machine employing 50 workers has an output of 100 units, then both the technical composition of capital and labour productivity will equal 100/50 = 2. If a second machine is introduced that doubles total output but employs only 25 workers, then labour productivity and the TCC will equal 200/75 = 2.666. This is clearly a very peculiar result since the use-value of the second machine is obviously greater than that of the first; but since its use-value is determined solely by its capacity, the second machine is measured with exactly the same yardstick as the first. However, once we drop the assumption that a machine's use-value is determined solely by its capacity (or output), we may then conclude that the numerator of the TCC has risen above 200 and that the TCC must therefore exceed the index of labour productivity; that is, the growth of the TCC has exceeded the increase in labour productivity.

4.3 *The Choice of Technique Argument*

If a rising OCC is compatible with a stable or rising rate of profit *for particular capitals*, the precise micro-economic criteria by which individual capitalist firms choose different techniques of production need to be established. The much-cited 'Okishio theorem' attempts to show that the criteria actually employed by capitalists would rule out a fall in the *general* rate of profit.[25] Van Parijs summarises the argument as follows: 'Under competitive capitalism, a profit-maximising individual capitalist will only adopt a new technique of production … if it reduces the production cost per unit or increases profits per unit at going prices. A technical innovation which satisfies this requirement … enables the capitalist to get (temporarily) a transitional rate of profit higher than the initial general rate in the economy.'[26] Consistent with the dubious neo-Ricardian presupposition of an absolute tendency toward profit-rate uniformity, the Okishio theorem assumes that 'the new average rate will be higher than the old average, due solely to the introduction of a cheaper technique (real wages being given).'[27]

In his response to this 'choice of technique' argument, Shaikh suggests that Okishio's theorem merely underscores Marx's own thesis that 'the battle of competition is fought by the cheapening of commodities' (*Capital* I) and that 'the cheapest method of production will win out in the wars among capitals'.[28] But there is a crucial *difference* between the 'cheapest method of production' *per unit of output* and the 'cheapest method' from the standpoint of *capital invested*. In order to grasp this, the distinction made earlier between *stocks* and *flows* must be appreciated. The cheapening of commodities is predicated on the lowering of unit cost price – that is, a reduction in the *flow* of capital used up in the production of each unit of output. Marx's argument is precisely that this reduction is generally accomplished through increased investment in the fixed-capital *stock*. The 'increase in the productive powers [of labourers]'[29] – which brings about the lowering of unit costs – is paid for through an increased 'roundaboutness' of production. Elaborating on Marx's point, Shaikh argues:

> [A] lower production cost per unit of output is achieved by means of a greater investment cost per unit of output. Once the difference between

25 Okishio 1961.
26 Van Parijs 1980, p. 10.
27 Shaikh 1978b, p. 242.
28 Shaikh, 1978b, p. 245.
29 Marx 1973, pp. 776–7.

> production costs and investment costs is grasped, it immediately follows that there in fact exist two different measures of profitability; profits in relation to capital used up in production (i.e., in relation to cost price), which I shall call profit-margin on costs and profits in relation to capital advanced, or the profit rate. The former is a ratio of two flows, the latter a ratio of flow to stock … [I]t becomes apparent that what Okishio has in fact demonstrated is that such a choice will raise the average profit-margin which corresponds to a given real wage.[30]

Since the Marxian rate of profit is a ratio of the surplus-value *flow* to the constant-capital *stock*, the increased fixed capital needed to cheapen commodities 'will lower not only the maximum but also the actual rate of profit – precisely because this cheapening "necessitates a costly and expensive apparatus" [Marx]'.[31]

The argument does not end here, however; it merely shifts its ground from the realm of 'rigorous mathematical proofs' to the realm of theory. Why, the neo-Ricardians might ask, would innovating capitalists opt for a technique that would lower their transitional rate of profit, even if it increased profit margins? After all, even Marx asserts that no capitalist 'ever *voluntarily* introduces a new method of production … so long as it reduces the rate of profit'.[32] The answer is that the transitional rate of profit of the innovating capitalist firm will *not* be lowered, *unless* it seeks to turn its technical advantage against its competitors immediately: '[E]very such new method of production cheapens the commodities. Hence, the capitalist sells them originally above their prices of production, or, perhaps, above their value. He pockets the difference between their costs of production and the market prices of the same commodities produced at higher costs of production'.[33]

If the innovating capitalist sells the cheapened commodities at prevailing market prices, then a surplus profit can be reaped and the transitional rate of profit on the capital investment will rise. If they are sold at a market price reflecting their lowered cost price, a decent rate of profit can still be realised, competitors can be undercut in the market, and increased market share may produce a larger *mass* of profits. Faced with all this, the innovating capitalist's competitors are no longer confronted with a voluntary choice as to whether or not to adopt the new technique of production; they are *compelled* to do so

30 Shaikh 1978, pp. 242–3.
31 Shaikh 1978, p. 244.
32 Marx 1978a, p. 264.
33 Ibid.

on pain of competitive ruin. Once the new technique becomes generalised, however, the result must be a lower average rate of profit.[34]

5 Dimensions of Capitalist Crisis

Although the law of the falling rate of profit obviously occupies a central place in Marx's own theory of capitalist crisis, it has not enjoyed a comparable status in the crisis theories advanced by most twentieth-century Marxists. Since the 1970s, the 'wage-push/profit-squeeze' hypothesis has been prominent in Marxist economic literature and the most popular explanation for the 'stagflation' and profitability crises of that decade. Unquestionably, however, underconsumptionism has been the dominant paradigm within Marxist crisis theory for well over a century. To be sure, the underconsumptionists recognise that declining profits precipitate crises; but they differ decisively from Marx in pointing to *insufficient effective demand* as the underlying cause of profitability crises. In other words, underconsumptionists view capitalist crises centrally as *crises of realisation*.[35]

While some elements of an underconsumptionist position can certainly be found in Marx, these elements should not be seen as standing in contradiction to his theory of the overaccumulation of capital; on the contrary, they are part and parcel of this same theory. It is the putatively Marxist underconsumptionists who *counterpose* Marx's observations in this vein to the law of a rising OCC and falling average profit rate. And in so doing, they distort the real meaning of his supposed 'underconsumption' observations.

Let's consider what is perhaps the most frequently cited of these observations: 'The ultimate reason for all real crises always remains the poverty and

34 For insightful critiques of the choice of technique argument that are complementary but not identical to Shaikh's, see Freeman 1998, and Reuten and Williams 1989, p. 117, who argue that 'Once the theory is cast in dynamic terms, conditions of existence (or, appropriate "microeconomic foundations") for the TRPF can indeed be provided, and the analysis of the Okishians reduced to a special case'. Reuten and Williams seek to provide such microfoundations *inter alia* by emphasising the issue of 'capital stratification' and centralisation as contributing to a rising composition of capital. They write: '... whilst the average rate of profit decreases, profit is "redistributed" from the bottom to the top of the stratification' (1989, p. 134). See also Kliman 2007 and 2012 for an interesting critique of the Okishio theorem predicated on the TSSI critique of 'physicalist' and 'simultaneist' interpretations of Marx. See also Moseley 1991 and Carchedi 2011.

35 For an excellent overview and critique of underconsumption and profit-squeeze theories of crisis, see Carchedi 2011, Chapter 3. Carchedi's discussion complements my own critical remarks on these theories in Chapter 10 of this volume.

restricted consumption of the masses, in the face of the drive of capitalist production to develop the productive forces as if only the absolute consumption capacity of society set a limit to them.'[36]

What Marx is *not* saying here is that consumption necessarily lags behind production due to the persistent poverty and exploitation of the working masses under capitalism. Rather, his point is that the 'restricted consumption of the masses' constitutes an *immanent* barrier to capitalist production – a kind of 'structural constant' the dimensions of which might *exacerbate* capitalist crises while not necessarily causing them. Regardless of the concrete, proximate events that may trigger a particular crisis (and these are many and varied), its manifestations can be contained and its consequences mitigated through an expansion of 'effective demand', making possible the sale of commodities at prices that might otherwise not be realised. As Marx suggests, the 'overproduction' of commodities associated with capitalist crises can be mitigated to the extent that their sale is not wholly dependent on the 'narrow basis on which the relations of consumption rest'. In this connection, he points to the central importance of an expanding world market: '*The internal contradiction seeks resolution by extending the external field of production*.'[37]

For Marx then, successful penetration of an expanding world market along with capital investment in foreign countries become increasingly important strategies for curbing crisis tendencies *within national capitalist contexts*. The same thesis is suggested in Marx's discussion of foreign trade and investment as influences counteracting the falling rate of profit. Yet, as previously noted, all of this is very much a double-edged sword. *Every* capitalist country seeks to use such strategies to curb its 'locally manifested' crisis tendencies, even though it is only too obvious that not all of them (or even most of them) can succeed in any given conjuncture. The *condition* for 'resolving the internal contradiction' through an extension of the external field of production (and realisation of profit) for the social capital of one country is that the social capitals of other countries fail in this same strategy of 'exporting,' so to speak, their crisis tendencies. Furthermore, as all capitalist countries become increasingly interdependent, as the weakest of them reach the limits of their capacity to absorb the global effects of these tendencies, and as capital exerts itself more and more as an international power, unhampered by national loyalties or nation-state regulation, such strategies diminish in effectiveness, even to the point of becoming counter-productive.

36 Marx 1981b, p. 615.
37 Marx 1981b, p. 353.

Capitalist crises generally take the phenomenal or 'surface' form of crises of profit realisation (overproduction relative to effective demand), even though they have their most fundamental roots in an overaccumulation of capital in relation to the prevailing rate of profit. All capitalist firms are concerned with securing their ability to *sell* their products at prices reflecting the expected profit margin, and therefore the anticipated rate of return on invested capital. Accordingly, both individual capitalist firms and the capitalist state tend to pursue what might be called 'circulationist' strategies for mitigating capitalist crisis tendencies. It is generally only when the limits of these strategies have been reached that the social capital will resort to political-economic policies of a more draconian and openly anti-labour character (for example, monetarism, capital flight, union-busting, wage-slashing and government austerity) aimed directly at shoring up the average rate of profit through attacks on working-class living standards.

Since 'circulationist' strategies are often the *preferred* modus operandi for sustaining profitability (above all for political and ideological reasons), it is not surprising that the *costs* of circulation have increased dramatically as the fundamental contradictions of capitalism have intensified. A value-theoretical conceptualisation of these costs, as well as related increases in the costs of maintaining an interventionist and expansive state apparatus, is therefore of great importance to specifying, on the basis of the theory of labour value, the concrete contours of contemporary capitalism's crisis tendencies.[38]

6 Crises of Valorisation and Crises of Realisation

Although one would be hard-pressed to find much in Marx's writings to directly support the idea that the 'realisation of surplus-value' constitutes a major problem for capitalism, it has nevertheless attracted a diverse group of influential Marxist theorists including Rosa Luxemburg, Paul Sweezy, Ernest Mandel and David Harvey. Proponents of Marx's own crisis theory, such as Grossman, Mattick, Shaikh and Carchedi, have been repeatedly reproached from this camp for underestimating the importance of this 'realisation problem', one that Marx appeared to invoke in his critique of the French economist Jean-Baptiste Say.

To be sure, Marx was a harsh critic of 'Say's law', also known as 'the law of the markets', detecting within it a touching faith in the capacity of the capitalist system to self-regulate and to maintain an equilibrium between supply and

38 This issue is addressed at length in Chapter 8 and again in Chapter 10.

demand, so long as 'free market' forces are given full sway. This law, which also came in for strong criticism from John Maynard Keynes and his followers in the twentieth century, states that the production of commodities is simultaneously the production of the income needed to purchase those commodities, and that therefore 'general overproduction' is not endemic to a capitalist economy. Marx thought otherwise. Furthermore, he emphasised that once surplus-value is produced, it must still be 'realised' as profit for expanded reproduction and the accumulation of capital to proceed. The difficulty, however, is that, periodically, commodities cannot be sold at the *prices* demanded by the capitalists. The problem of profit realisation, therefore, is actually a problem of *price realisation* rather than a problem of 'surplus-value realisation'. Those who identify the latter as the phenomenon underlying crises of overproduction not only claim that 'too much' surplus-value is produced relative to the system's ability to 'absorb' it – and thereby sustain economic stability and growth; they also *overstate* its magnitude in order to give this claim credibility.[39]

In a critique of Robert Brenner's account of the long-term profitability problems of Western capitalism, I noted that the theory of crisis implicit in his analysis, although itself not an underconsumptionist one, shared with underconsumptionism a stress on realisation problems and the problem of deficient effective demand. According to Brenner:

> … under capitalist social-production relations, the generalization of the individual norms of profitability maximization combined with the pressure of competition on a system-wide scale tends to bring about the growth of the productive forces and overall productivity, with the result that, on the assumption that the real wage remains constant, both the rate and the mass of profit rise, assuming there are no problems of realization. But given capitalism's unplanned, competitive nature, realization problems cannot be assumed away. The same cost cutting by firms, which creates the potential for aggregate profitability to rise, creates the potential for aggregate profitability to fall, leading to macroeconomic difficulties.[40]

In addition to affirming his agreement with several neo-Ricardian notions pertaining to the determinants of the rate of profit, Brenner suggests that realisation problems associated with overproduction flow primarily from the

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39 This tendency to exaggerate the volume of surplus-value produced under capitalism will be discussed in greater depth in Chapters 8 and 10.

40 Brenner 1998, p. 24.

unplanned and competitive nature of capitalism. (This contrasts with the idea that such problems result from the generation of 'too much surplus' by giant monopolies and a related dearth of effective demand in the consumer-goods sector, as proposed by the *Monthly Review* School of underconsumptionism). But for Marx, the inability of capitalists to realise prices adequate to sustain profitability stems from a crisis in valorisation. The inadequate production of new value – and of surplus-value in particular – results in a lack of effective demand within the sphere of circulation (a reduction in 'purchasing power' by capitalists and workers alike), and this problem flows from the replacement of living labour in production with increasingly sophisticated labour-saving technology.

While the phenomenon of 'falling prices' stems in large part from efficiencies imposed under the whip of market competition, such price adjustments are not the cause of realisation problems in Marx's theory. A 'realisation crisis' arises only when the realised prices of commodities are inadequate to sustain the average rate of profit on an economy-wide scale. What must be explained, then, is why prices relative to costs (capital advanced) cannot be sustained at levels permitting a stable, or better yet, a rising rate of profit. To approach the matter from a different angle, the question is: how can we explain the aggregate fall in purchasing power (relative to invested capital) that prevents prices from remaining at levels compatible with stable profitability?

The answer, for Marx, is that the labour-saving and labour-displacing technological innovation that enhances productivity must also, at the macro level, reduce the magnitude of aggregate values that are the basis of aggregate prices. Once this phenomenon is theoretically apprehended it becomes clear that aggregate prices must fall as the values sustaining them recede, and it is precisely this that explains why capitalists are unable to command prices for their commodities, in the aggregate, that can sustain the average rate of profit. This analysis, which highlights the problem of an insufficient *production* of new value, is thus directly opposed to 'Say's law' – for it recognises that any equilibrium between supply and demand is both fleeting and subject to periodic disruption *due to the tendency of the rate of profit to fall.*

In an exceptionally clear formulation, John Maynard Keynes described Say's law as stating 'that the aggregate demand price (or proceeds) always accommodates itself to the aggregate supply price'.[41] Taking this observation as his starting point, Shane Mage defines the Marxist understanding of 'effective demand' and with it the 'problem of realisation' as follows:

41 Keynes 1936, p. 26, cited by Mage 1963, p. 130.

> The 'aggregate supply price' schedule in Marx is the same as in all classical and neo-classical economics: the cost of production of each output plus the given rate of return on the capital involved. But this rate of return is given as the prevailing average in the immediate past. If the falling tendency of the rate of profit is in operation, the *realised* rate of return based on the identity of proceeds with aggregate value must be *less* than this 'given' expected rate of profit, and thus *the effective demand must be less than the aggregate supply price* … Accordingly, far from being deduced under the assumption that Say's law is valid, Marx's law of the falling tendency of the rate of profit is directly and completely contradictory to Say's law – but in a clearly defined way. The rate of profit does not fall because there is not enough effective demand; on the contrary, there is deficient effective demand because the rate of profit is falling. The essential meaning of overproduction is 'production of too many means of production and necessaries of life to permit of their serving as means for the exploitation of labourers *at a certain rate of profit*' (Marx).[42]

7 The Historical-Structural Crisis of Capitalism

A substantial basis exists in Marx's work for understanding the law of the falling rate of profit as not only a precipitant of cyclical or conjunctural interruptions of the capitalist accumulation process, but also as an expression peculiar to the capitalist mode of production of a growing and irresolvable contradiction between the social relations and the forces of production, that is, of a 'historical-structural crisis' of capitalism. This idea is clearly expressed in the following passages from Marx's *Grundrisse*:

> [The declining profit rate] is in every respect the most important law of modern political economy, and the most essential for understanding the most difficult relations. It is the most important from the *historical* standpoint … Beyond a certain point, the development of the powers of production become a barrier for capital; hence the capital relation a barrier for the development of the productive powers of labour. When it has reached this point, capital, i.e. wage labour, enters into the same relation towards the development of the social wealth and of the forces of production as the guild system, serfdom, slavery, and is necessarily stripped

42 Mage 1963, pp. 130–2. Quoted passage is from Marx, *Capital III*.

> off as a fetter. The last form of servitude assumed by human activity, that of wage-labour on one side, capital on the other, is thereby cast off like a skin, and this casting-off itself is the *result* of the mode of production corresponding to capital; the material and mental conditions of the negation of wage labour and of capital, themselves already the negation of earlier forms of unfree social production, are themselves results of its production process. The *growing incompatibility* between the productive development of society and its hitherto existing relations of production expresses itself in bitter contradictions, crises, spasms. The *violent destruction* of capital not by relations external to it, but rather as a condition of its self-preservation, is the most striking form in which advice is given it to be gone and to give room to a higher state of social production.[43]

Several points in these passages should be especially noted. First, Marx refers to the 'development of the powers of production' as a *barrier* to capital, and to the 'capital relation' as a 'barrier for the development of the productive powers of labour'. This suggests a dialectical interaction between the 'material' forces and the social relations of production in which, increasingly, each stands as a barrier to the other. If the expansion of the forces of production undermines the relations of production, pointing to the latter's growing irrationality, the relations of production *also* undermine the forces of production: in particular, the potential to expand the global productivity of labour. As long as capitalism survives, this destructive interaction must persist. The forces of production can 'prevail' over the relations of production only through the latter's elimination and the emergence of a 'higher state of social production.'

Second, Marx refers to the 'growing incompatibility between the productive development of society and its hitherto existing relations of production.' This point is crucial to the *historical* significance of the law of the falling rate of profit. A falling rate of profit resulting from an overaccumulation of capital is a feature of *both* the period of capitalist ascent and the period of capitalist decline. But if this law is also the *harbinger* of capitalist decline – the expression of an irremediable contradiction fatal to capital's continuing ability to systematically promote the development of labour productivity and with it human culture – then it must have a somewhat *different* significance and expression during the era of capitalist decline than it had when capital was still playing an historically progressive role. This seems to be the burden of Marx's reference to a 'growing incompatibility' – and yet the expression of this growing

43 Marx 1973, pp. 748–9, emphasis added.

incompatibility is left unspecified by Marx, except for a reference to 'bitter contradictions, crises, spasms' – that is, to phenomena that have been recurrent features of capitalism since its birth.

This brings us to a third point. Marx also implies that the 'growing incompatibility' between the forces and relations of production will find expression in the 'violent destruction of capital not by relations external to it, but rather as a condition of its self-preservation.' Here Marx proved to be remarkably prescient – for it has been the quite literal physical destruction of capital in *world wars* (themselves interpretable as products of the 'growing incompatibility') that led many twentieth-century and contemporary Marxists to conclude that capitalism has indeed entered into historical-structural crisis. In Lenin's terms, capitalism has reached its 'highest stage' with the advent of *imperialism*, a phenomenon that expresses, above all, the attempt of the most developed capitalist countries to resolve their 'internal' contradictions at the expense of each other as well as at the expense of the less-developed colonial and semi-colonial countries they dominate.

But if imperialism and its associated conflicts have demonstrated how destructive the capital relation can be to existing stocks of physical capital (not to mention human beings and 'the natural conditions of production'), the growth of 'unproductive' sectors within the most-developed capitalist countries *also* signifies that the capital relation is destructive to the productive and emancipatory potential of the technology that has developed under its wing. Indeed, in an era when nuclear weapons have made a resolution of the internal contradiction of capitalist production through a military extension of the external field of production immensely perilous, this thwarting of the great potential of science and technology, together with the wasteful allocation of social labour and other resources to unproductive activities that are 'socially necessary' solely from the standpoint of capitalism, may well be 'the most striking form in which advice is given [to capital] to be gone and to give room to a higher stage of social production.' At the same time, it would be foolish to discount the very real tendencies toward world war that capitalism continues to breed and the attendant threat of a thermonuclear Armageddon, a possibility that has only been strengthened by the change in geo-political dynamics ushered in by the collapse of the Soviet bloc, the long-term decline of US imperialism, and the growing tensions between the imperialist West and the emerging 'great powers' of Eurasia: China and Russia.

CHAPTER 8

Socially Necessary Unproductive Labour, Valorisation and Crisis

In this chapter, I examine several issues pertaining to a Marxist 'value-theoretical' interpretation of the distinction between productive and unproductive labour. By 'value-theoretical' I mean an approach predicated on Marx's labour theory of value and informed by his historical-materialist critique of commodity and capital fetishism.[1] What will distinguish my treatment from most previous treatments of these issues will be my contention that the income of the great majority of unproductive workers is most appropriately conceived as an 'overhead cost' of the system as a whole: in value-theoretical terms, as elements of the 'constant capital' whose use-values are consumed in the reproduction process of the social capital, but whose *value* is preserved and reappears in the gross value of output. This approach, though proposed by Shane Mage as early as 1963, has received scant attention. Its great merit in my view, is that it helps to resolve many of the long-standing theoretical difficulties with well-established Marxian treatments of unproductive labour by scrapping the curious convention of treating the wage-bill of unproductive workers as a non-profit component of social surplus-value and by acknowledging that most forms of unproductive labour are vitally necessary to sustaining profitability and to reproducing the institutional framework of the valorisation (value-expansion) process.

1 Marx and the Problem of Unproductive Labour

All forms of unproductive labour have one obvious thing in common: none, by definition, is 'productive'. The simplest way to begin is therefore to establish how *productive labour* is conceptualised in Marx's theory.[2]

First, in all of his writings on the subject, Marx is unequivocally clear that productive labour is by no means synonymous or coextensive with *production* labour, that is, manual and/or mental labour directly involved in the produc-

1 Marx 1977, pp. 163–77, 983, 1003, 1046.

2 Marx's most important writings on productive and unproductive labour include passages from *Theories of Surplus-Value*, the *Grundrisse*, the three volumes of *Capital*, and *The Results of the Immediate Process of Production* (appendix to Marx 1977).

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tion of use-values (useful things or effects). Production labour is not specific to the capitalist mode of production, as it is also performed in non-capitalist modes of production and in non-commodified domains of capitalist society (for example, domestic household labour). Productive labour, on the other hand, is that which is productive for capital; it is labour that not only produces commodities (marketed use-values), but is also employed by capital and is specifically productive of surplus-value. For Marx, this last is the key criterion. Labour may be in the employ of capital, and yet not be productive. It may even produce a measurable 'output' in physical terms and/or assist individual capitalists in realising a profit, and yet still not be productive. In the specifically Marxist sense, only waged or salaried labour that participates directly in a capitalist labour process and directly creates and augments social surplus-value can be regarded as productive.

Second, Marx's distinction between productive and unproductive labour is inseparable from his value theory, which, for our purposes, involves two fundamental postulates: that living labour is the sole source of all new value at the level of the capitalist economy as a whole, and that value exists as a definite quantitative magnitude limiting profits, purchasing power, and the realisability of set prices. Marx holds living labour to be the unique source of new value because value, as the 'social substance' of prices, wages, and profits, is fundamentally an expression of the social division of living labour. External objects or useful effects only have value in so far as they stand in a particular relationship to 'abstract, socially necessary labour' – a structure of socio-economic relations grounded in production and regulating exchange as the social form of capitalist reproduction. Moreover, value exists as 'a definite quantitative magnitude' precisely because it has a real existence in the relations comprising the social division of labour. Although subjective factors may play a role in how value is distributed between various economic agents, the value-magnitude is nevertheless the resultant of irreducibly objective conditions within capitalist production. Foremost among these conditions is precisely the quantity of living labour that is expended in the production of commodities representing surplus-value. The magnitude of productive labour implicated in commodity production, therefore, has a very real bearing on what Marx called the laws of motion of capitalism – the rise, the dynamics and the decline of the capitalist mode of production. Given this, the distinction between productive and unproductive labour acquires a decisive significance for the analysis of capitalist economies.

The macro-economic emphasis evident in the above rendering of Marx's value theory is of course complementary to the definition of productive labour as labour that directly creates and augments social surplus-value. For Marx, capital is 'self-expanding' value: value in search of an increment. The value-expansion – or 'valorisation' – process is inherently a macro-economic process. This is so for two reasons. First, the distinction between the necessary labour that produces the value equivalent of the workers' wages and the surplus labour that produces surplus-value, together with the very definition of what constitutes socially necessary labour time (as the measure of value), is established on an economy-wide scale. Individual producers are obliged through competitive market pressures to adapt their concrete labour processes in accordance with standards prevailing within the economy as a whole. Second, social surplus-value is the result of the collective exploitation of all productive labour by the total social capital. Individual capitalist firms do not realise as profit the magnitude of surplus-value that they extract from their 'own' workers. Rather, the surplus-value appropriated within capitalist production as a whole is distributed to individual capitals on the basis of the average rate of profit calculated on the capital investment (or 'capital advanced').[3]

The tendency toward the equalisation of the rates of profit and the formation of a general rate of profit is the mechanism whereby *unproductive capitals* (mainly commercial or financial capitals in the sphere of circulation) participate with productive capitals in the division, distribution and realisation of social surplus-value, as a 'reward' for their specific contributions to the reproduction and enlargement of the total social capital. The differentiation between productive and unproductive capital reflects, then, a division of labour among the living agents of self-expanding value – that is, a division of labour within the capitalist class. It is a functional differentiation within capital that facilitates the valorisation process and therewith the accumulation of capital.

Having established what, for Marx, constitutes productive labour, we are now in a position to distinguish between the main forms of unproductive labour. Two principal forms are already indicated: (1) labour that belongs to non-capitalist socio-economic activities and therefore cannot serve to augment social surplus-value (the labour of self-employed commodity producers is a major instance of this form within capitalist societies, as is the labour of domestic servants),[4] and (2) labour that is in the employ of unproductive capital and therefore 'facilitates' the valorisation process but does not contribute

3 Marx 1981b.

4 In a *capitalist* context, independent commodity producers create small amounts of surplus-value by appropriating 'surplus labour' from family members and even themselves; but this is a historically declining phenomenon that is not measurable using standard national income accounts. See Weil 1995 and Smith 2014, Chapter 11.

directly to the augmentation of social surplus-value. To these should be added: (3) labour that is employed by the capitalist state and likewise contributes 'indirectly' to valorisation and accumulation through its role in maintaining the institutional framework of capitalist society, and (4) labour employed by productive capital but which nevertheless contributes only indirectly to valorisation and accumulation (for example, the labour of supervisors and security guards).

The last three forms of unproductive labour – what might be referred to as 'circulation labour' (form 2) and 'social-maintenance labour' (forms 3 and 4) – have expanded considerably in the advanced capitalist countries since Marx's time, while the first form has declined precipitously. Yet it was undoubtedly only the first form that Marx had in mind when he enunciated his much-quoted but quite misleading definition of unproductive labour as labour 'which is not exchanged with capital, but directly with revenue, that is with wages or profit'.[5]

In *Capital II* and *Capital III*, Marx unequivocally affirms the existence of forms of unproductive labour that are not exchanged with 'revenue' (narrowly conceived as wages and profits), but rather with capital. In these later treatments, Marx is concerned with the specifically capitalist incarnations of unproductive labour: the socially or systemically necessary forms of unproductive labour that serve the reproduction of the capitalist socio-economic order. To be sure, in *Capital II*, Marx still refers to unproductive workers 'who receive for their services a part of the luxury expenditure of the capitalists' and 'who are themselves to this extent a luxury item'.[6] But the main focus is no longer on 'form-1' unproductive labour of the luxury type. Rather it has shifted to unproductive labour in the sphere of circulation, and to unproductive labour as a cost of circulation. Such activities as buying, selling, and bookkeeping are singled out by Marx as types of unproductive labour with a very different import than the unproductive labour of butlers, maids and stable boys:

> Labour-power and labour-time must be spent to a certain degree in the circulation process ... But this now appears as an additional outlay of capital; a part of the variable capital must be deployed in acquiring these labour-powers that function only in circulation. This capital advance creates neither products nor value. It proportionately reduces the scale on which capital advanced functions productively.[7]

5 Marx 1978, Vol. 1, p. 157.
6 Marx 1981a, p. 486.
7 Marx 1981a, pp. 210–11.

Clearly, the unproductive labour to which Marx refers here is socially necessary to capital in so far as it contributes *not* to the 'creation' of surplus-value but to its *realisation* in the sphere of circulation. Moreover, Marx is clear that this form of unproductive labour is indeed exchanged with capital. Yet he also states that the capital advance made to acquire these unproductive labour powers is a 'part of the variable capital' – a suggestion that contradicts his fundamental definition of variable capital as that part of the social capital invested in acquiring labour power of the productive type.[8]

This contradiction in Marx's thinking on the problem of circulation labour reflects a contradiction existing in reality: the circumstance that labour involved in the circulation of capital is 'productive' from the standpoint of individual (commercial or financial) capitals, even though it is unproductive from the point of view of the social capital. What we are considering then is a 'variable capital *sui generis*' – a portion of the social capital exhibiting some but by no means all of the characteristics associated with variable capital. In brief, circulation labour is subject to exploitation, even though it is not directly productive of surplus-value.

In the case of a 'buying and selling agent' who works for a capitalist, Marx states that 'as a wage labourer he works part of the day for nothing. He may receive every day the value product of eight hours' labour, and function for ten.' Yet, '[the] two hours surplus-labour that he performs no more produce value than do his eight hours of necessary labour, although it is by means of the latter that a part of the social product is transferred to him'.[9] For the industrial capitalist who employs this type of unproductive labour, the capital exchanged with it is an *overhead cost* of production, a *faux frais*, that should be kept to a minimum. Such labour does not augment social surplus-value, Marx, insists, even though it 'performs a necessary function, because the reproduction process itself includes unproductive functions'.[10] Yet for the commercial capitalist who employs such labour, its significance is necessarily very different: the surplus labour performed by unproductive workers in the sphere of circulation is precisely the means whereby 'a part of the social product' is transferred to commercial capital in the form of merchants' profit. Hence, in *Capital III*, Marx writes:

> Commercial capital's relationship to surplus-value is different from that of industrial capital. The latter produces surplus-value by directly appropriating the unpaid labour of others. The former appropriates a portion of

8 Marx 1977, p. 317.

9 Marx 1981a, p. 210.

10 Marx 1981b, p. 209.

> this surplus-value by getting it transferred from industrial capital to itself … The very function by virtue of which the commercial capitalist's money is capital is performed in large measure by his employees on his instructions. Their unpaid labour, even though it does not create surplus-value, does create his ability to appropriate surplus-value, which, as far as this capital is concerned, gives exactly the same result: i.e., it is its source of profit.[11]

The fact that 'buying and selling agents' in both the spheres of production and circulation perform functions that are *necessary* to completing the circuit of capital (through the realisation of commodity values) in no way suggests that the paid labour of such agents will not be viewed differently by industrial and commercial capitals: the former will see such labour costs as a deduction from its profits, the latter as a source of profits. Both perspectives embrace a partial truth. But the real significance of this form of labour from the standpoint of the social capital as a whole can only be grasped by taking into consideration its contributions to the overall process of capitalist production/reproduction. From this standpoint, socially necessary unproductive labour (hereafter, SNUL) – whether of the circulation or the social-maintenance types – has a highly complex relationship to the valorisation and accumulation processes: one that must necessarily find a subtle theoretical expression at the level of Marx's fundamental value categories. These categories comprise the three constituents of the total value of the commodity product: constant capital, variable capital and surplus-value.

At different times and in different theoretical contexts, Marx subsumed the wage-labour costs of SNUL under all three of these categories, never definitively resolving the problem of how SNUL should be specified in value-theoretical terms. Unfortunately, the conventional Marxian treatment of the problem, which treats the wage-bill of SNUL as a non-profit component of social surplus-value (and as a straight-forward deduction or subtraction therefrom), does justice neither to the dialectical subtlety of Marx's theory nor to the real complexity of the SNUL phenomenon under capitalism.[12]

11 Marx 1981b, p. 407.

12 This 'conventional Marxist' treatment of unproductive labour has been most frequently challenged by neo-Ricardian or neoclassical critics, who insist that the income of all wage labourers should be subsumed under variable capital. As I will suggest later, the conventional approach is indeed susceptible to this sort of criticism, which simply obviates the productive-unproductive distinction entirely, in so far as it involves a fetishistic departure from Marx's value theory.

2 SNUL and Marx's Value Categories

The specification of SNUL costs as elements of social surplus-value became a convention within Marxist discourses only with the rise of underconsumptionism in Marxian crisis theory.[13] The 'monopoly capitalism' (aka *Monthly Review*) school in particular has championed this specification in a fashion that has a clear affinity to its view that the key problem facing modern capitalism is one of 'absorbing the surplus'.[14] On this view, unproductive labour is functional to capitalism, not only because its on-the-job activity helps to realise surplus-value, but also because unproductive workers' consumptive behaviour generates additional effective demand for an ever-growing 'economic surplus'.[15] Such an analysis comes close to suggesting that unproductive labour is deliberate 'make-work', designed and paid for by micro-economic agents (primarily commercial capitalists) to redress a macro-economic effective-demand problem. The problem here is that the feedback mechanism in this particular 'functional loop' is impossible to specify.[16]

Yet many Marxists who are not proponents of underconsumption theories of crisis have also accepted the proposition that SNUL is 'paid for' out of surplus-value. Joseph Gillman, for example, asserts: 'The whole congeries of administrative expense and selling costs, as well as rent, interest and business taxes, are all part of surplus-value.'[17] This view is seconded by Anwar Shaikh, a leading proponent of Marx's LTRPF: 'The question Marx poses … is: out of what fund are [the] distribution activities to be supported? And the answer he gives is: out of the surplus-product, out of surplus-value. After the replacement of the costs of production, there remains the surplus product from which all further costs of capitalist reproduction must eventually be defrayed.'[18]

Given the near-consensus on this point among Marxists who uphold the productive-unproductive distinction, it is important to emphasise that Marx never offered such a clear answer to the question attributed to him by Shaikh.

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13 Sweezy 1968 [1942].

14 Baran and Sweezy 1966; Foster 1986; Dawson and Foster 1991.

15 See Tarbuck 1983.

16 For further discussion of this point, see Seymour 1972. On the concept of a functional loop, see Stinchcombe (1968), who argues that a functional analysis is deficient if it is unable to (a) incorporate intent (and therefore human agency) into its explanations, and (b) specify the feedback mechanisms whereby structural patterns are reinforced and preserved over time.

17 Gillman 1957, p. 17.

18 Shaikh 1978b, p. 8. See also Miller 1984; Moseley 1987 and 1991; Chernomas 1987 and 1990; Fine and Harris 1979; and Shaikh and Tonak 1994.

Indeed, the *sole* basis in Marx's writings for the specification of SNUL costs as paid for out of surplus-value seems to be his ambiguous reference to a 'deduction from surplus-value' in the following passage from *Capital II*:

> The general law is that all circulation costs that arise simply from a change in form of the commodity cannot add any value to it. They are simply costs involved in realising the value or transferring it from one form into another. The capital expended in these costs (including the labour it commands) belongs to the *faux frais* of capitalist production. The replacement of these costs must come from the surplus product, and from the standpoint of the capitalist class as a whole it forms *a deduction of surplus-value or surplus product*, in just the same way as the time that a worker needs to buy his means of subsistence is lost for him.[19]

An obvious difficulty with this passage is that it appears to contradict Marx's treatment of commercial capital and the costs of circulation as this is elaborated in *Capital III*, as well as in other passages of *Capital II*. Indeed, the way it has been interpreted by Sweezy, Gillman, Shaikh and others renders it totally incompatible with the burden of this latter treatment, which we shall turn to shortly. The incompatibility disappears, however, if we amend the wording of the first sentence to read 'any new value' instead of 'any value', and if we examine the concept of a 'deduction from surplus-value' more closely.

The main preliminary point that needs to be made is that a 'deduction from surplus-value' can be understood in either a relative or an absolute sense. Proponents of the conventional specification of SNUL are clearly committed to an absolute interpretation; for them, Marx is referring to a straightforward 'subtraction'. Yet, in a passage where Marx actually defines the concept, such an interpretation is *logically excluded*: 'the actual circulation costs increase the value of the product, but decrease the surplus-value … The costs of circulation generally, in so far as their merely economic moments, circulation proper are concerned … are to be regarded as deductions from surplus-value, i.e. as an increase of necessary labour in relation to surplus-labour.'[20]

Consistent with his *Capital III* treatment, Marx is quite clear here that the costs of circulation increase the value of the commodity product. Yet if the circulation costs were 'paid for' out of surplus-value, there would be no increase in the value of the product. All that would happen is that the total surplus-

19 Marx 1981a, pp. 225–6, emphasis added.
20 Marx 1973, p. 548.

value would be divided between the payment of circulation (and other unproductive) costs and the surplus-value available for private capitalist consumption and accumulation. But since, according to Marx, these costs *increase* the value of the product (without, however, adding fresh surplus-value to it), any decrease in surplus-value must only be a *relative* one. Hence, what is involved in a 'deduction from surplus-value' is a diminution in the *proportion* of the commodity's value that takes the form of surplus-value. If the added circulation costs did not exist – if they were 'unnecessary' – the absolute magnitude of new surplus-value would not increase (indeed, it may even decrease), but this magnitude would represent a larger proportion of the total value of the commodity product. The corollary to this would be that industrial (productive) capital would appropriate all of the surplus-value.

Marx also suggests that a deduction from surplus-value signifies an 'increase of necessary labour in relation to surplus labour' (assuming that all circulation costs are labour costs). But if the costs of circulation were really a non-profit *component* of surplus-value, such a definition would be absurd. For if, as Marx insists, surplus-value is simply a monetised form assumed by surplus labour under capitalism, and if, as Shaikh and others insist, a deduction from surplus-value is *still a 'component'* of surplus-value, then Marx's last sentence might just as well read: 'The costs of circulation … are to be regarded as surplus-labour, i.e. as an increase of necessary labour in relation to surplus-labour.' Clearly, in so far as a deduction from surplus-value represents an 'increase in necessary labour', the wage bill of this necessary labour cannot be considered a component of aggregate social surplus-value on any logically coherent grounds.

If the costs of circulation are not to be regarded as a part of the aggregate surplus-value, how then should they be treated? The most adequate answer to date has been suggested by Shane Mage: 'What takes place in the unproductive spheres is simply the outlay of a determined and necessary constituent part of the total social capital.'[21] Mage's inspiration for this approach is the Marx *of Capital III*, who states: 'Although [circulation capital] forms additional capital, it does not form any more surplus-value. It must be replaced out of the commodities' value, for a portion of this value must be reconverted back into these circulation costs …'.[22]

Since circulation activity can add no new value to the commodity product, Marx concludes that 'the additional value that [the merchant] adds to commodities by his expenses is reducible to the addition of *previously existing*

21 Mage 1963, p. 65.
22 Marx 1980b, p. 405, emphasis added.

values, even though the question still arises here as to how he maintains and conserves the value of this *constant capital*'.[23] The relationship of commercial capital to the commodity product is therefore similar to that of 'means of production' (machines in particular), which add 'previously existing value' but can confer no new value. Such a parallel is supported by Marx's own imagery:

> *One* merchant (considered here merely as the agent of the formal transformation of commodities, as merely buyer and seller) may, by way of his operations, shorten the buying and selling time for many producers. He should then be considered as a machine that reduces the expenditure of useless energy, or helps to set free production time … The capital advance [required to meet the labour costs of circulation] creates neither products nor value. It proportionately reduces the scale on which the capital advanced functions productively. It is the same as if part of the product was transformed into a machine that bought and sold the remaining part of the product.[24]

What all this implies is that the variable capital *sui generis* deployed by unproductive capital is, from the standpoint of the social capital, qualitatively similar to the constant capital deployed by productive capital. It is 'variable' only in its ability to transfer magnitudes of already existing surplus-value from the productive to the unproductive spheres. Moreover, whether paid for by commercial or industrial capital, the costs of circulation form a component of the capital advanced and therefore reduce the average rate of profit: 'The surplus-value s remains constant, but the capital advanced C still grows from C to $\hat{}C$, so that the profit rate s/C is replaced by the smaller profit rate $s/(C+\hat{}C)$. The industrial capitalist therefore attempts to keep these circulation costs to a minimum, just as he does his outlay on constant capital.'[25]

Marx's near-explicit treatment of unproductive labour costs as a form of constant capital in the above passages finds explicit expression in the way that Mage specifies the value categories:

> The difference between variable capital and constant capital is founded on their differing modes of transferring value to the commodity-product; and in the case of constant capital this characteristic mode is precisely *the addition of previously existing values*. Consequently, the appropriate

23 Marx 1980b, p. 406, emphasis added.
24 Marx 1981a, pp. 209, 211, emphasis in original.
25 Marx 1981b, p. 413.

> treatment for the outlay on unproductive expenses in general, provided only that they are 'socially necessary' under the existing form of social organisation, is to regard them as part of the constant capital advanced and expended.[26]

Mage applies this reasoning to both circulation labour and the social-maintenance labour supported by the capitalist state. Like commercial and financial capital, the state carries out a range of tasks indispensable to perpetuating the institutional framework of the valorisation process; like them, the state appears both as a 'socially necessary' apparatus and as a 'barrier' to capitalist accumulation; and like them, the state's role in the production of surplus-value is an indirect one, except, of course, where the state is itself involved in profit-generating commodity production.[27]

Unlike commercial and financial capital, however, the capitalist state is not a 'private accumulator'. Most of its revenues are obtained through taxation rather than through participation in surplus-value redistribution on the basis of the average rate of profit (or interest). Rather than compete with capitalist enterprises for a share of social surplus-value, the capitalist state is principally concerned with obtaining adequate value (revenue) to allow it to continuously acquit its historically developed tasks. This is not to say that the state *never* captures a portion of currently produced surplus-value in order to *expand* its activities; on the contrary, it has exhibited a strong historical tendency to do precisely this.[28] Yet, while the state regularly appropriates a certain share of newly created surplus-value as a means of further entrenching its role in social reproduction, it is wrong to regard *most* tax revenues as a 'deduction from surplus-value', just as it is wrong to treat the tax on labour income as a deduction from variable capital.[29]

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26 Mage 1963, p. 66, emphasis in original.

27 The capitalist state obviously does not participate in surplus-value redistribution on the basis of the average rate of profit (or interest) except where it involves itself directly in commodity production (for example, nationalised power utilities) or circulation (for example, nationalised banks or the retailing of liquor).

28 Mage's failure to recognise this point is a weakness of his theoretical approach and of his empirical study of the US economy. He treats all tax revenues as constant capital even though a part of these revenues may at times include currently produced surplus-value.

29 In empirical studies of the Marxian ratios, it is necessary to define variable capital as the *after-tax* wage-bill of productive workers. The latter's *real* income is the income used to reproduce 'the capacity to work' and to support non-waged family members, not the 'income' deducted from workers' wages and transferred to the state. Arguably, certain 'transfer payments' benefitting working-class households may be seen as elements of variable capital – but these are small relative to taxes deducted from 'gross wages'.

From the standpoint of the social capital, the state is a machine of social reproduction.[30] Like any other machine, it requires maintenance, amortisation, new parts, and a continuous supply of fuel and energy. Accordingly, the social capital – in whose historical interests the capitalist state functions – must set aside a considerable portion of the value it realises in order to continuously finance state activity, just as it must 'set aside' some of the same 'realised value' to replenish raw material stocks, depreciated fixed capital, and expended fuel supplies in the mines, mills, and factories that are the principal sites of surplus-value production.

A few qualifications are now in order. Like unproductive capital in the sphere of circulation, the state carries out a range of tasks that are indispensable to maintaining the institutional framework of the valorisation process. In this sense, it contributes 'indirectly' to the production of social surplus-value. Yet the capital exchanged with SNUL in the state sphere is not regarded by any segment of the social capital as contributory to profits. While the precise way in which state employees perform 'unpaid labour' may seem problematic,[31] it is clear that such state-supported 'social-maintenance labour' is exchanged with a form of constant capital that has even less in common with 'variable capital' than that exchanged with circulation labour. For 'state capital' ('capitalised' tax

30 This value-theoretical appreciation of the state as part of the 'machinery' of social reproduction has implications for the elaboration of a general theory of the capitalist state – in particular for specifying the *limits* within which it can operate. To some extent, our approach is consistent with the 'capital-logic' strategy of 'deriving' the state's forms and functions from the laws of motion and contradictions of capitalism (on the latter, see Holloway and Picciotto (eds) 1978). However, rather than adopting a 'pure' capital-logic approach, which leads to interminable debates on the 'logical ordering' of capital and value relations, as well as on the particular contradictions dictating state functions, the analysis favoured here calls for a *historical* approach. For us, the capitalist state develops in response to an ensemble of contradictions, the basic elements of which are always present within a given capitalist formation, but whose 'ordering' in terms of state priorities is only historically and conjuncturally determinable. On this basis, it seems possible to meet most of the objections to a 'capital-theoretic' approach to the state registered by Gough (1979), Jessop (1982) and other Marxist theorists who emphasise the relative autonomy of 'the political' and/or 'the class struggle' in relation to capitalism's 'systemic logic'.

31 From a Marxist value-theoretical standpoint, the most salient difference between the surplus labour appropriated from SNUL workers in general and from productive workers is that more 'productive surplus-labour' translates into rising surplus-value, while more 'SNUL surplus-labour' translates into reduced overhead costs. By extracting more surplus-labour from its employees, the capitalist state reduces its costs, increases its efficiency, and reduces its dependency on tax revenues, potentially freeing up values for investment in productive spheres, for reallocation within unproductive spheres, or for reducing national debt.

revenues for the most part) is not exchanged with SNUL with a view to transferring surplus-value from the sphere of production to the state, but with a view to centralising and rationalising some of the overhead costs of the social capital as a whole and to attenuating systemic contradictions. The great majority of its revenues are obtained through a political taxation process, which may have the appearance of 'democratically' involving all citizens as 'taxpayers' but which finally always amounts to a tax on the social capital.[32]

3 Constant Capital and Capital Fetishism

One possible objection to treating SNUL costs as a component of the constant capital flow is that the latter is almost always thought of as 'means of production' and as directly implicated in the physical process of producing commodities. But constant capital is not merely a value expression of its 'material' forms in the immediate process of production. Rather, it is one expression of the 'social relation' that is capital, the other expression being variable capital. It is therefore quite reasonable to argue that the category of constant capital encompasses all those 'advances' and 'costs' associated with the total process of capitalist production and reproduction that are not encompassed by variable capital. If variable capital is defined as that portion of the social capital that is transformed into the living labour that is directly productive of surplus-value, then constant capital may be defined as the portion transformed into all the elements of capitalist production/reproduction that are *indirectly* implicated in the total valorisation process. As such, constant capital may assume the form of SNUL just as easily as it assumes the form of a drill press, an industrial robot, a ton of steel, or a cash register.

To assume that constant capital must be directly implicated in use-value production to be 'indirectly' implicated in valorisation is a *fetishistic* error. Marx's critique of fetishised political economy involves centrally a rejection of the confusion of the social and the 'material-natural' aspects of production

32 This does not entirely preclude the use of government taxation policy to either increase or decrease the rate of exploitation of the working class in the short term. But it does suggest that the after-tax incomes of wage earners must *tend* toward levels determined by the value of particular labour-powers in the labour market, as conditioned by historically constituted norms. Hence, if 'take-home pay' falls as a result of changing tax policies, workers will typically respond by seeking a compensatory pay increase. How successful they will be will depend, of course, on how well organised and combative they are in particular conjunctures as well as on broader labour-market conditions.

and of the product of labour. The conventional Marxian identification of constant capital with the physical means of production is no less an instance of such confusion than is the neoclassical/ neo-Ricardian failure to distinguish between productive and unproductive forms of wage-labour. Neoclassical economic theory cannot distinguish between the productive labour that creates the material/ natural content of the commodity product and the unproductive labour that effects its sale because sales activity (for example, the labour of the retail cashier) is conceived as the final act in the production of a use-value bearing the required commodified form. In a sense, the activity of the circulation worker is perceived as 'productive' of the social form of the product of labour. Activity in the sphere of circulation, on this view, does more than effect a change in titles of ownership and thereby facilitate the realisation of commodity values; rather, it 'attaches' the commodity form to the product of labour, as a kind of social icing on the cake. By positing an external relation between the natural content and the social form of the product of labour, the neoclassical approach lays the basis for treating each as a unique 'productive contribution' of, respectively, 'industry' and 'commerce' to the creation of 'wealth' (a concept that itself conflates and confounds the material-natural and social dimensions of production and reproduction). Marx's theory of value, by contrast, is based on a dialectical conception of the form-content relation as internal and contradictory.[33] From this perspective, the conventional Marxian treatment of constant capital and SNUL adopts a fetishistic view of capitalist economy, while, paradoxically, disarming the proponents of the productive-unproductive distinction of their most valuable theoretical weapon: consistency in resisting the conceptual conflation of the material/natural and the social.

The various forms of constant capital constitute elements of the total process of capitalist production and reproduction that owe their existence to the past transformation of surplus-value into capital. In this sense constant capital in general forms part of a historically constituted social surplus product from which all systemic costs must be defrayed. But past (now-'capitalised') surplus-value and newly created surplus-value are by no means coextensive, and there is no good reason to say that the value of an industrial robot should be subsumed under the former, while the value of SNUL should be subsumed under the latter. Upon some reflection, then, it is not difficult to see that what Marx said about the means of production is, in principle, quite applicable to the means of circulation and social maintenance as well:

33 Rubin 1973, p. 117.

> As regards the means of production, what is really consumed is their use-value, and the consumption of this use-value by labour results in the product. There is in fact no consumption of their value and it would therefore be inaccurate to say that it is reproduced. It is rather *preserved* ... Hence the value of the means of production reappears in the value of the product, but it is not strictly reproduced in that value. What is produced is a new use-value in which the old exchange-value re-appears.[34]

It might be objected that when Marx speaks of the use-values of means of production being 'consumed by labour' and resulting in a new product he is speaking of a process that is not duplicated in the unproductive spheres. This is quite true. It may nevertheless be argued that the use-values of the 'means of reproduction' (including SNUL) are consumed in a process of facilitating valorisation and capital accumulation, but that this consumption does not involve the consumption (and disappearance) of their value. Instead the value of the consumed means of reproduction is 'preserved' and 'reappears' in the value of the commodity product (conceived as the gross output of the economy as a whole). In other words, two streams of constant capital value reappear in the new social product: one emanating from the immediate process of use-value production, the other from the spheres of circulation and social-maintenance.

The myriad concrete forms of constant capital share this common essence: they are means of presenting living labour as new value. Means of production, means of circulation and means of social-maintenance are all indispensable to maintaining and enhancing the productivity of surplus-value-producing labour, and each therefore has a claim to participating indirectly in the valorisation process. It matters little that means of production are directly involved in use-value production, while the means of circulation and of social-maintenance are not. What matters insofar as the valorisation process is concerned is that each of these means of living productive labour represents an element of capital that can contribute to surplus-value production only as *facilitators*.

Living productive labour is the sole source of surplus-value in Marx's theory, and it is therefore capital fetishism to impute to constant capital in production more than an auxiliary role in the production of value, a role paralleled in the unproductive spheres by SNUL. This is the unmistakable burden of the following passage from Marx's *Grundrisse*: 'To the extent that the instrument of production is itself a value, objectified labour, it does not contribute as a pro-

34 Marx 1977, pp. 315–16, emphasis added.

ductive force … If capital could obtain the instrument of production at no cost, for 0, what would be the consequence? The same as if the cost of circulation = 0'.[35]

4 Theoretical Advantages of Treating SNUL as Constant Capital

Perhaps the single greatest merit of treating SNUL as part of the constant capital flow is that it serves to affirm its *indispensability* for capitalism. Proponents of the conventional treatment of SNUL as a non-profit component of surplus-value tend either to subsume SNUL under an expanded notion of 'luxury consumption' or to overstate the discretion enjoyed by capital in the disposition of the social surplus product as between productive and non-productive uses. By emphasising the social necessity of SNUL for the reproduction of the social capital, the constant-capital conceptualisation recognises and gives due weight to a powerful argument often advanced by critics of the productive-unproductive distinction: that circulation labour (and perhaps even social-maintenance labour) contributes materially to a decrease in the turn-over period of capital by increasing the velocity of commodities as they move through circulation. In Marxist terms, such a decrease means a higher level of employment of productive labour than might otherwise be the case, and consequently an increase in the absolute magnitude of surplus-value produced relative to the capital advanced. Marx discussed this phenomenon at length under the rubric of the 'annual rate of surplus-value': 'If the variable capital turns over ten times in the year … then the mass of surplus-value produced in the course of the year will be ten times that corresponding to one turnover period.'[36] Indeed, a decrease in circulation time, other things being equal, must mean an increase in the rate of profit. In light of this consideration, the Marx of *Capital II* could only have admonished the Marx of *Capital III* for assuming that an increase in the capital advanced on circulation costs could not increase the magnitude of surplus-value. Due to the significant influence of the 'annual rate of surplus-value' on the average rate of profit, the direction of change in the previously-cited rate of profit $s/C+{}^{\wedge}C$ becomes somewhat indeterminate.[37]

Nevertheless, such a reduction in circulation time is by no means easily accomplished. The costs of circulation may well rise under the whip of compet-

35 Marx 1973, p. 765.
36 Marx 1981a, p. 382.
37 See also Marx 1981b, p. 393.

itive pressures without yielding significant decreases in the average turn-over time of the social capital. 'Circulationist' strategies may be pursued by individual capitals to shore up profit margins, but the unintended consequence of these strategies may be a downward pressure on the average rate of profit analogous to what Marx says occurs when living labour is replaced by labour-saving machinery in production. Undoubtedly, the costs of circulation have been rationalised considerably as a result of the evolving functional division of labour between industrial, commercial and financial capital. Yet it is also quite clear that these costs have evinced a tendency to rise as the contradictions of capitalism have intensified, and these rising circulation costs may, under certain conditions, contribute to a crisis of profitability.[38]

The picture is therefore a highly contradictory one. Under conditions of increasing market accessibility, SNUL may enhance the 'annual rate of surplus-value' and play a significant (if still indirect) role in augmenting social surplus-value. But under conditions of market contraction, and intensified competition over market shares, SNUL may only help individual capitals hold their own against competitors, permitting them to lay claim to their rightful share of a pool of surplus-value that is shrinking relative to capital invested. The more autonomy that commercial and financial capital (and indeed the capitalist state) have from industrial capital under such conditions, the greater the damage that they may inflict upon productive capital, the valorisation process and the average rate of profit. By conceptualising SNUL as a necessary systemic overhead cost, the constant-capital approach emphasises that capital's room for manoeuvre with respect to these problems is quite limited, giving Marx's proposition that 'the true barrier to capitalist production is capital itself' a somewhat new twist.[39]

What needs to be stressed is that none of these considerations are adequately captured in the conventional Marxian conceptualisation of unproductive labour. On this conceptualisation, the capitalist economy is either one in which the 'economic surplus' is rising, or in which the distinction between a gross rate of profit (which abstracts from SNUL) and a net rate of profit (which does not) is a meaningful one for economic policy debates.[40] The constant-capital conceptualisation, on the other hand, affirms that the fall in the rate of profit can no more be stemmed by redirecting investment from SNUL to productive labour than it can be by redirecting investment from fixed constant capital to variable capital. It is, in other words, resistant to a politically reform-

38 See Lebowitz 1972.
39 Marx 1981b, p. 358.
40 See Chernomas 1987.

TABLE 4 Conceptualising productive labour and socially-necessary unproductive labour in relation to Marx's value categories (variable capital, surplus-value and constant capital)

Productive Labour (PL)						
PL & PL wage costs as value	Does PL produce surplus-value?	Does PL produce new value?	Does PL preserve previously existing value?	Does PL function as variable capital?	Are PL wages a component of social surplus-value?	Are PL wages a component of constant capital flow?
As variable capital	Yes	Yes	Yes	Yes	No	No
Socially Necessary Unproductive Labour (SNUL)						
SNUL & SNUL wage costs as value (alternative conceptions)	Does SNUL produce surplus-value?	Does SNUL produce new value?	Does SNUL preserve previously existing value?	Does SNUL function as variable capital?	Are SNUL wages a component of social surplus-value?	Are SNUL wages a component of the constant capital flow?
As variable capital (denies u-p distinction)	Yes	Yes	Yes	Yes	No	No
As surplus-value (upholds u-p distinction)	No	No	Probably No, but unclear	No	Yes	No
As constant capital (upholds u-p distinction)	No	No	Yes	No	No	Yes

ist perspective, staking its ground on Marx's own conviction that the system 'moves in contradiction' and is subject to increasingly severe crisis tendencies.

By way of concluding this section, Table 4 provides schematic representations of how productive labour is generally defined in Marxist theory along with three alternative ways of specifying SNUL.[41]

41 Note that this table incorporates a correction to an earlier version that appeared in Smith 2014, p. 63, which erroneously suggested that the constant capital specification treats SNUL wages as a component not only of the constant-capital flow but of social-surplus-value as well.

CHAPTER 9

Imperialism, Unequal Development and the Law of Value

Up to this point, we have considered the operations and effects of the capitalist law of value under conditions in which: a) the mobility of capital, as between branches of production and fields of investment, is relatively unimpeded, and b) the mobility of labour is sufficient to dictate that the main determinant of differentials in rates of surplus-value is the relative sophistication of the tools, equipment and machinery with which workers in different industries are working, rather than variations in the 'intensity of labour'. These two conditions may be taken as 'given' in the relatively homogeneous capitalist economic environments associated with 'nation-states' – although even in such ethnically homogeneous and politically centralised countries as Japan, significant regional variations can mitigate these conditions to some degree. Looser federative or confederative formations (for example, the United States and the European Union) may circumscribe an economic environment in which regional variations will play a larger role, and in which fragmented political authority may significantly reduce the scope for unfettered capital and labour mobility. But it is above all in the international arena that the above-mentioned conditions are most compromised, and that serious questions are posed pertaining to the operation of the law of value.

The problem of the internationalisation of the law of value has received closest attention from theorists concerned with issues of imperialism and third world underdevelopment. Hence, it is in this theoretical context that our discussion finds its natural starting point.

1 Unequal Capitalist Development on a World Scale

Prior to the advent of neoliberal 'globalisation' around 1990 and the attendant acceleration of industrialisation in several 'post-colonial' countries (above all China and India), it was a commonplace to observe that Marx failed to anticipate the formidable obstacles to economic development and social progress that capitalism had erected in many of the less developed or 'underdeveloped' countries of Asia, Africa and Latin America. In this connection, his 'optimistic' predictions concerning the impact of British colonialism in India and his

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forecast in the *Communist Manifesto* that European capitalism would create 'a world after its own image' have been frequently cited. And yet it is also clear that Marx later 'revised' the projections of the *Manifesto* significantly by disclosing the laws of capitalist development and decline that would generate uneven and highly unequal patterns of development in the global economy.

From a perspective informed by the law of the falling rate of profit, in particular, the 'development of under-development' is an inexorable concomitant of capitalism's historical-structural crisis – a phenomenon portending increasingly formidable barriers to capital accumulation not only in the weaker capitalist nations and the semi-capitalist periphery, but in the citadels of world capitalism as well. Furthermore, an intensification of the contradictions of 'developed capitalism' could not fail to have the most profound implications for worldwide economic development, and serve to exacerbate the already uneven tempo of indigenous capital accumulation as between the more developed and the less developed regions of the world capitalist economy. It is precisely in connection with these considerations that Marx's discussion of foreign trade and investment as 'counteracting tendencies' to the law of the falling rate of profit needs to be approached:

> In so far as foreign trade cheapens on the one hand the elements of constant capital and on the other the necessary means of subsistence into which variable capital is converted, it acts to raise the rate of profit by raising the rate of surplus-value and reducing the value of constant capital … Capital invested in foreign trade can yield a higher rate of profit, firstly, because it competes with commodities produced by other countries with less developed production facilities, so that the more advanced country sells its goods above their value, even though still more cheaply than its competitors.
>
> As far as capital invested in the colonies, etc. is concerned … the reason why this can yield higher profit rates is that the profit rate is generally higher there on account of the lower degree of development, and so too is the exploitation of labour, through the use of slaves and coolies, etc.[1]

Marx points here to some key factors underlying the uneven, restricted and 'dependent' forms of capitalist development in regions of the world under the domination of foreign capital and exhibiting some degree of interpenetration of capitalist and pre-capitalist relations of production. Precisely because the

1 Marx 1981b, pp. 344–5.

'internal contradiction' of developed capitalism 'seeks resolution by extending the external field of production',[2] a pronounced tendency exists for capitalist countries to exploit every possible advantage in their efforts to mitigate their internal economic problems at the expense of other countries (whether weaker capitalist nation-states, or semi-capitalist colonies and neo-colonies). This tendency is both complemented and countered by the tendency of individual capitals to seek opportunities for valorisation without regard to the 'national interests' of the social capital to which they belong – that is, by the contradiction between the internationalisation of capital and the continued existence of the nation-state as the pre-eminent political unit in which the contradictions of the social capital are addressed.

Since Lenin, most Marxist theories of imperialism have emphasised the great importance of the direct production and subsequent transfer of surplus profits from the underdeveloped to the imperialist countries. With few exceptions, however, these theories have not had a value-theoretical approach as their analytic basis, a circumstance reflecting the prevalence of 'underconsumption' and 'disproportionality' theories of capitalist crisis within Marxism.

This situation began to change with the emergence of the 'unequal exchange' (UE) school in the 1960s and 1970s. Not only did Arghiri Emmanuel's theory of the 'imperialism of trade' point to exchange mechanisms on the world market as the most significant means of imperialist exploitation of the less developed capitalist (and semi-capitalist) countries; it sought to do so on the basis of an analysis of the operations of the law of value in an *international* context. Accordingly, the terms of the debate that ensued around the UE theory are important to understanding the dynamics of international value transfers as a phenomenon affecting international trade between the imperialist countries themselves and not just between developed and less developed countries.

2 Emmanuel's Theory of Unequal Exchange

Can we speak of international value transfers occurring through exchange mechanisms on the world market? Our concern is not primarily with the appropriateness of Emmanuel's dismissal of the 'myth of investment imperialism',[3] but with the adequacy of his alternative theory of the 'imperialism of trade'.[4] It should nevertheless be noted that Emmanuel misses a key point when he

2 Marx 1981b, p. 353.
3 Emmanuel 1974.
4 Emmanuel 1972.

asserts that the advanced capitalist countries are 'too rich' not to 'absorb' all of the new capital formed within them – an apparent reference to Lenin's thesis that imperialism is characterised by the export of 'surplus capital' to sectors where a higher rate of profit can be obtained.[5] In effect, Emmanuel implies that 'being rich' prevents capitalists from suffering the effects of a falling rate of profit. But an argument can be made that it is precisely the overaccumulation of capital, associated with a rise in the OCC, that creates the problem of surplus-capital disposal and impels the search for investment opportunities in external capital markets, whether in the less developed capitalist formations or in other imperialist countries.

The foundation of Emmanuel's UE theory is that a particular law of price formation distinct from that found within 'national' economies dominates the operations of the capitalist world market. This law involves centrally 'an unequal rewarding of factors', particularly the labour factor, which he insists is systematically 'under-valued'. It follows that poor countries exhibiting a relatively low level of labour productivity, and a high degree of labour intensity, will be disadvantaged in world trade. A commodity produced in a highly developed capitalist country can be exchanged for a commodity 'embodying greater value' that has been produced in a less developed country due simply to the 'unequal rewarding of factors'. This process is key, in Emmanuel's view, to explaining how value is transferred from the poor to the rich countries.

It should be noted that Emmanuel distinguishes this form of UE from those that occur due to variations in the organic composition of capital and in productivity levels between firms, industries and branches of production. Wage differentials are the basis of the UE that concerns him most. Thus, in characteristically neo-Ricardian fashion, Emmanuel views wages as the 'independent variable' in capitalist development.

Can international exchange ratios be explained on the basis of the law of value? Emmanuel argues that they can be, but to do so one must first contend with Ricardo's still-influential arguments against the notion.

Ricardo argued that in international trade the law of value breaks down as an adequate explanation of exchange ratios precisely because the tendency for the rate of profit to equalise across national lines is qualitatively attenuated by the phenomenon of international capital immobility. The immobility of capital on the world market means that there is no general rate of profit governing the formation of prices of production across national lines, and this signifies that a different law of price formation is required to explain the exchange ratios

5 Lenin 1916.

of commodities in international markets. Ricardo's solution to this problem was 'the law of comparative costs', a law that asserts that exchange inequalities between trading partners will be cancelled out due to processes of specialisation in the production of particular commodities. This notion was central to Ricardo's case for free trade. In good measure because it is entirely unrelated to his labour theory of value, Ricardo's law of comparative costs has been widely incorporated into neoclassical theories of world trade.

Emmanuel does not entirely reject the law of comparative costs; he simply amends it, arguing that since Ricardo's time there has been a fundamental change in the economic intercourse between nations. Not only do commodities flow between them, but so too does investment capital. Increased international capital mobility has brought with it a tendency for profit rates to equalise on an international basis, resulting in the formation of international prices of production. This phenomenon has not been accompanied, however, by a corresponding increase in the mobility of labour, and the persistent relative immobility of labour creates huge differences in wages and rates of exploitation as between the developed and less developed countries in the capitalist world economy. The conjunction of international capital mobility and international labour immobility, in a situation where the law of comparative costs determines international patterns of specialisation and trade, produces the phenomenon of the 'development of underdevelopment' in the colonial and semi-colonial countries.

As a prelude to his critique of this theory, Shaikh provides a succinct summary of the main implications of Emmanuel's theory as follows:

> [S]ince wages tend to be much lower in the underdeveloped regions, in the absence of capital mobility between regions, profit rates will tend to be higher in the underdeveloped regions than they will be in the developed regions. If profit rates are now equalised through international mobility of capital, the profit rate in the underdeveloped regions will be lowered and that in the developed regions raised. It follows from this that profits (surplus-value) are transferred from the former to the latter.[6]

6 Shaikh 1979, pp. 298–9.

3 Critiques of Emmanuel

Criticisms of Emmanuel's theory have centred on his theory of wages and his account of the international equalisation of profit rates. The close connection between the two is revealed by his statements that 'inequality of wages as such, all other things being equal, is alone the cause of the inequality of exchange' and that 'relative wages determine relative prices'.[7] Geoffrey Pilling observes that Emmanuel's wage theory is predicated on a 'quantity' theory of the means of subsistence necessary for the reproduction of labour power, while Marx's theory of wages insists that 'the value (and hence price) of labour power is determined not by the quantities of the means of subsistence which will enable the worker to maintain himself and his family and re-present himself on the market, but by their value (that is, the socially-necessary labour time required to produce these means of subsistence)'.[8]

Ernest Mandel's critique centres on Emmanuel's thesis of international equalisation of profit rates:

> The hypothesis of international equalisation of the rates of profit … presupposes *perfect* international mobility of capital – in effect, the equalisation of all economic, social and political conditions propitious to the development of modern capitalism on a world scale. Such equalisation, however, is completely contradicted by the law of uneven and combined development, which dominates this development … [The] vast international differences in the value and the price of the commodity labour-power, which Arghiri Emmanuel rightly underscores, are not causes but results of the uneven development of the capitalist mode of production, and of labour productivity in the world.[9]

Mandel proposes an alternative theory of unequal exchange in international trade predicated on: (1) 'the fact that [by dint of its technology-enhanced productivity – MS] the labour of the industrialised countries counts as more intensive … on the world market than that of the underdeveloped lands'; and (2) 'the fact that *no* equalisation of the rates of profit occurs in the world market, where different national prices of production (average rates of profit) exist side by side and are articulated with one another'.[10] According to Mandel,

7 Emmanuel 1972, pp. 61, 100.
8 Pilling 1973, p. 174.
9 Mandel 1975, pp. 352–3, emphasis added.
10 Mandel 1975, p. 351, emphasis in original.

Emmanuel's theory is 'incapable of showing why countries with high wages undergo industrialisation while underdeveloped nations possess relatively little industry' if indeed a situation of 'perfect' international capital mobility exists in the capitalist world economy.[11]

Mandel's critique of Emmanuel scores some direct hits, but his alternative account of UE, predicated upon completely unique 'national prices of production', is unconvincing. To begin with, it is rather surprising to find Mandel, a devoted expositor of the dialectical law of uneven and combined development, resorting to such undialectical formulations as '*perfect* international capital mobility' and '*no* equalisation of the rates of profit … in the world market'. Since when has 'perfect' capital mobility been a condition for the formation of a general rate of profit even in a nationally circumscribed capitalist economy? Capital mobility is *nowhere* 'perfect', and, consequently, the formation of a general rate of profit can only be a *tendency*, as Mandel points out elsewhere. Once we grant that capital mobility exists between countries – however 'imperfectly' – then it immediately follows that a *tendency* must also exist for the equalisation of the rates of profit on the world market. Emmanuel probably overstated the strength of this tendency (a common neo-Ricardian pitfall, as we have seen) in the mid-twentieth century, but he was nevertheless right to recognise its importance.

Mandel thinks he can refute the idea of 'perfect international capital mobility' (a notion he unfairly attributes to Emmanuel) by suggesting that it poses, but fails to resolve, the following riddle: 'How does it come about that the prospects for valorisation of capital are not more advantageous where wages are lowest, and that for a hundred years capital has not decamped on a massive scale from countries with high wages to countries with low wages?' But Mandel's own answer to this question is not, in principle, inconsistent with Emmanuel's theory of unequal exchange, namely 'problems of the "domestic market," the alienation of capital accumulation, the transfer of surplus-value and the narrow limits imposed on "internal" capital accumulation by the existing social structure'.[12] Indeed, Emmanuel's theory goes one step further by positing a transfer of surplus-value from the underdeveloped to the developed countries that tends to equalise the rates of profit existing between them and, in so doing, undercuts the incentive for capital to relocate to low-wage regions. The mobility of capital is therefore limited on an international scale by the

11 Mandel 1975, p. 352.
12 Mandel 1975, p. 353.

same tendencies that this mobility creates: the internationalisation of profit rates and the consequent tendency toward an international redistribution of surplus-value through exchange.

Any convincing critique of Emmanuel's theory of UE must recognise the disturbing circularity of this latter argument. If we return to Shaikh's summary of Emmanuel's conclusions, quoted above, we can isolate the following propositions as central to the argument: (1) *until* international capital mobility becomes significant, *the rate of profit* prevailing in the underdeveloped regions will be higher than in the developed ones owing to lower wages; (2) *once* international capital mobility becomes significant, the international equalisation of profit rates will create comparable prospects for the valorisation of capital in both regions – and will, logically enough, slow the flow of capital from the developed to the underdeveloped regions.

Taken together, these two propositions constitute something of a conundrum. In the first place, how is it possible to speak of the existence of a 'rate of profit' or even of 'wages' *before* capital has penetrated the (formerly non-capitalist) 'underdeveloped' regions (a penetration that naturally presupposes significant international capital mobility)? Second, how can the tendency toward the international equalisation of profit rates sustain itself if it produces conditions discouraging international capital mobility? Clearly, these questions can only be satisfactorily addressed by recognising *the centrality of production* to the appropriation of surplus-value by capital. Emmanuel's exclusive focus on exchange – and his related neo-Ricardian habit of treating capitalist categories ahistorically – leads away from this insight and, not surprisingly, results in paradoxical conclusions. There can be no participation by the underdeveloped regions in the formation of a general international rate of profit unless capitalist production occurs there; there can be no capitalist production there unless favourable prospects for the valorisation of capital exist; and, consequently, the direct production and subsequent transfer of surplus-value from the underdeveloped to the developed countries is the indispensable foundation of imperialist exploitation of the capitalist periphery. In other words, Emmanuel's 'imperialism of trade' must *presuppose* the 'imperialism of production' – something which Emmanuel clearly considers a secondary issue and which, in any case, he makes no effort to integrate into his overall theory.

A second line of criticism concerns the fact that, while Emmanuel exaggerates the strength of the tendency toward a 'uniform' international profit rate, he overlooks the significance of *intersectoral* differentials in profit rates – differentials that *also* cut across national lines. He therefore misses the point that, *ceteris paribus*, capital will flow not to *countries* with higher than average profit rates but to *units or branches of production* promising higher rates of valorisation, irrespective of where they are located.

4 Shaikh's Critique of Emmanuel and the Ricardian Theory of Trade

As part of an ambitious attempt to develop a Marxist alternative to the Ricardian theory of comparative costs and international trade, Anwar Shaikh has presented a highly suggestive critique of Emmanuel's theory of UE.[13] Shaikh begins by establishing that no Marxist theory of international trade can incorporate the Ricardian theory of comparative costs, however amended. Not only is Ricardo's 'law' a transparent ideological justification for free trade policies that serve the interests of the more developed traders; it is also intimately bound up with Ricardo's theories of value and money – both of which were refuted effectively by Marx. More precisely, Shaikh argues that it is '*absolute* advantage, not comparative, which rules trade'.[14] Thus, the net inflow of gold into a country resulting from a trade surplus will not lead, as Ricardo maintained, to a general increase in prices undercutting the 'comparative advantage' of that country in international trade. Nor will the gold outflow from the weaker trading partner necessarily result in a lowering of its prices, such that its comparative position will be enhanced. Instead, the *absolute* disadvantage of the weaker trading partner will be 'manifested in a chronic trade deficit, balanced by a persistent outflow of gold', while the greater efficiency of the stronger trading partner will 'manifest itself in a chronic trade surplus, balanced by a persistent accumulation of gold'.[15] Given such a situation, the weaker trader must seek to specialise in branches of production where it possesses some natural *absolute* advantage, while the stronger trader must seek out avenues for profitable investment of its money capital (for example, the weaker trading partner's export sector).

In general, the underdeveloped countries must concentrate their production for export on commodities that they can produce most efficiently (that is, at a lower value) and/or those commodities that are relatively unique to them (for example, plentiful and easily accessed raw materials). Both of these types of export commodities will reflect a *specific local advantage* that will tend to compensate for the *generally* lower level of productive efficiency in these coun-

13 Shaikh 1979–80.
14 Shaikh 1979, p. 301.
15 Shaikh 1980, p. 38.

tries. Such advantages might include a favourable climate, a wealth of relatively unique natural resources, or an advantageous geographical location. These natural absolute advantages of the export sectors of underdeveloped countries will likely draw foreign capital in search of attractive investment opportunities; consequently, the export sectors will become the main focus of foreign capital penetration. The combined result is this: first, trade with the more developed countries will bring about the ruination of traditional industries unable to compete with cheap imports, and second, it will create the conditions for such an extreme form of specialisation that the economic development of the underdeveloped country will become highly distorted, due in part to foreign capital domination of its most viable export sectors: 'Foreign investment appears as the agency of modernisation from the outside. This helps create the dual character of UCR [underdeveloped capitalist region] exports: large-scale modern industries in which foreign capital predominates, side by side with backward industries in which local capital predominates. It thus expands and strengthens the export sector, and, taken by itself, it tends to improve the balance of trade.' At the same time, however, 'Direct investment accelerates the devastation of local (capitalist and non-capitalist) production which free trade brings about, while the introduction of modern techniques requires increased imports of machinery and materials from the [developed capitalist region]'.[16]

Other effects of this direct foreign investment might include: displacement of more workers from native industries than can be absorbed by the relatively capital-intensive (high OCC) modernisation sector; the repatriation of profits produced by foreign capital to its 'mother country', starving the underdeveloped regions of investment; increased productive efficiency of the export sector, resulting in the lowering of export prices and in a deterioration of the commodity terms of trade of the underdeveloped country; and a deterioration in the balance of payments associated both with falling export prices and the repatriation of profits, and tending to offset the initially positive effect of direct investment on the balance of payments of the underdeveloped country.

Importantly, Shaikh points out that the formation of a general rate of profit involves a transfer of surplus-value from industries with lower OCCs to those with higher ones, and that this occurs both between and within industries. Moreover, both intra-industry transfers, 'which depend on differences between individual and average producers within the same industry', and inter-industry transfers, 'which depend on differences in the organic compositions of the aver-

16 Shaikh 1980, p. 46.

age producers in the different industries', occur across national lines: 'For any individual set of capitals, defined for instance by their location, nationality, or degree of development, the net transfer of surplus-value will be the sum of these two effects.'[17]

Shaikh's conclusion regarding the implications of these considerations for international transfers of surplus-value resulting from commodity exchange alone is sufficient to call into question the whole thesis of the 'imperialism of trade':

> [I]t is perfectly possible for all the structural patterns of international uneven development … to exist while at the same time there is a zero or even positive transfer of value for the UCR export sector as a whole … It is of course possible that even if the above were true for export sectors as a whole, the underdeveloped regions might still lose value through its purchase of imports … When this is coupled with the possibility of a gain in value on the side of exports, it becomes clear that the net effect can easily be zero.[18]

According to Shaikh, the unwarranted assumption that all high OCC industries exist in developed capitalist countries and all low OCC industries in underdeveloped ones allows Emmanuel to ignore *intra-industry* transfers altogether: for example, transfers within the auto industry as between Hyundai Motors of South Korea and General Motors in the US. By doing this, and by assuming that interregional wage disparities exacerbate these transfers (a point denied by Shaikh on the grounds that they merely increase the magnitude of two opposing flows of surplus-value between high and low OCC sectors), Emmanuel leaps hastily to the erroneous conclusion that the equalisation of profit rates internationally must involve a continuous drain of surplus-value away from the underdeveloped world.

Shaikh also rejects Mandel's theory of unequal exchange. By arguing that there is *no* tendency for the rates of profit to equalise on an international scale, Mandel ignores the effects of inter-industry transfers on international exchange and illegitimately concludes that the only value transfers occurring through exchange are from low to high efficiency producers. While Mandel's derivation of UE is thus the opposite of Emmanuel's, it leads to similarly incorrect conclusions.

17 Shaikh 1980, p. 49.
18 Shaikh 1980, p. 50.

Shaikh concludes his analysis as follows: '[Since] uneven development on a world scale is a direct consequence of free trade itself, these transfers of value and the theories of unequal exchange which rely on them emerge as secondary phenomena, not primary causes, of underdevelopment. In fact, a critical examination of the theories of unequal exchange shows that even the net direction of value transfers cannot be simply established.'[19]

This conclusion is also important for identifying one of the limitations of Marx's counteracting tendencies to the law of the falling rate of profit, reinforcing the point made in Chapter 7 that foreign trade and investment should be regarded as a 'two-edged sword'. It should nevertheless be reaffirmed that, even if the primary mode of imperialist exploitation of the underdeveloped capitalist regions is not the 'imperialism of trade', unequal exchange may well play a secondary role in the 'development of underdevelopment'. What's more, in trade relations between the developed, imperialist countries, unequal exchange may play a role of signal importance in determining the relative economic fortunes of nations.

The methodological upshot of Shaikh's critique is that value transfers through processes of international exchange and profit rate equalisation must be analysed at a far more *concrete* level of analysis than any UE theory yet advanced. Such an analysis would require a careful specification of the whole range of 'absolute advantages' and 'absolute disadvantages' that any two trading partners might display – including such 'institutional externalities' as the role of nation-states in enhancing the competitive position of its national capitals on the world market and/or in protecting these same capitals from competition in the domestic market. Only by taking into account the full range of factors influencing patterns of trade can one determine the direction of value transfers as these are effected through trade alone.[20]

19 Shaikh 1980, p. 57.

20 John C. Smith's book, *Imperialism in the Twenty-First Century: Globalization, Super-Exploitation, and Capitalism's Final Crisis* (2016), represents a significant new contribution, theoretically and empirically, to the literature on unequal exchange and the mechanisms whereby low-wage workers in the Global South generate super-profits for transnational corporations based in the North. His is a 'global-value-chain' analysis centred on what he calls 'global labour arbitrage'. While Smith's approach to many of the issues surrounding value and crisis theory considered in the present work is not always clear, an affinity with the *Monthly Review* School is apparent.

CHAPTER 10

'Testing Marx' in the Twilight of Capitalism: Marxian Value Categories, National Income Accounts, and the Crisis of Valorisation

Since the 1960s, Marxist researchers have produced a large body of empirical studies pertaining to the historical trends of the rate of profit, the rate of surplus-value, and the composition of capital as well as distinctive measures of other, more familiar economic phenomena like productivity, output-capital ratios, and real wages.[1] What is most striking about these studies, however, is not their unitary distinctiveness in relation to 'mainstream' (that is, non-Marxian) accounts of key economic trends, but rather their markedly different approaches to operationalising Marx's concepts as empirical variables. Consequently, different ostensibly Marxist analyses have arrived at widely divergent conclusions concerning the meaning of observable economic phenomena and the validity of Marx's theory of capitalism's 'laws of motion', above all his law of the falling rate of profit.

The root of the problem is to be found in the different ways in which Marx's concepts – his 'value categories' in particular – have been specified for purposes of empirical Marxian research, for it is only too obvious that, without a theoretical consensus regarding the empirical content of these concepts, any meeting of minds concerning what 'the facts' reveal is impossible. The problem is compounded by the circumstance that over the past fifty years Marxist economic analysis in the West has been dominated by academics trained in the ideas of the 'neo-classical synthesis', a tradition permeated with what Marx would have considered vulgar and fetishistic notions. Accordingly, the markedly divergent

1 An incomplete list must include: Gillman 1957, Mage 1963, Mandel 1975, Weisskopf 1979, Wolff 1986, Moseley 1986, 1987 and 1991, Dumenil, Glick and Rangel 1987, Shaikh 1987, 1989, 1999, 2010 and 2016, Carchedi 1991, 2011a and 2011b, Shaikh and Tonak 1994, Smith 1991b, 1993, 1994, 2010 and 2014, Cockshott, Cottrell and Michaelson 1995 and 1996, Smith and Taylor 1996, Webber and Rigby 1996, Mohun 1996, 2005 and 2009, Dumenil and Levy 2004 and 2011, Freeman 2009 and 2012, Roberts 2009 and 2011, Kliman 2010 and 2012, Basu and Vasudevan 2011, Smith and Butovsky 2012 and 2018, and Sato 2018. Shaikh and Tonak's 1994 book *Measuring the Wealth of Nations* and Shaikh's 2016 work *Capitalism: Competition, Conflict, Crises* deserve special mention for their impressive combinations of theoretical depth and empirical sophistication. I acknowledge this notwithstanding important differences with Shaikh that are discussed in this chapter.

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results yielded by different, putatively Marxian empirical studies might reasonably be seen as stemming from an uneven process of cognitive rupture with conventional, neoclassical or Keynesian influences.

An additional problem deserves to be emphasised: many ostensibly Marxist or 'neo-Marxist' economists subscribe to theories of capitalist crisis that are by no means based on Marx's value theory and that often share much in common with Keynesian or post-Keynesian perspectives. This consideration points directly to the *political* import of the debates among those who adhere to underconsumption or disproportionality theories, those who subscribe to a 'profit squeeze' account of capitalist malaise, and those who insist, with Marx, that such phenomena as 'deficient effective demand' and 'class struggle' need to be theoretically articulated with the tendency of the social capital to increase its organic composition, thereby undercutting its prospects for valorisation (that is, its 'real' profitability).

Marxian underconsumption theory can lend itself to a traditional *reformist* perspective to the extent that it sees the class struggle as centring on the disposition of an ever-expanding economic surplus that the system must find some way of 'absorbing'. The affinities to Keynesian theory and policy are striking and have already been touched upon in previous chapters.[2] Alternatively, leftist proponents of the profit-squeeze theory, as well as the 'Social Structure of Accumulation' and 'Regulation' paradigms that emerged from it, often share the view of mainstream economists that the profitability problems of the 1970s and 1980s were due, above all, to 'rising labour strength' in the context of high levels of class conflict – an 'overpaid' and recalcitrant workforce impeding productivity growth as well as the largess of a 'welfare state' whose emergence and staying power depended on a combative organised labour movement.

Although Marx's theory of a falling rate of profit linked to a rise in the organic composition of capital is sometimes adduced, mistakenly, to support the notion of an inevitable, irrevocable collapse or 'breakdown' of the capitalist system, most of its proponents view it as the theoretical core of a programmatic perspective that denies that the contradictions of capitalism can be significantly attenuated through 'progressive reform' or that capitalism can any longer play a 'progressive historical role'.[3] In the view of many of them, such a per-

2 I hasten to add that the relationship between theories of crisis and programmatic perspectives is always a mediated one; hence, Marxists who subscribe to underconsumption theories are by no means destined to pursue a reformist or Keynesian orientation, even though their theoretical orientation might incline them in this direction.

3 There is no 'fatalism' associated with Marx's theory because crises, of various degrees of acuity – and involving political and military as well as economic dimensions – can always be

spective must come to inform the programme and practice of the workers' movement if it is to resist the siren calls of social-democratic reformism, effectively rebut the anti-labour hysterics of the crisis theorists of the right, and chart a serious course toward socialist transformation.[4]

But can Marx's theory be employed effectively to explain the malaise of the capitalist world economy during and since the 'stagflation' and profitability crisis of the 1970s and 1980s? Can the growing turbulence associated with globalisation, 'financialisation', neoliberal austerity, mounting worldwide debt, and tepid global growth rates be meaningfully connected to the profitability problems of that era? And finally, can a coherent analysis of the worsening malaise of global capitalism over the past half century proceed from a theoretical defence and empirical verification of Marx's law of the falling rate of profit and its theoretical corollary: the proposition that capital's systemic crises stem from recurrent and deepening problems in generating adequate volumes of surplus-value? These are among the questions this chapter attempts to answer.

Part I of the chapter surveys several putatively Marxian empirical 'tests' of Marx's law of the tendency of the rate of profit to fall (hereafter, LTRPF) that appeared in the midst of, or following, the profitability crisis of the 1970s and 1980s. Particular attention is given to differences that arose over the measurement of 'variable capital' and the value-theoretical status of unproductive labour.

Part II surveys a number of more recent studies bearing on the LTRPF that have examined profitability trends during the era of ascendant neoliberalism and rampant financialisation (roughly from 1980 to 2008), with special attention to my own study (with Butovsky) of the US economy. These latter studies have highlighted new problems pertaining to the use of official statistics in measuring the constant capital stock and aggregate surplus-value (the denominator and numerator, respectively, of the Marxian rate of profit).

Marxian empirical studies from both periods are vitally important to assessing the thesis outlined in Chapter 1 of this book, namely that capitalism is

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counted on to eventually restore conditions of profitable accumulation – barring, that is, ecological or thermonuclear apocalypse, on the one hand, or socialist revolution, on the other. This is not to say, however, that crises can be counted on to restore a 'progressive historical role' to capitalism once that has been exhausted. The exhaustion of that role, which this book seeks to substantiate, signals a substantially increased risk to the very survival of human civilisation, posing the urgent need for a global socialist transformation.

4 For some attempts at 'popularising', or at least making this standpoint accessible to a broader audience, see Smith 2000 and 2010, Mattick 2011, Smith and Butovsky 2013, and Roberts 2018.

in the throes of *a long-term valorisation crisis*, whose dimensions include: (a) a persistent malaise in the rate of profit of productive capital; (b) an expansion of unproductive capital and 'socially necessary unproductive labour' that constrains the development of the productive forces; and (c) a massive proliferation of fictitious capital/profit in an increasingly debt-burdened global economy. This multidimensional crisis of valorisation needs to be apprehended theoretically as well as empirically; but for a satisfactory empirical case to be made, the relevant data from official 'national income accounts' must be translated appropriately into Marx's value categories, which in turn demands a careful specification of the latter's theoretical foundations.

As noted, many Marxist political economists have attempted such a translation since the 1950s. While this vast body of work cannot be reviewed in depth here, the present chapter does address the core problem of specifying the main empirical constituents of constant capital, variable capital and surplus-value, with a view to charting the *long-term trends* of the fundamental Marxian ratios as accurately as possible. This requires a restatement of the case for conceptualising the wage-bill of 'socially necessary unproductive labour' as part of the constant capital flow – a case first made by Mage in 1963, developed in Chapter 8 of this book, and defended by me in a series of publications since 1991.[5] Beyond this, the chapter considers the hypothesis that the 'aggregate corporate profits' data recorded in US national income accounts are diverging more and more from the real magnitude of 'currently produced surplus-value' owing to the inclusion of *fictitious profits* that constitute little more than 'anticipated future value' – that is to say, claims on value not yet produced but resting on relations of credit and debt.

1 Part I: the Profitability Crisis of the 1970s and 1980s: Contradictory Testimonies of Empirical Marxian Research

Marx's LTRPF asserts that the productivity-enhancing imperatives of the capitalist mode of production must impart to the process of capital accumulation

5 Mage's method of specifying the value categories has been mentioned in passing by a number of sympathetic commentators, including Hodgson 1974, Wright 1978, and Gonick 1983, as well as by such critics as Mandel 1975, Moseley 1991, and Shaikh and Tonak 1994. Apart for my own work (Smith 1991, 1993, 1994, 1994–95, 1999, 2010; Smith and Taylor 1996; and Smith and Butovsky 2012 and 2018), however, few Marxist studies have engaged with Mage's 'heterodox' specification of the value categories at the *theoretical* level. A partial exception is Shaikh and Tonak (1994, pp. 10–11), who misleadingly conflate Mage's approach with that of the bourgeois economist Eisner (1988).

a *labour-saving* bias, the result of which is a diminution in the role of living labour relative to 'accumulated labour'. The law further states that this diminution must find a *value* expression such that the OCC – the ratio $c/(s+v)$ – exhibits a tendency to rise and the rate of profit s/c a tendency to fall. Mathematically, the association of a rising organic composition of capital with a falling average rate of profit is ineluctable, even if the inevitability of the former is not entirely obvious. Accordingly, if a clear empirical tendency for $c/(s+v)$ to rise can be established, and if the latter can be correlated with a decline in s/c, this would constitute strong 'real-world' support for what Marx termed the 'most important' law of modern political economy – a law which resides at the very heart of Marx's theory.

In very general terms, three groups of empirical studies had emerged by the 1980s with some claim to having assessed the principal hypotheses of Marx's LTRPF. The first group highlighted a rising rate of exploitation as the most salient feature of modern capitalist development. Frequently, however, the studies associated with this approach were only tenuously based on Marx's own (value-theoretical) categories of analysis. This was particularly true of the empirical work of the 'Monopoly Capitalism' School initiated by Paul Baran and Paul Sweezy, who argued that the key problem of modern capitalism was its inability to 'absorb' an impetuously growing 'economic surplus'. That said, the Baran-Sweezy concept of the economic surplus owed a great deal to the value-theoretic distinction between productive and unproductive labour, as well as to the expansive definition given to surplus-value by Sweezy in his influential 1942 text *The Theory of Capitalist Development*.[6] The upshot was that the

6 Sweezy 1968 [1942], p. 283. In his original formulation of the 'economic surplus' concept, Baran distinguished three forms – actual, potential and planned – and defined the actual surplus as 'the difference between society's actual current output and its actual current consumption'. He noted that this actual surplus 'comprises obviously a lesser share of the total output than that encompassed by Marx's notion of surplus-value' (1957, p. 22). What emerges quite clearly in Baran and Sweezy's *Monopoly Capital* is the view that unproductive costs should be treated as part of the 'consumption' of the capitalist class, a component of net output that is 'consumed unproductively'. Implicit in this approach is the influence of the 'socialist rationality criteria' informing Baran's notions of the 'potential surplus' and especially the 'planned surplus' – criteria that encourage viewing costs necessary to the functioning of the capitalist system as 'luxury consumption' and therefore part of its social surplus. Criticising the 'technocratic bias' informing the Baran-Sweezy approach, Seymour correctly notes that it 'amounts to applying those categories which Marx used to analyze capitalism to a rational economic order (i.e. socialism)' (1972, p. 3). This point relates to our previous argument that underconsumption theory, no less than neo-Ricardian profit-squeeze approaches, rests on a fetishised, Ricardian-Marxist misinterpretation of Marx's value theory, one popularised by Sweezy in *The Theory of Capitalist Development*.

Baran-Sweezy method of specifying the value categories – by radically expanding the estimates of surplus-value – pointed to a dramatic increase in the rate of surplus-value, undermined the notion of a rising organic composition of capital, and effectively obliterated any long-term 'tendency for the rate of profit to fall'.

Baran and Sweezy insisted that Marx's LTRPF should be set aside and a 'law of rising surplus' substituted for it in order to understand the phenomenon of persistent 'stagnation' under conditions of 'monopoly capitalism'. To empirically validate this law, they measured the magnitude of the US economic surplus and calculated it as a percentage of gross national product (GNP) for the years 1929–63.

The notion of a rising surplus, it should be said, is not entirely inconsistent with the LTRPF. Indeed, Marx clearly states that both the mass and the rate of surplus-value will evince a secular tendency to rise under capitalism, even as he also insists that such increases will *not prevent* a fall in the rate of profit.[7] What is at issue, however, is what counts as surplus-value. Interestingly, an analysis of the data presented in Joseph Phillips's statistical appendix to *Monopoly Capital* discloses, in light of the value specifications defended here, a tendency exactly *opposite* to what Baran and Sweezy attributed to twentieth-century advanced capitalism. Baran, Sweezy and Phillips defined the major components of the economic surplus as: 1) total property income, corresponding roughly to Marx's definition of surplus-value as the sum of profit of enterprise, interest and rent; 2) waste in distribution, including a major part of what Marx called the costs of circulation; 3) corporate advertising, which also forms part of Marx's costs of circulation; 4) surplus employee compensation, corresponding to the income of SNUL in financial, insurance, real estate and legal firms; and 5) surplus absorbed by government (tax revenues). The sum of these components rose from 46.9 percent of GNP in 1929 to 56.1 percent in 1963, seemingly confirming the 'law of rising surplus'. However, the trend for 'total property income' considered alone was strikingly different: it *fell* as a percentage of GNP from 26.9 to 17.9 percent over the same period. Thus, it was only by defining the costs of circulation and of social-maintenance as components of the economic surplus that Baran and Sweezy were able to justify the substitution of the 'law of the rising surplus' for the LTRPF.

Significantly, a later study by Dawson and Foster updating this data series showed that between 1963 and 1988 the (actual) surplus percentage (inclusive of adjusted corporate profits, estimated profits of unincorporated business,

7 Marx 1981b, p, 322.

rental income, net interest, and the profit element of corporate officer compensation) persistently fluctuated in the 16 to 20 percent range, displaying no clear-cut (upward or downward) trend over that 25-year period.[8] Thus, the empirical data adduced by the Monopoly Capitalism School actually suggested that the expansion in the postwar period of the non-property income components of the 'economic surplus' (including SNUL) eventually ran up against formidable structural limits, and that the (profitability) crises of the 1970s and 1980s could not be adequately explained on the basis of an underconsumptionist analysis that considered profit (property income) not in relation to capital investment (as in Marx) but as a relatively static share of gross national product.[9]

With the 'law of the rising surplus' faltering as a convincing explanation of capitalist malaise in a period of declining profitability, it was to be expected that Marx's LTRPF would attract greater interest. Despite the renewed interest in Marx's account of profitability crises, however, many empirical tests of Marx's hypotheses were skewed by the propensity of the investigators to theoretically define and empirically measure surplus-value as inclusive of SNUL and constant capital as 'physical things consumed in production'. Arguably, this reflected the lingering influence that the Monopoly Capitalism School – constituted on the basis of a 'physicalist' and 'fetishistic' Ricardian-Marxist understanding of Marx's value theory and clearly under the sway of Keynesian influences as well – continued to exert on a new generation of Marxists.

Studies belonging to the second and third groups (hereafter, Group 2 and Group 3) agreed that a long-term decline in the rate of profit had occurred over the postwar period in many of the major capitalist countries. Shaikh's graph in Chart 1 illustrated the trend for the US.[10] The two groups were divided, however, as to its *cause*. Group 2, the most influential in the 1970s, attributed the observed crisis of profitability to a decline in the rate of surplus-value stemming from a 'wage-push/profit-squeeze', a massive 'social wage' bill associated with an expansive welfare state, or a slowdown in productivity growth. At the same time, the Group 2 studies reported a falling or relatively stable

8 Dawson and Foster 1991.

9 In general, the Monopoly Capitalism School saw the systemic crisis of that period as a product of the stagnation fostered by monopolistic firms. The growth of the latter's productive capacity simply outpaced the expansion of internally generated demand and this exerted downward pressure on corporate profitability. On this, see Sweezy and Magdoff 1981.

10 Shaikh 1987, p. 121. Here one profit rate is adjusted for variations in capital utilization and the other is not.

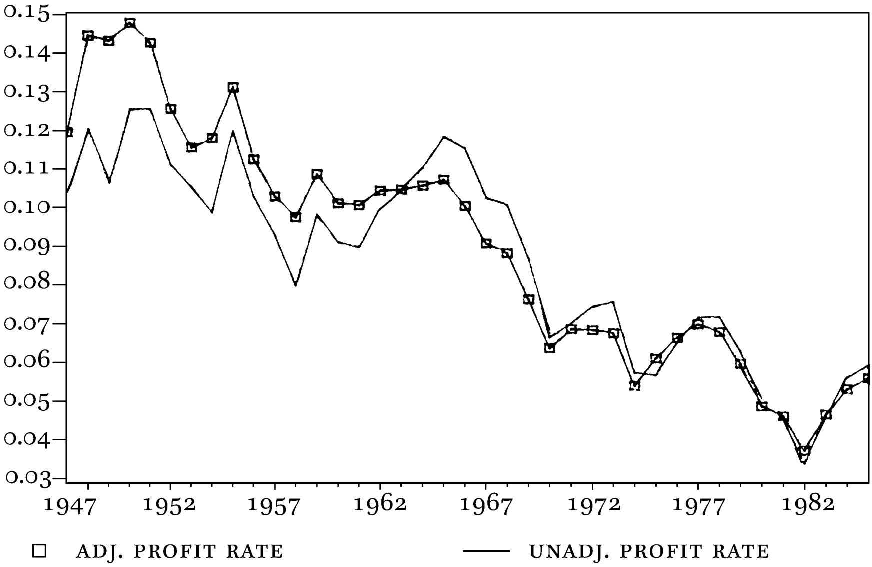

CHART 1 Profit rates S/C, USA (Shaikh's estimates)
SOURCE: SHAIKH 1987

organic and/or value composition of capital (if and when these ratios were measured at all). Studies by Weisskopf and Wolff were representative of this approach.[11]

In contrast, the Group 3 studies yielded results that supported Marx's expectations concerning the dynamics and trends of capitalist accumulation. Studies by Shaikh, Moseley, Shaikh and Tonak, and myself followed Mage's pioneering study in establishing correlations between a decline in the rate of profit and a rise in the organic composition of capital.[12] And for the postwar period at least, they were in agreement concerning the upward trend of the rate of surplus-value. Charts 2 and 3 provide a graphic comparison of Moseley's results with those of Weisskopf and Wolff concerning the trends of the composition of capital and the rate of surplus-value in the US economy.

The single most important factor accounting for the discrepancy between the results of the second and third groups of studies concerned the manner in which variable capital was empirically specified. Although important theoret-

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11 Weisskopf 1979, pp. 341–78; Wolff 1986, pp. 87–109. See also Glyn and Sutcliffe 1972; Boddy and Crotty1975; Reati 1986; Bowles, Gordon and Weisskopf 1983 and 1986.

12 Shaikh 1987 and 1989, Shaikh and Tonak 1994, Moseley 1987 and 1991, Smith 1984, 1991 and 1996.

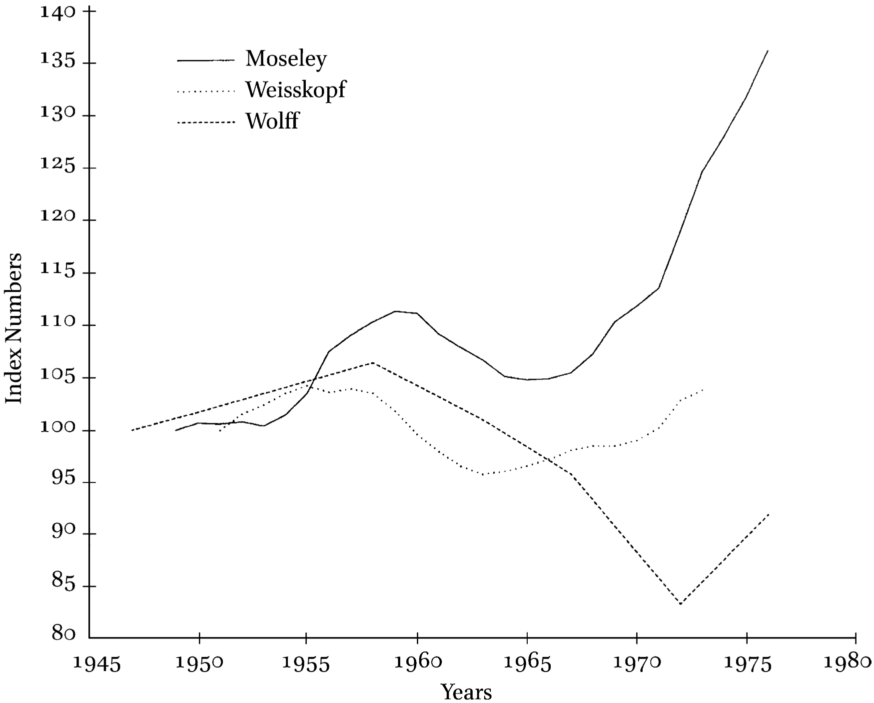

CHART 2 The composition of capital, USA (three estimates)
SOURCE: MOSELEY 1987

ical differences existed among the Group 3 studies, they were united in rejecting as a proper measure of variable capital an all-inclusive wage-labour bill in which the remuneration to unproductive labour (working in the sphere of circulation or for the state) is added to the income of productive workers (those involved directly in the production as opposed to the realisation of surplus-value).

The exclusion from the measurement of variable capital of those incomes flowing to the unproductive sectors of the workforce is the first, elementary step to a specification of Marx's value categories adequate to the task of empirically evaluating his theory on its own terms. Indeed, the difference this step makes empirically is so great that it is mystifying how any researcher, least of all a nominally Marxist one, could undertake an 'empirical test' of Marx's theory without confronting this theoretical issue directly. As already mentioned, however, among those who did confront it, most adopted the Sweezy-Gillman convention of subsuming unproductive labour under an expansive concept of surplus-value. Some, notably Moseley and Shaikh, explicitly rejected Mage's proposal to treat SNUL costs as part of constant capital, but none

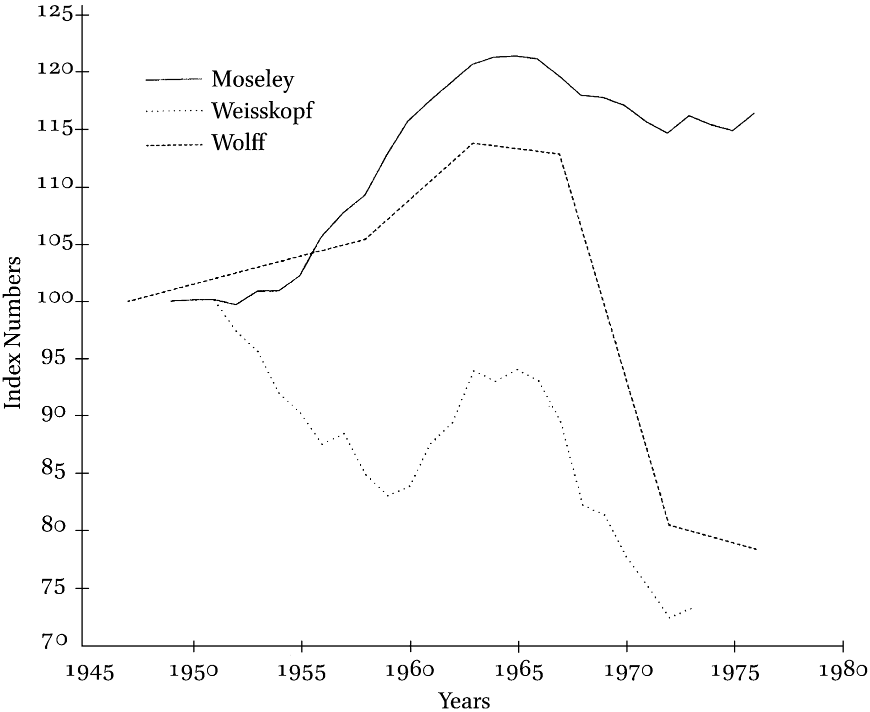

CHART 3 The composition of capital, USA (three estimates)
SOURCE: MOSELEY 1987

engaged seriously, at the *theoretical* level, with arguments favouring his approach in their published work.[13]

The practice of limiting the category of constant capital to fixed and circulating capital consumed in the productive sector is a *fetishistic* and *physicalist* approach, as I have argued in Chapter 8. In considering once again the 'non-fetishised' definition of constant capital proposed by Mage and myself, we will first interrogate Moseley's ostensibly 'value-theoretic' definition – for his is a particularly clear fetishism common among even the most sophisticated Marxist economists.

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13 To the best of my knowledge, the only published criticism of my defence of Mage's position is that of Dawson and Foster (1994), from the perspective of the Monopoly Capitalism/*Monthly Review* School. My reply to them can be found in Smith 1994–95. However, a substantial written exchange between Moseley and myself took place on OPE-L, a 'closed' Internet discussion group of Marxist political economists, in February 1998. This exchange can be read on the website of the OPE-L archives. Please note, however, that the website administrators ask that no statements posted on this site be reproduced or cited without permission from the author(s).

For Moseley, 'Marx's concepts of constant capital and variable capital include only the capital invested in *production activities*, where "production" is defined fairly broadly to include such activities as transportation and storage' but does *not* include 'circulation' or 'supervision' activities.[14] Moseley tries to sustain this position by arguing that 'the (past and current) labour required to perform the non-production functions of circulation and supervision, although entirely necessary within the capitalist mode of production, nonetheless does not add to the value of the commodities produced'. He then subsumes such labour under 'unproductive capital' and asserts that 'since this unproductive capital produces no value, it cannot be recovered out of value which it produces'.[15] But this line of reasoning invites an all-too obvious question: how does *constant capital in production* 'recover value' even though *it too* produces no value?[16]

In my view, this problem of 'recovery' is *not* solved by effectively amalgamating constant capital with variable capital under the category of 'productive capital'. *Implicitly*, such a procedure attenuates Marx's key insight that variable capital is *solely* responsible for the production of all new value, and readmits, albeit unwittingly, the capital-fetishistic notion that machinery and other 'dead labour' can be a source of new value.[17] Furthermore, Moseley's procedure leads *explicitly* to excluding from the category of constant capital not only unproductive labour but also *all* of the fixed and circulating capital used by commercial and financial capital.

The problem of 'recovery' is only satisfactorily resolved by recognising that there is a fundamental difference between 'adding'/transferring (old) value to the new commodity product and 'producing' the (new) value contained in it. Once this distinction is grasped, it no longer follows that the unproductive-capital values 'consumed' in the process of reproduction need to be 'recovered … out of the surplus-value produced by productive labour employed in cap-

14 Moseley 1987, p. 106.

15 Moseley 1987, p. 107.

16 The answer to this question is that constant-capital values can be 'recovered' and 'transferred' because they are *preserved* by a labour process. Constant-capital values in production are preserved by the labouring activity of productive workers; constant-capital values in the sphere of reproduction (including the values represented in SNUL wages) are similarly preserved by the labouring activity of SNUL workers, even though the latter do not produce any *new* value. SNUL workers operating in productive enterprises also preserve the value represented in their wages through their own labouring activity.

17 Marx's own critique of such 'capital fetishism' is to be found in 'Results of the Immediate Process of Production', an unfinished work appended to Marx 1977.

italist production'[18] – for all that is really 'consumed' in the total process of capitalist production and reproduction are *material-natural inputs*, not the *values* represented by those inputs. Far from being consumed and 'lost', these values are preserved and then transferred to the new commodity product. As in the sphere of production, what is consumed in the sphere of capitalist reproduction are various *use-values* (including SNUL labour power), while the *values* of these reproductive use-values are preserved and find expression in the cost price of the newly marketed commodity.

Thus, contrary to Moseley, constant capital is not merely a value expression of the material inputs that enter into the direct process of production. Rather, it is a particular expression of the social relations of production comprising capital and is therefore properly understood in relation to its 'complementary' if 'opposite' expression, variable capital.

The conclusion is clear enough: the costs of circulation and social maintenance in general are legitimately treated as a component of the *constant capital* expended in the total process of capitalist production and reproduction.[19] Value is *added* to the commodity product by these costs in the same way that it is added by the costs associated with the consumption of constant capital operating in the immediate process of production: through an addition/transfer of *previously existing* values effected by the activity of living labour.

Constant capital represents and *re*-presents value. The form it assumes in the circulation and state spheres is obviously different from the form it takes in the sphere of commodified use-value production. But, again, it is a *fetishistic* error to assume that any and every form of constant capital must be directly implicated in producing the use-value of a commodity to be 'indirectly' implicated in the production of its *value*.

All forms of constant capital owe their existence to the *past* transformation of surplus-value into capital. Upon some reflection, then, it is not difficult to see that what Marx said about the means of production (direct inputs to production) can apply just as well to the means of circulation, realisation and reproduction (that is, to what Shaikh and Tonak call 'intermediate inputs'):

> As regards the means of production, what is really consumed is their use-value, and the consumption of this use-value by labour results in the product. There is in fact no consumption of their value and it would therefore be inaccurate to say that it is reproduced. It is rather preserved …

18 Moseley 1987, p. 107.
19 Mage 1963, p. 66.

> Hence the value of the means of production reappears in the value of the product, but it is not strictly reproduced in that value. What is produced is a new use-value in which the old exchange-value re-appears.[20]

Again, the use-value of SNUL consists, in the broadest sense, of maintaining the social conditions requisite to commodity production and exchange. Its value, however, is not 'consumed'; rather, it *reappears* in the product, in this way 'adding' to the value of the commodity.

These considerations provide a new angle from which to assess Moseley's account of Marx's distinction between 'productive capital' and 'unproductive capital'. It is only in their role as direct instruments of use-value production that the elements of 'constant capital' in the sphere of production should be considered 'productive capital'. Insofar as the *value-expansion* process is concerned, this form of constant capital is qualitatively indistinguishable from the constant capital invested in 'reproduction', which includes not only SNUL but all the 'non-living' fixed and circulating forms of capital required by commercial and financial capitalists to engage in profit-seeking activities.[21]

The argument may be summed up as follows. Means of production exist in all modes of production, but they take the social form of constant capital only under capitalism. In all modes of production their function is to produce or facilitate the production of use-values. Capital – defined as value-seeking-an-increment – transforms them into means of producing *commodities* embracing *value*. However, the production of commodity *values* requires an ensemble of social conditions and relations that impose a particular social form on the immediate process of use-value production. It requires a free and formally egalitarian marketplace (the sphere of commodity circulation and exchange) and a state apparatus that can facilitate the smooth-running operation of the

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20 Marx 1977, pp. 315–16. Note that this passage recapitulates the point made on page 237 above.

21 While Shaikh and Tonak (1994) reject Mage's inclusion of the SNUL wage-bill in the constant capital flow, they conceptualise the *constant capital stock* in a way similar to him. Accordingly, unlike Moseley, they define the 'Marxian general rate of profit … as the ratio of surplus-value to total fixed capital' (Shaikh and Tonak 1994, p. 122) in the spheres of production *and* circulation. They add the following caveat, however: 'More properly, one should add the stock of circulating capital to the stock of fixed capital. But consistent data on the former are not readily available' (ibid, n. 16). They also write: 'The capital stock of a business is part of a profit-making venture, and comprises not only durable items (plant, equipment, and durable financial assets) but also nondurable items (inventories of materials and work in progress as well as short-term financial assets). It is because money is tied up as capital … that the possibility of profit arises' (ibid, pp. 13–14).

whole system. Metaphorically expressed, the production of value requires the existence of special 'social machinery' (including unproductive living labour) specific to capitalism. This social machinery not only assists in the realisation of value and surplus-value; it also sustains the 'institutional means' for the valorisation process. Understood in this way, the costs of circulation and of state activity are *indirectly* productive of value in the same sense as an industrial robot: *they are simply means of presenting productive living labour as new value*.

Finally, it should be noted that the 'constant capital' operating in the sphere of circulation is subject to the same distinction that was made earlier – that is to say, the distinction between capital stocks and flows. The wage-bill of circulation workers is appropriately treated as a component of the constant capital *flow*, but it should not be considered a component of the constant capital *stock*. Like the wages paid to productive workers – the variable capital – the wage-bill of unproductive workers is an investment *sui generis* of the capitalist class, one qualitatively different from an investment in fixed constant capital of any sort.

1.1 *Assessing the Empirical Trends*

In the foregoing I have argued for a specification of Marx's value categories that (a) limits the category of variable capital to the (after-tax) income of productive workers, and (b) treats the income of socially necessary unproductive workers as a component of the constant capital flow. By thus limiting the category of variable capital and broadening the category of constant capital, we are better able to specify the phenomenal content of aggregate surplus-value. Following Marx, surplus-value is defined as the sum of profit of enterprise, rent (ground and technological), and interest, plus the personal (salaried) income of top capitalist executives, along with any governmental revenues raised through taxation that constitute a *net increase* in these revenues.

Prior to the publication of my own work (with Butovsky) on the US economy in 2012, Mage's study of the US economy (for the 1900–60 period) and my two studies of the Canadian economy (for the periods 1947–80 and 1947–91) were the only attempts to empirically assess the long-term trends of the fundamental Marxian ratios on the basis of the value specifications defended above. The full implications of these specifications are dramatically revealed by a comparison of these studies with others covering comparable periods.[22] However, the

22 Mage's study of 1963 is most profitably compared with that of Gillman (1957), while my own initial study of the Canadian economy, published in 1991 and based on Smith 1984, invites comparison with Sharpe 1982. See also Webber and Rigby (1986, pp. 33–55), who establish a rising trend in the value composition of capital (c/v) and the rate of surplus-value, alongside a consistent fall in the rate of profit from 1950 to 1981 in Canada. They do

simplest way to assess their importance is to compare the results obtained on this basis with those obtained using the 'conventional' Marxian definition of unproductive labour income as part of aggregate surplus-value.

My first study of the Canadian economy, covering the years from 1947 to 1980, involved the calculation of the rate of surplus-value (*s/v*), the organic composition of capital (*c*/(*s*+*v*)), and the average rate of profit (*s/c*) using two different measures of aggregate surplus-value.[23] The first measure, s4, conformed to the 'narrow' definition of surplus-value defended above: that is, 'surplus-value privately appropriated' plus an estimate of current surplus-value transferred to the state resulting from a real increase in the tax flow. The second measure, s5, conformed to the 'expanded' definition of surplus-value associated with the conventional Marxian treatment of SNUL and tax revenues. The s5 measure, therefore, included all tax revenues, the after-tax wage-bill of SNUL in the private sector, as well as the non-tax components of s4.

Table 5 contains a sample of the results of this study. Both the s4 and the s5 data series disclose a tendency for the rate of surplus-value to rise, although this is far more pronounced with the s5 series than the s4.[24] The comparative results for the organic composition of capital and the rate of profit, however, were strikingly different. The s4 series displayed a marked tendency for the organic composition to rise, while the s5 series depicted long-term stability – a 'flat' trend.[25] Finally, the s4 series evinced a long-term fall in the rate of profit, while the s5 series was flat over the long haul, displaying a tendency to decline only in the 1970s.[26]

Overall, the s4 data series provided strong support for Marx's prognostications, revealing a long-term fall in the average rate of profit that was signific-

so, however, by considering the manufacturing sector alone – a procedure that I regard as theoretically inadmissible on the grounds that the Marxian average rate of profit is calculable only with reference to the social capital as a whole. This problem persists in their otherwise valuable study of profit trends in Australia, Canada, Japan and the USA published in 1996.

23 Smith 1984 and 1991b.

24 The trend line for the ratio s4/v rises from 0.546 in 1947 to 0.810 in 1980 (r^2=0.56, p. <.0001). For the ratio s5/v, it rose from 1.632 in 1947 to 3.894 in 1980 (r^2=0.97).

25 The OCC defined as C/(v+s4) has a trend line that rises from 3.84 in 1947 to 5.97 in 1980 (r^2=0.93). By contrast, the trend line for C/(v+s5) rises only from 2.022 in 1947 to 2.203 in 1980 (r^2=0.38).

26 The trend line for s5/C *rises* from 0.3190 in 1947 to 0.3678 in 1980 (r^2=0.55). But the trend line for s4/C falls from 0.100 in 1947 to 0.074 in 1980 (r^2=0.46). When s4/C was treated as the dependent variable and C/(v+s4) as the independent variable, an r^2 of 0.69 was obtained, indicating that much of the downward trend in the rate of profit is accounted for the by the upward trend of the OCC.

TABLE 5 Trends in the rate of surplus-value (*s/v*), the organic composition of capital (*c/(s+v)*) and the average rate of profit (*s/c*) using two different measures of aggregate surplus-value, Canada: selected years from 1947 to 1980

	s/v		c/(s+v)		s/c	
Year	*s4*	*s5*	*s4*	*s5*	*s4*	*s5*
1947	.476	1.92	3.94	1.99	.081	.331
1950	.649	1.92	3.58	2.01	.111	.326
1953	.593	2.00	3.73	1.98	.100	.337
1956	.668	2.14	3.87	2.06	.103	.331
1959	.654	2.31	4.35	2.19	.092	.319
1962	.679	2.60	4.72	2.20	.086	.329
1965	.755	2.88	4.90	2.22	.088	.334
1968	.698	3.10	4.95	2.05	.083	.368
1971	.638	3.37	5.64	2.11	.069	.365
1974	.940	3.78	5.35	2.17	.091	.365
1977	.732	3.85	5.78	2.15	.073	.364
1980	.882	3.88	5.96	2.30	.079	.345

SOURCE: SMITH 1984 AND 1991B; SEE ALSO APPENDIX 1

antly correlated with a secular rise in the organic composition of capital. While these results were partially complementary to those obtained for the US economy by Moseley (rather more so to Shaikh's), they were *not* dependent on distinguishing between a 'Marxian rate of profit' and a 'conventional rate of profit' after the problematic fashion of Moseley.[27] Furthermore, the results of my s4 study indicated that a rising OCC was a much stronger determinant of the fall in the profit rate than it was in Moseley's study, which concluded that

27 Defining the conventional rate of profit as 'the ratio of the amount of profit (P) to the total stock of capital invested', Moseley argues that 'the conventional rate of profit depends not only on the composition of capital (CC) and the rate of surplus-value (RS) (the determinants of the Marxian rate of profit), but also on the two ratios of unproductive capital to variable capital'. He defines these ratios as 1) the ratio of 'capital invested in non-production stocks and equipment' to variable capital, and 2) the ratio of the annual flow of unproductive capital, 'mostly the wages of non-production workers, but also the depreciation costs of non-production buildings, equipment and materials', to variable capital. 'More precisely', he writes, 'the conventional rate of profit varies inversely with these two ratios of unproductive capital to variable capital' (Moseley 1991, pp. 108–9).

the increase in the ratio of unproductive labour to productive labour was the *main* factor behind declining profitability in the postwar US economy.[28]

Along with his exclusion of capital stock in the sphere of circulation from the denominator of the rate of profit, I argue, Moseley's treatment of unproductive-labour income and most tax revenues as components of total surplus-value constitutes a serious error in developing a 'Marxian accounting framework' – whether or not one then proceeds to measure the rate of profit in a way that excludes some or all of these elements from its numerator.[29]

My first study of the Canadian economy concluded that empirical trends – the 'actual facts' of capitalist development – provided sufficient warrant for a serious reconsideration of the theoretical fertility of Marx's LTRPF, while also demonstrating that the empirical evidence marshalled against it depended on a series of assumptions contrary to Marx's theory of value. It also noted that, while agreement existed across a broad range of economic analyses concerning a long-term decline in the rate of profit in the postwar period, arguments persisted over the cause and extent of the decline, as well as the prospects for a long-term reversal of the trend. Studies that failed to distinguish between productive and unproductive labour income were liable to cite a wage-push/profit-squeeze, declining productivity, or deteriorating terms of trade. On the other hand, studies that made this distinction generally concluded that the growth of real wages among production workers had not exceeded the growth of productivity and that the organic composition of capital had shown a marked tendency to rise.[30]

In light of the argument made here, the difference of opinion between the Group 2 and Group 3 studies was a striking conceptual reflection of a certain 'adulteration' of Marx's LTRPF. For if the growth of constant capital in relation to newly created value had once signified a growth in the productivity of labour, it now *also* signified a relative diminution of productive labour in relation to socially-necessary unproductive labour. If Marx argued that the rate of profit would fall both conjuncturally and in the long term due to increases in the composition of capital, profitability now seemed to be subject to a downward pressure stemming from both technical changes enforced by capitalist competition *and* the circumstance that a diminishing percentage of the working class was involved in surplus-value production as distinct from realisation or institu-

28 Moseley 1991, p. 122. A detailed analysis of Moseley's empirical results is provided in Chapters 3 and 4 of this work.

29 See, for example, Moseley 1987 and 1991; Shaikh 1987; Shaikh and Tonak 1994.

30 For data on productivity and the real wages of production workers, see Smith 1984, pp. 281–3, Shaikh 1987, pp. 118–22, Moseley 1991, and Shaikh and Tonak 1994.

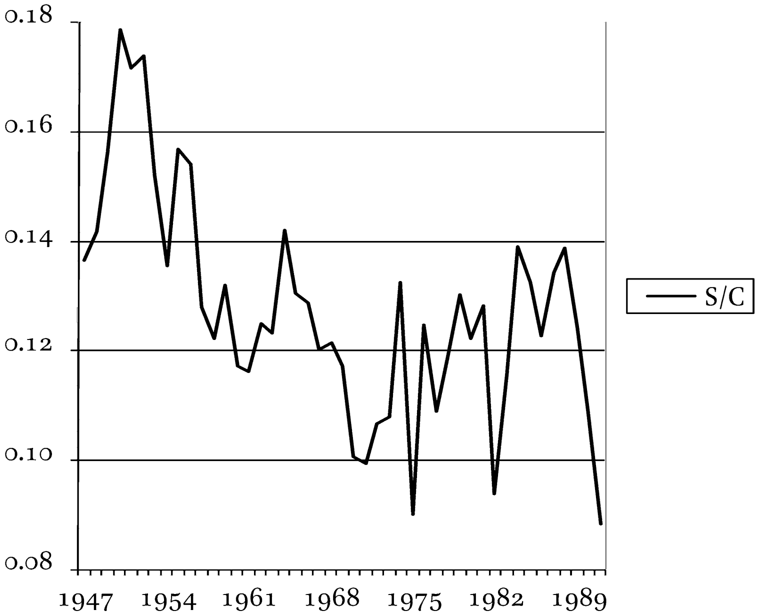

CHART 4 The average rate of profit, Canada, 1947–91 (the ratio of total surplus-value flow to the value of the fixed constant capital stock: S/C)
SOURCE: SMITH AND TAYLOR 1996, P. 115

tional reproduction. If capitalism's tendency to promote the 'objective socialisation' of labour and of production once reflected its historically-progressive role in developing the forces of production, it now *also* reflected a hypertrophy of the capitalist state and the sphere of circulation – one that was impeding the advance of the productive forces by diverting enormous economic resources *away from* production.

My second study of the Canadian economy, co-authored by K.W. Taylor and published in 1996, examined the trends of the fundamental Marxian ratios from 1947 to 1991 and reaffirmed the principal conclusions of the first study.[31] Indeed, it produced an almost 'ultra-Marxist' set of conclusions regarding the long-term dynamics of capitalist development between 1947 and 1975: a falling rate of profit, a gradually increasing rate of surplus-value, and an impetuously rising OCC. What's more, in the ensuing 1976–91 period of capitalist restructuring in response to the profitability crisis (a period marked by a determined mobilisation of the 'counteracting tendencies' to the LTRPF), the trend lines for the rate of profit and the OCC stabilised and the rate of surplus-value rose sharply. (See Charts 4, 5 and 6).

31 Smith and Taylor 1996. This study was later summarised in Smith 1999, 2000 and 2010.

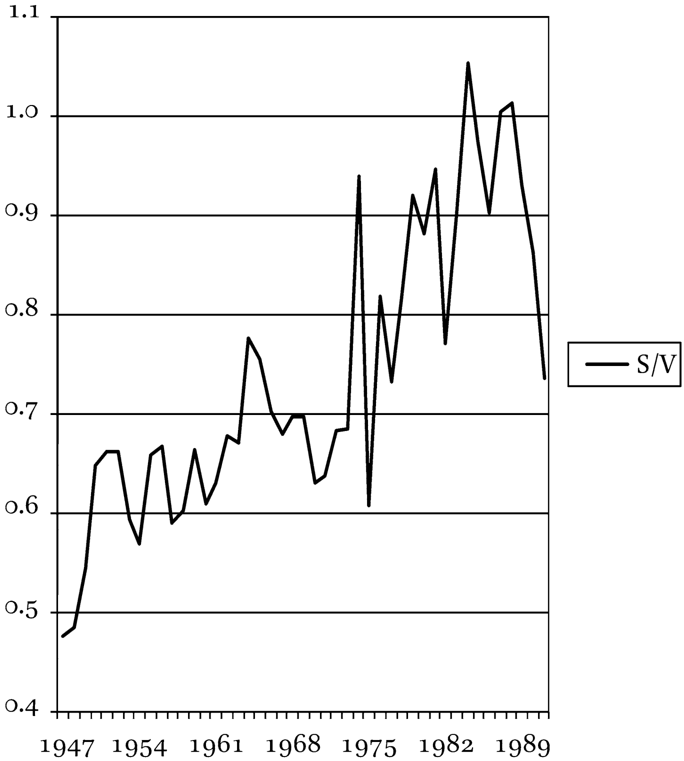

CHART 5 The rate of surplus-value, Canada 1947–91 (the ratio of total surplus-value flow to variable capital flow)
SOURCE: SMITH AND TAYLOR 1996, P. 116

This analysis accorded well with established facts about the response of Canadian capital and the state to the stagflation crisis of the 1970s: namely, to limit wage growth, diminish the strength of organised labour, improve productivity (by intensifying labour processes, lengthening the working day, and introducing 'lean production' techniques), remove obstacles to international capital mobility, cut back on government-funded social programmes, and significantly reduce corporate taxes – all with a view to restoring the conditions of profitability.

The empirical findings of the Smith-Taylor study furnished strong support for the hypothesis that the profitability crisis of the 1970s in Canada had resulted from the displacement of living labour from production and its replacement by labour-saving technologies, a process encouraged both by competitive cost-cutting and capital-labour antagonism. In this regard, Marx's expectations concerning the long-term dynamics of capital accumulation were shown to be

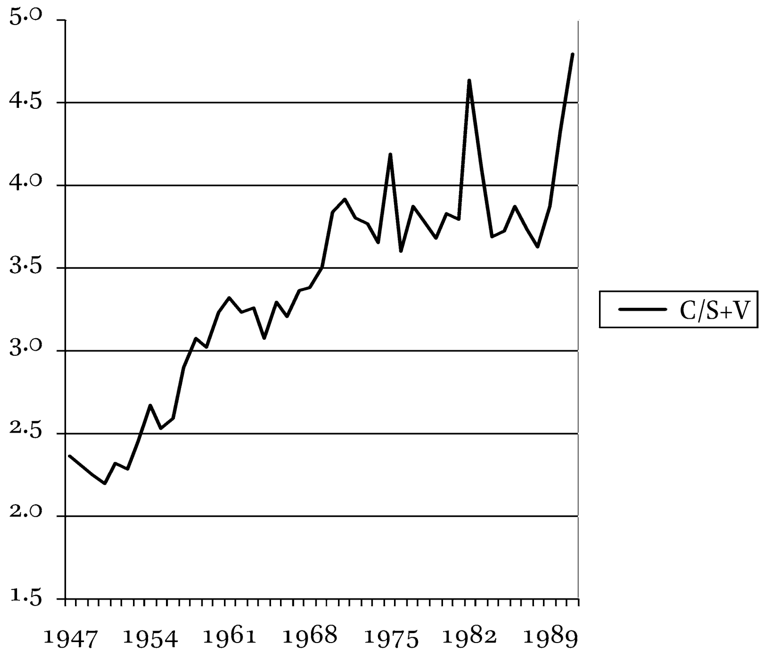

CHART 6 The organic composition of capital, Canada 1947–91 (the ratio of value of fixed constant capital stock to the sum of surplus-value and variable capital flows)
SOURCE: SMITH AND TAYLOR 1996, P. 117

fully consistent with the actual performance of the Canadian economy in the mid- to late twentieth century. An adequate scientific analysis of the trajectory of the world capitalist economy, it concluded, needed to recognise that *a high organic composition of capital in the advanced capitalist countries* had become a persistent and significant obstacle to profitability.

2 Part II: the LTRPF and the Rise of 'Fictitious Capital': the Case of the US Economy, 1950–2013[32]

The financial crisis of 2007–08 and the ensuing protracted slump of the global capitalist economy prompted the appearance of several new empirical studies

32 Part II draws heavily, though not entirely, on Smith and Butovsky 2012 (adapted and reprinted in Smith 2014) and Smith and Butovsky 2018. Owing to co-authorship, the pronouns 'we' and 'our' are used frequently throughout the ensuing discussion.

pertinent to assessing the relevance of the LTRPF to the realities of twenty-first-century capitalism.

While few analysts argued that the downturn that began in 2007 was triggered exclusively by a conjunctural fall in the rate of profit (either globally or in the US), radical-left commentators generally adopted one of two divergent positions: (1) the severe profitability crisis of the 1970s and early 1980s prompted changes in capitalist investment strategies, state regulatory practices and patterns of capital accumulation that have not (or not yet) resolved the crisis entirely, but that did pave the way for a much-enlarged role for financial capital and therewith for the financial turbulence that crested in September 2008;[33] or (2) the profitability crisis was substantially overcome by the late 1980s, and therefore the post-2007 crisis of global capitalism has much more to do with the contradictions of 'financialisation', conceived as a process that has been integral to the neoliberal project and largely beneficial to profitability in a new era of 'finance-driven' capitalism.[34] Proponents of Marx's LTRPF tend to support the first position, while its critics on the radical left tend to support some variant of the second.[35]

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33 See, among others, Freeman 2009, Harman 2009a, Shaikh 2010, Smith 2010, and Carchedi 2011 and 2012. Although not a proponent of the LTRPF, Brenner 2009 can also be included in this group.

34 Albo, Gindin and Panitch (2010, p. 42) argue, *inter alia*, that the 'onset of the crisis in 2007 was not rooted in any sharp profit decline or collapse of investment … Rather it was rooted in the dynamics of finance'. Choonara (2009) provides a survey of other accounts of the crisis that share this general approach. See also Lapavitsas (ed.) 2012.

35 Foster and Magdoff (2009) of the *Monthly Review* school adopt an intermediate position according to which financialisation has encouraged growing inequality, depressed aggregate demand and inhibited productive investment, thereby setting off a new phase of stagnation and 'realisation' crisis in what they dub 'globalised monopoly-finance capitalism'. A different sort of intermediate position is occupied by McNally (2011), who upholds Marx's value-theoretic strategy and the LTRPF, even while agreeing with Albo, Gindin and Panitch that the neoliberal era has been a 'very dynamic period of capitalism' (2010, p. 33). McNally argues that 'while neoliberal expansion (1982–2007) did not reach the heights of the Great Boom [of 1948–73], it compares most favorably with every other phase of capitalist history' (2011, p. 38). However, McNally's comparative historical analysis is based on Maddison's (2003) figures for *world economic growth* during four discrete periods, and fails to discriminate between GDP growth in capitalist, pre-capitalist, semi-capitalist and post-capitalist regions of the world economy – regions whose specific weights and roles have varied enormously over the 130-year 'capitalist history' that he surveys. For example, China's growth performance during its Maoist period is treated no less problematically as a component of *capitalist* 'world economic growth' than its performance since 1979 (the post-Maoist period) or its performance between 1870–1949, when it was burdened by feudalism and imperialist subjugation. Through this legerdemain, McNally obscures the historical significance of the sluggish rate of global capitalist growth in the neoliberal era.

Building on our analysis in *Global Capitalism in Crisis: Karl Marx and the Decay of the Profit System*,[36] what follows reports an attempt by Smith and Butovsky to chart the fundamental Marxian ratios for the US economy between 1950 and 2013. In doing this it tries to further corroborate three of the latter work's central propositions: (1) the current crisis has its deepest roots in the persistent profitability problems of *productive capital* on a world scale; (2) these problems are an expression of Marx's LTRPF in an era that has been marked both by a persistently high organic composition of capital (involving the displacement of living labour from production) and by the growing weight of unproductive capital and SNUL; and (3) the profitability problems of productive capital, the hypertrophy of unproductive capital and fictitious capital, and the unprecedented growth of global debt over the past decade are interrelated expressions of an historical-structural and multi-dimensional valorisation crisis of the capitalist mode of production.

2.1 *Marx's Value Categories, the Temporal Modes of Value, and the LTRPF in the Age of Fictitious Capital*

The theoretical presupposition of Marx's theory is that economic value originates in social labour and must be conceptualised both in terms of the *class dynamics* of capitalism and *temporally*. Value is above all a *social relation*, the substance of which is abstract labour, the measure of which is socially necessary labour time, and the form of appearance of which is money. The fundamental value categories of constant capital, variable capital and surplus-value are vital to conceptualising the specifically capitalist mode of class exploitation, the process of capital accumulation, and the distribution of value in national income and gross output. But the Marxian theory of capitalist crisis – and especially any Marxian theory of the historical-structural crisis of the capitalist mode of production predicated on the LTRPF – must also distinguish between three *temporal modes* of value: previously existing value (PEV), new or currently produced value (NV), and anticipated future (not-yet-existing) value (AFV).

In Marx's theory, the concept of constant capital corresponds to PEV, while variable capital and surplus-value are two forms of NV whose relative magnitudes are, within certain limits, determined by class struggle. The concept of AFV is not fully developed by Marx but is nevertheless implicit in his discussions of the credit system and 'fictitious capital'. Stocks, bonds and debt obligations, together with more recent innovations in fictitious capital such as

36 Smith 2010.

collateralised debt obligations and credit default swaps, constitute claims on current and previously existing value (NV and PEV) but also wagers on AFV – value that has yet to be, and that may never be, produced.[37]

Fictitious capital has long played an important role in the operations of capitalist economies, and should not be viewed as purely parasitic or predatory. Fundamentally, however, it is money capital seeking to enlarge itself through speculative claims on future income, signifying an attempt on the part of a fraction of the social capital, centred in the financial sector but involving other sectors as well, to liberate itself from the problems of the 'productive economy' and the constraints of the law of value, above all the tendency of the rate of profit to fall.

The downward pressure on the rate of profit of productive capital, associated with a rising composition of capital and an enormous expansion of the constant capital flow, has brought about a deepening, systemic *crisis of valorisation*. Inadequate levels of surplus-value production (relative to overall systemic costs) have compelled dominant fractions of the social capital in the richest capitalist countries to rely on 'investment strategies' predicated on speculation, an extraordinary expansion of credit and debt, criminal parasitism and, following the financial crisis of 2007–09, massive central-bank money-printing ('quantitative easing'), rather than on the production of commodities embody-

37 In *Capital*, Volume III, Marx writes: 'With the development of interest-bearing capital and the credit system, all capital seems to be duplicated, and at some points triplicated, by the various ways in which the same capital, or even the same claim, appears in various hands in different guises. The greater part of this "money capital" is purely fictitious' (1981, p. 601). An obvious instance of this in the lead-up to the most recent financial crisis is the appearance of 'money-capital' at first as a mortgage and subsequently as a mortgage-backed security. Further on, Marx observes that 'commodity capital largely loses its capacity to represent *potential* money capital in time of crisis, and generally when business stagnates. The same is true of fictitious capital, *interest-bearing paper*, in as much as this itself circulates as money capital on the stock exchange. As the interest rate rises, its price falls. It falls further, owing to the general lack of credit, which compels the owners of this paper to unload it onto the market on a massive scale in order to obtain money' (1981, pp. 624–5, emphasis added). Carchedi observes: 'Titles of credit/debt have no intrinsic value. However, they have a price. Take a bond. Its price is given by the capitalization of future earnings and thus depends on the rate of interest. Marx refers to this as the "most fetish-like form" of capital because it seems that it is capital that creates surplus-value, not labour … If loan capital is fictitious, loan (financial) profits are fictitious too. They are fictitious not because they do not exist (as in some fraudulent accounting practices). They are the appropriation of a representation of value (money), and in this sense they are real. But they are fictitious because this appropriation is based upon a relation of debt/credit rather than of production. Financial capital sells valueless titles of debt for money' (2011, pp. 5–6). See also Carchedi 2012, pp. 149–50.

ing surplus-value.[38] Hence, money profits, particularly in the financial sector, are less and less likely to represent 'redistributed' shares of surplus-value originating in capitalist production, and more and more likely to represent aliquot shares of 'anticipated future value' (AFV) circulating as paper assets in an increasingly debt-burdened economy.

Our claim is that the proliferation of forms of fictitious capital whose 'temporal value composition' is weighted more and more toward AFV has emerged as a hallmark of the historical-structural crisis of capitalism in the neoliberal era – an era whose latest phase might well be dubbed *the age of fictitious capital*. The proliferation of fictitious capital and the generation of fictitious profits are expressions of an advanced stage of decay of the profit system. The 'value' rate of profit – conceptually apprehended in terms of the socially necessary abstract labour *currently* constituted by the social division of labour – has been subject to powerful downward pressures. The active response of the agents of capital, following many 'failed' responses to this problem of valorisation, now involves a massive expansion of credit and debt as a means of sustaining the system – and the result of this is a 'money' rate of profit that is increasingly autonomous from the (underlying) 'value' rate of profit – that is to say, increasingly reliant on purely fictitious claims to value. The 'money form' seeks more and more to assert its independence from socially necessary abstract labour time by acquiring a stronger foundation in 'relations of credit/debt'. Hence, money printing, quantitative easing, the growing gap between the 'value' of total securities in the global economy and the value of current real output.[39]

38 Smith summarised the financialisation phenomenon that led up to the crisis of 2007–09 as follows: '… significantly increased investment in financial activity, the appearance of new financial instruments like derivatives and hedge funds, frenzied speculation surrounding a growing volume of fictitious capital, a massive overloading of the credit system and a generalised "irrational exuberance," to borrow Alan Greenspan's famous phrase' (2010, p. 15).

39 The system is living quite literally on borrowed time, inasmuch as it is 'counting' anticipated future value, not yet created, as actual 'wealth'. Those managing this system are either betting that this AFV, now represented in a massively expanding volume of securities, can and will eventually be converted into real, currently produced value … or that the day of reckoning will never come. The first involves a hard-nosed assessment that massive amounts of 'real wealth' will eventually need to be transferred from debtors to creditors, regardless of the pain and dislocations that this will cause; the second involves magical thinking – the forlorn hope that massively growing debt poses no real threat to the system. What, in fact, this growing debt reflects is the *obsolescence* of the capitalist profit system; it poses acutely the need to move beyond the measurement of wealth in terms of labour time. This movement is impossible, however, within the framework of antagonistic class relations and the private ownership of the means of production.

As the flow of constant capital (PEV) grows relative to the flow of NV (due to the declining role of productive wage-labour in the capitalist economy), there is a corresponding tendency for representations of AFV to acquire increased importance. This process is manifested in the proliferation of *increasingly fictitious* forms of financial capital and a malignant growth of unsustainable debt. Consequently, the true extent of the 'valorisation crisis' of late capitalism is concealed by the false appearance of (some) AFV as part of the 'profit' component of currently produced surplus-value. Booked profits, as these appear in conventional national income accounts, reflect not only a determinate share of the new value produced by productive living labour, but also 'fictitious profits' that have no substantial foundation in the value-creation process. Fictitious profits also make up a growing proportion of the personal income of the top 1 percent of 'wage and salary' earners, and especially the top 0.1 percent.

To be sure, some profits that do not arise from the current exploitation of living labour represent *transfers* within the circuits of capitalist revenue (NV) or from certain streams of constant capital (for example, PEV flows originally earmarked for state expenditures). Such profits can be conceptualised as 'profit upon alienation' or 'profit through dispossession'. But alongside such (non-NV) profits exists a growing mass of fictitious profits (above all in the financial sector) that constitute claims on AFV in the form of debt obligations – and therefore claims on income whose actualisation depends on the future performance of productive labour.[40]

The mechanisms through which 'booked profit' is bolstered by transfers involving one or another form of AFV are numerous and are in need of addi-

40 Harman notes: 'The shock of the financial crisis ... is now leading some bourgeois economic commentators to recognise that there were "fictitious profits" – and with them "fictitious economic growth" – in the mid-2000s, if not earlier. Most calculations of profitability try to circumvent this problem by restricting themselves to non-financial corporations (or, sometimes, the non-financial business sector). But many major non-financial corporations ... became increasingly dependent on financial operations from the 1990s onwards' (2009b, p. 3). Lapavitsas and Levina (2010) suggest that 'financial profit remains redistributed loanable capital, hence, a part of the existing flows of value'. Thus, while it encompasses redistributed profit from production, 'it retains elements of profit upon alienation or expropriation' as well. But this approach fails to consider that a growing share of financial profit may be seen as monetised debt obligations and therefore as claims on future income (AFV). In official national income accounts, no effort is made to distinguish financial profits that originate in flows of value newly created in production from those that originate in previously existing flows or from speculative bets on future earnings. The continuous packaging, selling, repackaging and re-selling of derivatives in recent decades undoubtedly generated huge financial profits of an especially fictitious character.

tional, ongoing research. Nevertheless, theoretical acknowledgement of this reality is vitally important to registering the significance of the long-term divergence between the rate of profit on productive capital and the rate of profit on financial capital. The more robust performance of the latter compared to the former has been one of the most striking features of capitalism in the neoliberal era.[41] At the same time, however, it can be seen as constituting a new and rather significant 'adulteration' of Marx's LTRPF – one that further complicates the already daunting task of evaluating this law through empirical analysis.

Notwithstanding these difficulties, Marxist analysis of the historical dynamics of the capitalist world economy ought not to dispense with serious attempts to measure such fundamental Marxian (value-theoretic) ratios as the average rate of profit, the rate of surplus-value, and the organic composition of capital. To be sure, such attempts can never offer much more than rough approximations. Even so, they are vitally important to charting and comprehending essential *trends* in the capitalist mode of production – trends that can usefully inform, if only in a very general sense, the political-programmatic perspectives and tasks of Marxist socialists in relation to the broader working-class movement.

2.2 *Theoretical Issues in Empirical Measurement*

Marx's LTRPF provides a simple and remarkably compelling foundation for the argument that capitalism's capacity to develop the productive forces and promote human progress is historically limited. Precisely because it stands opposed to any notion that capitalism can enjoy a progressive, 'crisis-free' evolution, theoretical formulations of this law have been the target of repeated criticism from both defenders of the capitalist order and reformist leftists who envision a gradual, incremental transition to socialism. Having noted this important dialectic of programme and theory, Marxists are nevertheless obliged to consider the scientific merit of the major theoretical objections to the LTRPF, since no empirical demonstration can establish its veracity so long as significant doubts about it remain at the theoretical level. The discussion already undertaken in Chapter 7 fulfils this obligation by showing that the major theoretical objections to the LTRPF are by no means conclusive and that substantial grounds exist for affirming that it has a real and significant impact on the macro-economic dynamics of capitalist economies and the actual history of capitalism. Nevertheless, important theoretical problems still confront those seeking to empirically test the major hypotheses suggested by the LTRPF.

41 Dumenil and Levy 2004, 2011; Brenner 2006, 2009; Shaikh 2010; Smith 2010.

The first problem concerns the value-theoretic rectitude of measuring the value categories and the Marxian ratios in magnitudes of money. Some readings of Marx posit a dualism of labour values and money-prices that enjoins the theorist either to reject in principle *any* empirical measurement of 'value' (a stance common to many neo-orthodox 'value-form' theorists) or to insist upon the measurement of value in units of labour (a stance associated with Ricardian, neo-Ricardian and Sraffa-based interpretations of Marx's theory, and also some 'fundamentalist' Marxist ones). In counterpoint to such readings we affirm our general agreement with Moseley that Marx's concepts of constant capital, variable capital, and surplus-value 'can be defined in terms of sums of money which function as capital. In principle, these concepts correspond to entries in the income statements and balance sheets of capitalist firms'.[42]

The second problem concerns the appropriate 'unit of analysis' for disclosing the real trends of the fundamental Marxian ratios. Can meaningful results be achieved by analysing *national* capitalist economies, or must the analysis be conducted at the level of the world economy – a postulated 'international rate of profit'?

Certainly, as the internationalisation of capital proceeds, manifested through increased international capital mobility, the formation of international 'prices of production' and more pronounced tendencies toward profit rate equalisation across national lines, one must acknowledge that processes of international surplus-value redistribution and 'unequal exchange' will play an increasingly important role in the realisation of profits within individual capitalist nation-states. Such processes will necessarily obscure *the transnational origin* of *some* of the surplus-value that appears as 'domestic profit' – and, to a certain extent, 'delink' the (increasingly 'internationalised') category of surplus-value from the 'nationally measured' value categories of constant capital stock and variable capital.[43]

42 Moseley 1991, p. 30. Among the 'fundamentalist' studies that have entertained a 'dual systems' approach to empirical Marxian analysis (if not necessarily to Marx's value theory per se) are Mage 1963, Smith 1984 and 1991, Shaikh 1987, Shaikh and Tonak 1994, and Smith and Taylor 1996. In practice, however, all these studies, with the exception of Mage's, measured the Marxian value categories in *current dollars* only. Smith and Taylor (1996, p. 129, n. 30) indicated several theoretical and empirical reasons for evading measurement in terms of units of labour time ('labour values'), while *not* dismissing the potential relevance of such a measurement.

43 For extended discussions of these issues, see Chapter 9 of this volume on 'international and inter-regional value transfers', and Carchedi (1991, Chapter 7) on 'production and distribution as worldwide processes'.

However, the globalisation of capitalist economy has not reached a point where one can speak of a 'general' or 'uniform' international rate of profit, and it is impossible, in any case, to measure an average rate of profit on an international scale. What's more, to the extent that processes involving transfers of surplus-value through unequal exchange are operative on a world scale, one can only assume that these would tend to favour national capitalist economies exhibiting the highest rates of labour productivity and the highest organic compositions of capital. Therefore, if the LTRPF can be measured and recognised as operative in the world's most powerful and productive national capitalist economy, the USA, there can be little doubt that it is also operative on a world scale.[44]

Transfers of surplus-value across national lines do not occur entirely or even mainly through processes of unequal exchange. They also occur through foreign direct investment and the 'repatriation' of corporate profits earned abroad. Over the past 25 years, US corporate profit earned 'in the rest of the world' has increased considerably as a percentage of total corporate profit. This too complicates any empirical test of Marx's LTRPF because the capital investments 'standing behind' these profits are not easily measured. This issue will be returned to later, but we note here that the largest share of these foreign investments was actually made in higher-wage countries exhibiting high compositions of capital.[45]

The foregoing considerations suggest that empirical measurements of the Marxian ratios in any national framework, even that of the USA, must always be scrutinised carefully and with many caveats in mind. That said, we think the exercise is still well worth doing.

The third problem has to do with the appropriate theoretical specification of the value categories of Marx's system and the empirical translation of these categories using conventional data sets (as furnished by capitalist states) – data

44 In this regard, Moseley has argued that the 'most likely source of bias resulting from [estimating the Marxian variables more narrowly in terms of the US economy] is that the composition of capital may have increased slower in the US than in the world capitalist economy' (1991, p. 182).

45 According to one analyst: 'Typically, US firms have placed the largest share of their annual investments in developed countries, primarily in Western Europe, but this tendency has increased since the mid-1990s. In the last half of the 1990s, US direct investment abroad experienced a dramatic shift from developing countries to the richest developed economies: the share of US direct investment going to developing countries fell from 37% in 1996 to 21% in 2000. [In 2009] [d]eveloped countries received nearly 70% of the investment funds of US multinational firms, while developing countries received about 30%' (Jackson 2011, p. 4).

sets that tend to be recalcitrant to Marxist concepts and especially to the critical distinction between productive and unproductive labour. This problem has already been addressed at length in Chapter 8 and in Part I of this chapter. Some additional points, however, ought to be made and are registered in the next section.

2.3 *The Specification of Marx's Value Categories and the Origins of the Current Malaise*

Without reprising the finer points of the controversy surrounding unproductive labour, it is important to emphasise that the Mage-Smith approach to SNUL and tax revenues allows us to agree with the critics of the productive-unproductive distinction that such costs are indeed *systemically necessary* from the point of view of the social capital (and are therefore *not* elements of surplus-value readily 'convertible' to profits),[46] while also agreeing with our fellow defenders of the productive-unproductive distinction that it is incorrect to treat the wages of workers employed in supervisory activity, bookkeeping, finance, trade and many service industries as part of variable capital – that is, as capital that is exchanged with *productive labour*.[47] In dialectical fashion, the constant-capital specification of these systemic overhead costs allows us to recognise that unproductive capital and SNUL are at once *necessary* to overall capitalist profitability and *hazardous* to it. But to theoretically sustain this specification we are obliged to conceptualise the category of constant capital as the value expression not only of physical means of production (its definition at the level of abstraction of the first volume of *Capital*) but of *all* the expenses and investments implicated in the total process of capitalist production and reproduction, *with the singular exception of living, productive labour*, which is the sole creator of the *new value* that enters into profit-of-enterprise, interest and rent (the principal components of surplus-value) as well as the productive-labour wage bill.

The Mage-Smith conceptualisation of constant capital has enormous implications for empirical Marxist analysis. For it suggests that the *flow* of constant capital represents a much larger share of the total value of gross output than

46 See, for example, Laibman 1992.

47 See Moseley 1991, Shaikh and Tonak 1994, Shaikh 1999, and Mohun 1996. It should be noted that some proponents of the LTRPF (notably Kliman 2010 and 2012) have recently undertaken empirical analyses in support of it that treat SNUL wages as part of variable capital. This has the effect of skewing the trend for the rate of profit downward (when defined as s/[C+v]), while also misrepresenting the real trends for the rate of surplus-value (s/v) and the composition of capital (c/(s+v) or c/v). On this, see also Carchedi 2012, p. 139, n. 12.

is usually thought – and this is especially true for the most developed capitalist economies with expansive state, commercial, service and financial sectors. Other things being equal, real growth in the SNUL wage-bill and in tax revenues must produce an increase in what we call the 'value composition of output' – $c^f/(c^f+v^f+s^f)$ – that is, the ratio of the annual flow of constant capital to the total value of gross product – an increase 'likely to be associated with a declining average rate of profit'.[48]

How then does this analysis assist us in understanding the process of financialisation and the proximate causes of the financial crisis of 2007–08? In brief, the profitability crisis of the 1970s, particularly as it afflicted productive capital in the core capitalist countries, was never fully resolved due to the determination of capital and capitalist states to (a) avoid the kind of deep global depression that would involve widespread bankruptcies and a significant devaluation of capital stocks, and (b) restore profitability through a *gradual* increase in the rate of exploitation, that is, in ways that would not provoke a major politico-ideological crisis for world capitalism in the era of the Cold War. Furthermore, to sustain effective demand and to mitigate crises of overproduction, the credit system was overhauled and extended in ways that allowed for the accumulation of dramatically larger volumes of debt across the world economy. Along with the globalisation of capitalist production and the creation of significant new sites of surplus-value production in Asia and Latin America, the expansion of the debt bubble helped restore profitability and conferred upon financial capital a much enhanced role in maintaining the conditions of capital accumulation and economic growth, even as the rate of new capital formation and the growth rate of global GDP slowed in the 1980s and the 1990s.[49] Under these circumstances, fictitious capital and profits became much more significant phenomena within the global circuits of capital. The effects of the concomitant financialisation of the global economy are strikingly illustrated in Chart 7.

The proliferation of fictitious capital and the build-up of debt between 2001 and 2007 stimulated an anomalously high rate of profit in the US and robust global economic growth. But the escalating financial panic of 2007–08 signalled a growing recognition that the rising value of an array of dubious financial assets (collateralised debt obligations and other derivatives) was wildly

48 Smith 2010, p. 89; see also Smith 1984. It should be noted that massive amounts of constant capital, understood as PEV, are also stored up in physical assets whose value is not represented in annually measured gross output.

49 'Between the fourth quarter of 1981 and that of 2008, credit market debt in the US mushroomed from 164 percent to 370 percent of GDP' (Smith 2010, p. 9).

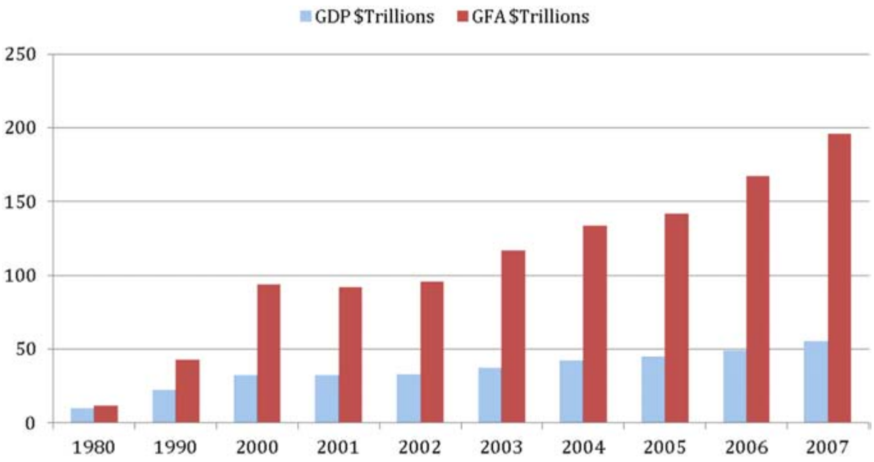

CHART 7 'Real' GDP wealth and global financial assets – 1980, 1990, and 2000–07
DATA SOURCE: MCKINSEY GLOBAL INSTITUTE

out of line with the 'economic fundamentals' (the precarious realities of the US sub-prime mortgage market, the profitability problems of productive capital, the stagnancy of real wage growth, etc.). In the end, the capitalist law of value asserted itself as a kind of gravitational force, pulling down the financial house of cards and precipitating the worst global slump since the 1930s.

This analysis suggests that the global slump that began in 2008 was by no means a typical periodic crisis of capitalism, but rather an extreme manifestation of a longer-term crisis of capitalist profitability rooted in a persistently high organic composition of capital in the 'advanced capitalist' core of the world economy. Short of a complete collapse of the latter into deep depression, the immediate prospect would seem to involve a major escalation of capital's offensive against labour on a world scale in order to boost surplus-value production and reduce systemic overhead costs, all with a view to restoring the conditions of profitability and arresting the burgeoning debt crisis.[50]

50 'Confidence' must not only be restored in the ability of the system to generate adequate profits but also in its ability to 'make good' on the Anticipated Future Value (AFV) represented by a mountain of debt – estimated in 2010 at over $ 40 trillion for the OECD countries alone. It is only in light of this new reality that the hard line of the 'troika' (the European Commission, IMF and European Central Bank) regarding Greece's especially severe and protracted debt crisis can be fully understood.

3 Profitability Trends in the US Economy: Some Recent Findings and Debates

While a conjunctural fall in US profitability was not the exclusive or even the main trigger for the crisis of 2007–08, we argue that the factors contributing to the profitability crisis of the 1970s and 1980s (above all, a high organic composition of capital) forced the average rate of profit in the US economy into *a relatively low range* for an extended period. The lacklustre profitability of productive capital set the stage for 'financialisation' and related processes that made both the US and global economies increasingly susceptible to a steep debt build-up, a proliferation of dubious forms of financial capital, and, in the upshot, a financial panic – the global sell-off of mortgage-backed securities and other exotic debt-instruments sparked by the collapse of the Lehman Brothers investment bank.

Many radical political economists have argued that, by the early 2000s, the average rate of profit in the US economy had been restored to much healthier levels – with the possible implication that reform of the 'global financial architecture' might be all that is needed to set the world capitalist economy back on a reasonably stable path of robust growth. In our view, however, these commentators have underestimated the degree to which the heightened profitability of the period 2002–07 (and to a lesser extent, much of the 1990s) was *anomalous* and critically dependent on an explosion of fictitious capital and profits associated with an orgy of unrestrained 'financial innovation' and double-dealing.

Before proceeding to our own empirical study, it will be useful to survey some of the findings and arguments of some other Marxists who have conducted empirical research on the rate of profit in the US economy in recent years. While only a few of these researchers have attempted to provide direct empirical data on the OCC or the rate of surplus-value, their findings have often had a close bearing on these fundamental Marxian ratios.

3.1 *Fred Moseley*

Moseley is prominent among those who argue that there was 'a very substantial and probably almost complete recovery of the rate of profit in the United States' in the period leading up to the crisis.[51] His findings suggest that 'the rate of profit is now approaching the peaks achieved in the 1960s'. Significantly, however, he tempers his analysis with the important observation that his estimates 'include a large and increasing percentage of profits from the financial sector … much of which will probably turn out to be fictitious'.

51 Moseley 2009.

3.2 *Anwar Shaikh*

Shaikh proposes an alternative way of assessing US profitability trends.[52] Like Moseley, he examines the *before-tax* rate of profit, registering his fidelity to the convention that treats tax revenues as a component of gross surplus-value. However, Shaikh excludes the financial sector from his analysis, calculating a 'rate of profit-of-enterprise' (the difference between the interest rate and the rate of return on active investment) which 'drives active investment'.[53] His rate of profit for US non-financial corporations is defined as the ratio of their profit 'before interest and profit taxes' to 'the beginning of year current cost of their plant and equipment'.[54] On this basis, Shaikh discloses a falling trend for the rate of profit from 1947 to 1983 and a very modestly rising trend from 1983 to 2010, with a steep fall in 2006–09 followed by a jump in early 2010. He then points to two main factors in arresting the decline in the rate of profit after 1983: 'an unparalleled slowdown in real wage growth' and 'the extraordinary sustained fall in the interest rate which began at more or less the same time'.[55] The first factor suggests a considerable increase in the rate of surplus-value, as does his graph showing a continuously widening gap between hourly productivity gains and hourly real compensation after 1983.[56] However, Shaikh makes no attempt to assess the trend for the OCC.

3.3 *Ergodan Bakir and Al Campbell*

Bakir and Campbell report findings that are broadly similar to those of Shaikh. Their analysis focuses on 'structural changes' in capitalism resulting in an *after-tax* rate of profit that has been 'lower in the neoliberal period than in the previous period'.[57] These changes are associated with an increased transfer of profits from the productive circuits of capital into financial circuits, with a simultaneous drop in the rate of capital accumulation – findings that refute 'the neoliberal claim that increased finance has improved the conditions for accumulation'.[58] However, Bakir and Campbell provide no explanation either for the 'increased finance' of the neoliberal period or for the profitability crisis that preceded – and likely encouraged – the process of financialisation.

52 Shaikh 2010.
53 Shaikh 2010, p. 46.
54 Shaikh 2010, p. 48. We note that Shaikh does not attempt to justify his implicit notion that the before-tax rate of profit, rather than the after-tax rate, 'drives active investment'.
55 Shaikh 2010, p. 50.
56 Shaikh 2010, p. 49.
57 Bakir and Campbell 2010, p. 324.
58 Bakir and Campbell 2010, p. 325.

3.4 *Simon Mohun*

Mohun's study is concerned with trends in 'aggregate capital productivity' in the US economy from 1964 to 2001 and their relationship to the rate of profit, the profit share of national income, and the rate of surplus-value.[59] The major focus is on 'the ratio of labour productivity to capital intensity'.[60] Mohun takes seriously the distinction between productive and unproductive labour, and his findings are clearly relevant to an evaluation of 'capital intensity' (Marx's TCC) and, indirectly, the OCC.

Reporting a before-tax rate of profit that fell sharply between 1964 and 1982 and rose gradually from 1982 to 2001, Mohun affirms that the 1964–82 period 'has some elements of a classical period *à la Marx*', by which he means that 'capital productivity fell steeply because a rising TCC could only generate rising labour productivity at a lower rate (and the rate of surplus-value was constant)'.[61] The rate of profit was driven down by both falling capital productivity and the rising wage-share of unproductive labour. These empirical findings seem broadly consistent with Marx's theoretical expectations.

In addition, Mohun finds that in the second period (1982–2001) the 'TCC was roughly constant, but labour productivity was rising so that real capital productivity rose sharply, driving up the rate of profit'.[62] This is in general accord with our argument that, in response to the crisis of profitability, capital and the state effectively mobilised many of the counteracting tendencies to the LTRPF, among them various methods for increasing 'absolute surplus-value' through the intensification and reorganisation of the labour process (such as speed-up, 'lean production' methods, etc.). Contrary to Mohun's implication, however, we see this response as entirely consistent with Marx's theoretical expectations. What Mohun calls the 'exceptionalism' of the later period – characterised by 'sustained annual increases in labour productivity in the absence of capital deepening'[63] – was precisely what was needed to arrest the decline in the rate of profit during that conjuncture. In the 1980s, the only viable alternative strategy for capital would have been to allow a massive devaluation of capital assets, risking a descent of the US and global economies into a severe depression at a time when the capitalist West was still facing down its Soviet adversary.

59 Mohun 2009.
60 Mohun 2009, p. 1025.
61 Mohun 2009, p. 1041.
62 Ibid.
63 Ibid.

3.5 *Andrew Kliman* (*versus Michel Husson*)

This last point brings us to a consideration of the work of Kliman,[64] whose analysis supports the claims that 'the long-term build-up of debt that led to the current crisis is in turn the result of a longstanding profitability problem', and that 'capital was not destroyed during the slumps of the 1970s and early 1980s to a degree sufficient to reverse the decline in the rate of profit'.[65] The first claim is one with which we can agree, but the second should be approached with considerable caution. While we accept that, for a variety of reasons (the Cold War, the strength of organised labour during the 1970s and 1980s, etc.), the strategists of the social capital sought to avoid a slaughtering of capital values on a scale adequate to quickly restore a dramatically higher rate of profit, we believe that the evidence is overwhelming that the rate of profit was stabilised in the 1980s and began a *gradual* rise thereafter. This was accomplished by extracting greater surplus labour from productive workers through methods that did not require large increases in the TCC, the result being a considerable rise in the rate of surplus-value.

While he denies the reality of an increase in the rate of surplus-value, Kliman is able to do so, we think, only by entirely ignoring the distinction between productive and unproductive labour, treating tax revenues as either surplus-value or variable capital, and failing to disaggregate after-tax wages and salaries into their variable capital, surplus-value, and constant capital components.

To his credit, Kliman is critical of analysts like Dumenil and Levy who have insisted that 'the structural crisis is over' and that poor accumulation rates can be blamed simply on neoliberal economic policies (a position that lends itself to reformist political prescriptions and one with which we are not in sympathy).[66] But his refusal to recognise the 'exceptionalism' of the post-1982 period cannot be justified by the implied claim that his analysis is *uniquely resistant* to the idea that the crisis is a 'purely financial one'. Analytically, a 'middle position' between Dumenil-Levy on the one side and Kliman on the other is not only possible but scientifically indicated – and such a position is clearly occupied by proponents of a variety of political perspectives.

Kliman also makes much of his commitment to 'historical-cost' measures of the capital stock and therefore of the rate of profit, as opposed to the 'current-cost' measures much more commonly used by Marxists. We think it is useful to measure, analyse and compare both historical-cost and current-cost rates of

64 Kliman 2010a, 2010b.

65 Kliman 2010b, p. 9.

66 Dumenil and Levy 2004 and 2011.

profit. At the same time, however, we agree with Husson that choosing between them 'does not have enormous empirical implications'.[67]

We also agree with Husson that Kliman's claim that the wage share of national income in the US has remained essentially constant is badly compromised by his failure to recognise that a sizable and rising share of 'wages and salaries' in the national income accounts is actually a disguised form of profit (a component of actual surplus-value): namely, the salaries of corporate executives. As Husson observes quite correctly: 'It is enough to exclude one per cent of the highest wages to find a fall in the share of wages as marked in the US as in Europe'.[68]

3.6 *Basu and Vasudevan versus Michael Roberts*

Deepankar Basu and Ramaa Vasudevan measured the US rate of profit from 1946 to 2010 in a variety of ways to find empirical evidence that the LTRPF can explain capitalist crises in general and the Great Recession of 2008–09 in particular.[69] They found that, regardless of how it is measured, the rate of profit declined between the mid-1960s and 1982, and then rose to a peak in the late 1990s. Thereafter, it fell precipitously to a very low point during the mild recession of 2001, and then peaked again in 2005 at a fairly high level before declining in the lead-up to the Great Recession. Michael Roberts reported similar findings in his own independent study. According to Roberts, 'the only measure that did not conform to this cycle of profit was one based on historic costs of fixed assets for the whole economy rather than replacement costs'.[70] This finding was also reported by Basu/Vasudevan.

However, Basu/Vasudevan and Roberts differ in their interpretations of these empirical findings. Basu/Vasudevan claim that their data show 'the current crisis [that began in 2008 – MS] was not preceded by a long period of declining profitability as was in evidence in the structural crisis of the 1970s; the fall in the rate of profit during the current crisis coincides with a short-run downward movement associated with fluctuations in the rate of profit at business cycle frequencies'.[71]

In his review of the Basu/Vasudevan study, a review worth quoting at length, Roberts contradicts their assessment and writes:

67 Husson 2010, p. 2.
68 Husson 2010, p. 6.
69 See Basu and Vasudevan 2011.
70 See Roberts 2011.
71 Basu and Vasudevan 2011, p. 19.

> For me, the rate of profit in the US was in an up-phase from 1946–65; a down-phase from 1965–82 (a structural crisis, according to B and V); an up-phase between 1982–97 (the neoliberal era according to many); and now a down-phase from 1997 … The terrific graphics provided by B and V would allow my interpretation just as much, if not more, than B and V's. The widest measure of the rate of profit à la Marx is to take the overall net value produced in an economy less the income going to wage earners and divide that by the net stock of fixed assets owned by capitalist businesses. This measure is the one I have favoured. Both B and V's results match mine exactly. They show a peak in US profitability in 1997 that is not surpassed by any subsequent peak (2005) to a low in the Great Recession. I interpret this as evidence that the US capitalist economy was and is suffering a down-phase in profitability that began in 1997, interspersed with smaller cyclical ups and downs …
>
> The Great Recession can thus be seen as a result of the downward pressure on profitability since 1997. This is the underlying or ultimate cause, but not the immediate trigger or proximate cause, which was the credit crunch and the financial crash. Once the boosting effects of the credit and property boom of 2002 onwards were exhausted in 2006, the recession was inevitable …
>
> The hi-tech revolution in the 1990s cheapened the costs of fixed assets (constant capital) and globalisation kept wage costs down as capitalist businesses relocated to cheaper locations abroad (boosting the rate of surplus-value). These trends were less effective after 1997 and a rising organic composition of capital began to overcome these countervailing factors … [P]rofitability was lower at its peak in 2005 than it was in 1997 and it fell for three years before the crisis. Indeed, by [the] end [of] 2006, the mass of profit was falling. Surely this suggests that profitability was relevant to the ensuing recession.[72]

While noting that he elides the issue of fictitious profit and fails to deduct taxes on corporate profits from his overly broad definition/measurement of surplus-value, we consider Roberts's interpretation of the trends reported in his own study and that of Basu/Vasudevan to be reasonable. For now, we would simply add that the *severity* of the crisis that unfolded between 2007–09 must take the full measure of the financial panic that resulted from the emerging recognition among investors of the discrepancy between the profitability performance

72 Roberts 2011, p. xxx.

of productive capital and that of financial capital, as well as from a very sudden and forcible awakening to the reality that the extraordinary performance of the fictitious capital responsible for sustaining asset values and stock market indices during the Bush-era 'boom' had been built on a foundation of sand.

3.7 *Freeman versus Sato*

Alan Freeman has proposed an entirely new approach to the calculation of the Marxian average rate of profit (ROP). For the latter to fully reflect the increased role of financial instruments as capital investments in recent decades, he argues, marketable financial securities should be added to fixed assets in its denominator. By including these securities in his calculations, Freeman is able to conclude that 'there is a consistent long-run fall in the UK and US rates of profit which, contrary to the figures widely used by Marxists, have both fallen almost monotonically since 1968'.[73] To be clear, Freeman goes well beyond those who maintain that financialisation is an *effect* of the persistent profitability problems of productive capital to argue that securities investments constitute a form of 'capital advance' that has *caused* a continuing, 'monotonic' decline in the 'real' profit rate in the neoliberal era. His proposal therefore raises provocative questions not only about how the denominator of the rate of profit should be understood and calculated, but also about how financial investments should be conceptualised in a Marxian analysis of contemporary capitalism.

In an incisive critique of Freeman's proposal, Takuya Sato agrees that there are many legitimate ways of measuring profitability for a variety of different analytical purposes. One way is to measure the 'return on assets' (ROA), where 'total assets include not only property, plant, equipment, and inventories, but also cash, accounts, investment securities, and long-term loans to other corporations'. This measure may have real utility in analysing the behaviour of *individual* corporations, but it is also conceptually very remote from the Marxian average rate of profit, which, along with the rate of surplus-value and the composition of capital, plays a specific role in the analysis of the movement of the capitalist economy as a whole – in other words, the laws of motion of 'capital-in-general'. This foundational point leads directly to Sato's main criticisms of Freeman's approach:

> The biggest problem is that [Freeman] effectively obliterates the classical Marxist distinction between 'real capital' (encompassing both industrial and commercial capital) and 'interest-bearing capital'. While the former participates in the formation of a 'general' or 'average' rate of profit

73 Freeman 2012, p. 167.

> through the production, realisation and redistribution of surplus-value, the latter depends on the rate of interest as a principal means of capturing a specific share of social surplus-value. Furthermore, Freeman's negation of the distinction between real and interest-bearing forms of capital leads directly to two other significant problems.
>
> First, if both fixed assets and marketable financial securities are included in the denominator of the profit rate … we cannot avoid *double counting* the value of the same assets in its calculation. Assets are counted first as real assets and then as 'credit-money-capital' (i.e., financial securities, bonds, or money capital).
>
> If one assumes that the money capital lent by a rentier to industrial or commercial firms is subsequently invested by the latter to form real capital assets, then a double-counting problem becomes altogether obvious.
>
> Second, including financial securities in the denominator of the profit rate implies that there is no conceptual difference between the rate of profit and the rate of interest. But if the distinction between the rate of profit and the rate of interest is abandoned, Marx's concept of fictitious capital cannot be maintained. What's more, the crucial theoretical difference between two distinct forms of capitalist competition over social surplus-value – one involving the competition among industrial and commercial capitalists that results in an ARP, and the other involving competition among money ('rentier') capitalists governed by the market interest rate – disappears.[74]

Further on, Sato refers to Freeman's highly problematic interpretation of Marx's concept of 'the finished form of the average rate',[75] as revealed in this statement: 'The "finished form" of the profit rate is not that which *excludes* commercial, financial, and landed capital, but to the contrary, significantly modifies the inadequate notion we might have, if we confined ourselves only to productive industry'.[76] Sato replies as follows:

> It is certainly true that, for Marx, the 'finished form' of the ARP does not exclude commercial capital; however, it *does* exclude interest-bearing capital and so-called 'landed capital'. According to Marx, while commercial capital, as a form of real, functioning capital, takes part in the formation of the ARP, interest-bearing capital does not … However, 'bank cap-

74 Sato 2015, pp. 43–4.

75 Marx 1981b, p. 459.

76 Freeman 2012, p. 184.

> ital' ought to be included insofar as it acts as 'real, functioning capital', i.e. money-dealing capital. Thus, fixed capital assets employed by banking capitalists constitute part of the total social capital 'advanced' in the total process of capitalist production and reproduction and should therefore be included in the denominator of the rate of profit. Furthermore, the surplus-value distributed to 'real, functioning' financial capital, in the form of interest earned, should also be included in the numerator …
>
> [W]hile bank capital … should be included in the denominator of the ARP and interest should be included in the numerator, *interest-bearing capital in its role as fictitious capital* (that is to say, as paper claims on the value created by real, functioning capital) should be excluded from the calculation of the ARP.[77]

Sato concludes that Freeman is correct to think that traditional methods of measuring the Marxian rate of profit are inadequate in the era of financialisation, but also wrong to address this problem by inflating 'capital advanced' – the denominator of the rate of profit – with securities. Instead greater attention should be given to a more accurate calculation of the *numerator* of the rate of profit – the total surplus-value, which is very likely inflated in most Marxian studies due to the presence of *fictitious profits*. With this conclusion, we can affirm complete agreement.

3.8 *The Problem of Fictitious Profits in National Income Accounts*

This last consideration invites an important caveat concerning any attempt, including our own, to empirically test Marx's LTRPF. In the neoliberal era of financialised capitalism, the growing weight of fictitious profits calls for considerable scepticism regarding the *composition* of 'total corporate profits' as represented in conventional national income accounts.[78] Not only are the figures for these 'booked profits' more and more *disconnected* from real magnitudes

77 Sato 2015, pp. 54–5.

78 Sato observes: 'In the context of a dramatic increase in the volume and variety of financial securities, our best strategy for improving the calculation of the Marxian ARP [average rate of profit] must be one that focuses on disaggregating the various elements of financial and corporate profits in ways that would reduce to a minimum the fictitious elements included in its numerator' (2015, p. 66). Since the current study does not attempt such a disaggregation, it must be acknowledged that the 'average ROP' reported in the next section of this study cannot be considered a truly Marxian ROP. What's more, from the mid-1980s onward, the trend for our reported ROP will deviate more and more from that of the Marxian ROP as the weight of fictitious profits increases in the statistical category 'total corporate profits'. In an interesting unpublished paper, Peter Jones (2013) has attempted to measure a 'non-fictitious corporate profit rate' for the US between 1949 and 2012. Not

TABLE 6 Annual GDP% growth, USA, 2004–14

2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
3.8%	3.3%	2.7%	1.8%	−0.3%	−2.8%	2.5%	1.6%	2.3%	2.2%	2.4%

DATA SOURCE: WORLD BANK

of currently produced surplus-value, they are also, to an increasing extent, an index of the growing reliance of contemporary capitalism on measuring wealth in terms of *future labour time* – in particular the labour time required to service the debt accumulated by working people and the capitalist state. Any nominal 'improvement' in the rate of profit that is substantially based on profits deriving from 'relations of debt/credit' rather than the creation of surplus-value must be regarded as fundamentally spurious – a fiction masking an underlying pathology that is scarcely recognised by the policy doyens of capital, not to mention 'radical' proponents of income and wealth redistribution.

In line with our earlier argument, it is also worth emphasising that fictitious capital and fictitious profits can evince *varying degrees of 'fictitiousness'*. To the extent that the specific weight of fictitious capital and profits in relation to total capital and profits increased significantly over the past thirty years, and especially in the 2002–07 period and beyond, this could only have skewed official data in such a way as to suggest both a higher rate of profit and a lower organic composition of capital than was actually the case. And since the statistical category of 'total corporate profits' – inclusive of some fictitious profits – is a major component of overall GDP, there is some reason to believe that real GDP growth, in the USA as elsewhere, has actually been lower than the official estimates reported in Table 6.

3.9 *Financial Profits as 'Redistributed Variable Capital'?*

A final caveat must be registered. Pursuing a variation on Lapavitsas's notion of the 'financial expropriation'[79] by banks of some part of workers' take-home pay, Fletcher Baragar and Robert Chernomas offer the interesting hypothesis

only does his ROP display a fairly steady decline between the mid-1960s and the advent of the financial crisis of 2007–08, but it also tracks the growth rate of 'real corporate net value added' much more closely than other measures of the ROP. Unfortunately, his study provides no estimates for trends in the rate of surplus-value or the organic composition of capital. In addition, we have some theoretical and methodological differences with him concerning the calculation of total surplus-value.

79 Lapavitsas 2009 and 2012.

that some financial profits might legitimately be conceptualised as a deduction from variable capital – effectively a redistribution of value from industrial or commercial capital to financial capital. As their indebtedness becomes increasingly entrenched, interest payments made by workers to creditors

> result in a reduction in the quantity of abstract labor time that workers actually can command from the money wages that they receive (as demonstrated by the forcible downward adjustment in consumption) … Just as the financial sector receives a portion of their claim on social labor through the interest payments by corporate borrowers, so too does financial capital obtain a share of their claim by means of the interest payments from households. Workers' real claim on abstract social labor time needs to be considered *ex post* of these interest payments.[80]

To operationalise this hypothesis empirically, however, would be an extremely difficult undertaking in our judgement. In the first place, only the wages of productive workers are variable capital; wages paid to workers in the sphere of circulation and social reproduction (including the state) are either part of the constant capital flow (the Mage-Smith approach) or part of surplus-value (the conventional approach, to which Baragar and Chernomas subscribe). It is therefore unclear in what proportions this process of financial expropriation might involve transfers or redistributions of constant capital, variable capital and surplus-value.

What is clear, however, is that some determinate proportion of financial profit *could be* attributable to such transfers, and, if so, a smaller share of profit arising from relations of credit/debt should be assumed to be fictitious. Operationally, we would hazard the guess that a correct allocation of such transfers among the categories of constant capital, variable capital, surplus-value, and 'anticipated future value' would indicate, over time, a declining magnitude of variable capital, but little change in the magnitudes of either the surplus-value or constant capital flows. This would produce a higher estimate for the rate of surplus-value (s/v) and likely a higher estimate for the organic composition of capital (C/[s+v]), while its impact on the estimated rate of profit (s/C) would be to bias it further downward. However, such a procedure would also serve to underscore the extent to which 'financialisation' is depressing workers' consumption (after initially sustaining it) and thereby hobbling investment in productive capital.

80 Baragar and Chernomas 2012, p. 332.

3.10 *The Rate of Profit, the Rate of Surplus-Value and the Composition of Capital in the US Economy, 1950–2013*

In this section, we apply the theoretical perspectives outlined earlier in this chapter to an empirical analysis of the US economy from 1950 to 2013. We caution, however, that our results are somewhat inconclusive owing to numerous technical problems associated with the translation of official economic data into the Marxian value categories. This translation problem is especially evident in our calculations of surplus-value (after-tax profits and elite salaries) and variable capital (after-tax wages of productive workers).

The National Income and Product Accounts (NIPA) tables published by the US Bureau of Economic Analysis (BEA) include no data for *after-tax* wages or *the corporate-officer share* of 'wage and salary accruals' (an income stream that properly belongs to surplus-value), rendering the calculation of after-tax wages of productive workers ('variable capital' or V) problematic. Nor do these data sets allow us to easily discriminate between productive and unproductive labour, either within economic sectors/industries or between them.

In addressing these problems, we have been obliged to apply a crude 'average tax rate on personal income' in order to derive our estimates of variable capital (V). In addition, we have derived a rough estimate of corporate-officer compensation by defining the top one percent of wage and salary earners as recipients of such compensation for every year from 1950 to 2013. This estimate, based on figures provided by Saez,[81] was subtracted from after-tax wage and salary incomes and added to after-tax corporate profits to obtain our measure of surplus-value (S). Inasmuch as the proportion of total wage and salary accruals received by the top one percent increased considerably between the 1960s and the 2000s, the growth of this (revenue) component of surplus-value contributed to the upturn in the rate of profit and the rate of surplus-value over the past 30 years while doing little to improve the degree of capital accumulation.[82]

In distinguishing between productive and unproductive labour, we have followed the classification system suggested by Shaikh-Tonak and Mohun,[83]

81 Saez 2015.

82 Just as not all corporate profits should be considered surplus-value, neither should all of the after-tax income of the top one percent. An indeterminate but growing share of this salaried income actually derives from fictitious profits. Indeed, the proportion of 'fictitious profit' relative to actual surplus-value is probably greater for this income stream of the capitalist class than it is for the booked corporate profits recorded in *NIPA*. High salary earners are typically also recipients of considerable 'capital-gains' income, which form no part of currently produced surplus-value, but which involves a combination of PEV and AFV.

83 See Shaikh and Tonak 1994, and Mohun 2005.

defining as entirely unproductive the following divisions represented in the BEA/NIPA tables: wholesale trade, retail trade, finance, insurance and real estate, business services, legal services, miscellaneous professional services, other services, private households and general government. All other divisions, including construction, manufacturing, transportation and several service industries, were defined as *entirely* productive.[84] This compromise procedure – that is to say, the treatment of *all* labour employed by productive capital as productive – may skew our results for the rate of surplus-value and the composition of capital to the extent that the ratio of supervisory to non-supervisory labour and, more generally, the ratio of unproductive to productive labour in these productive divisions vary over time. Nevertheless, we think it is reasonable to assume that the basic long-term *trends* revealed for these ratios would not be affected substantially by more exact measurements that captured such changing ratios within the productive divisions.

Notwithstanding these difficulties and compromises, our estimates should be of considerable interest to those who recognise the importance of empirically operationalising the productive-unproductive distinction in the analysis of the fundamental Marxian ratios, and particularly to those persuaded of the need for a constant-capital specification of taxes and SNUL wages – a specification which effectively *removes* these flows from the calculation of the rate of profit, the rate of surplus-value, and the OCC.

A detailed account of our methods and sources for calculating the basic variables of this study is provided in Appendix 3 at the end of the chapter.

84 Integrating estimates of the ratio of productive to unproductive labour in different sectors and industries is a notoriously difficult and arduous task. Clearly, the financial, insurance and real-estate (FIRE) sector is reasonably regarded as unproductive in Marxist terms, as are retail and wholesale trade, whose workers are involved essentially in 'changing titles of ownership' to commodities that have already been produced. But it is certainly true that many 'personal service' firms produce 'useful effects' that assume the commodity form and represent surplus-value. At the same time, however, many workers employed by productive capital (from bookkeepers and marketing specialists to supervisory personnel) are clearly not involved directly in producing commodities or surplus-value and should therefore be treated as SNUL. Among the NIPA divisions producing 'service commodities' that we have defined as productive and as employing productive labour are hotels, personal services, auto repairs, motion pictures, amusement and recreational services, miscellaneous repair services, health services, educational services, and social services. This classification system represents an advance over the system used by Smith 1991 and Smith and Taylor 1996, which involved the treatment of *all* Canadian service divisions as entirely unproductive, as indicated in Appendices 1 and 2 of this chapter.

3.11 *The Main Findings*

The principal findings of our study can be summarised concisely and are presented in a series of charts below.

First, with respect to **the rate of profit** (ROP), the current-cost ROP displays a slight upward trend over the entire period from 1950 to 2013 (see Chart 8). As one might expect, it falls rather dramatically between 1950 and the 1980s, but then begins to climb sharply from 1990 to 2007, the eve of the Great Recession.[85] Furthermore, a truly remarkable increase is observable following the recession of 2001. Indeed, it reaches a postwar peak of 16.5 percent in 2006.[86]

As previously noted, however, there are compelling grounds for regarding the exceptionally strong performance of the ROP between 2002 and 2007 (and beyond) as *anomalous* and based to a considerable extent on 'fictitious profits' booked in the finance, insurance and real estate sectors, and perhaps also by many firms operating in the productive economy (as indicated in footnote 40). This suspicion is reinforced by the performance of the before-tax 'non-financial' ROP calculated by Shaikh, which showed a steep rise between 2002 and 2006 but only to a peak of 12 percent, a level about one-third below its post-war high in 1966.[87] Our own *after-tax* non-financial ROP (presented in Chart 9 below) reaches a peak during this period of just under 7 percent in 2006, fully *half* its postwar highs in 1950 and 1965–66. Moreover, the unpreceden-

85 In Smith and Butovsky (2012), we reported that the trend line for the current-cost rate of profit (s/c) between 1950 and 2007 fell slightly, while the historic-cost rate of profit (s/c2) registered a marginally steeper decline. Distinguishing between two phases of this 57-year period, we found that in the first, longer phase (1950–82) the unstandardised regression coefficient for s/c was 0.002, a statistically significant result. In the second, shorter phase (1983–2007), this coefficient is 0.003. The results of the current study reflect some changes in official data measurement, as well as the extension of the time series to 2013. The period from 2007 to 2013 saw the current-cost rate of profit fall below the trend line in only one year: 2008.

86 In Smith and Butovsky (2012), we reported results for the ROP and other ratios when 'profits from the rest of the world' were added to the domestic corporate profit estimates to obtain s. The charts indicated that these additional profits had a positive impact on the ROP trend line, and that this was particularly so for the neoliberal period. As we noted, however, the difficulty with adding these 'repatriated' profits to the numerator was that the value of the capital stocks standing behind them in 'the rest of the world' also needed to be added to the denominator of the revised ROP. This proved impossible, however, due to the unavailability of reliable data pertaining to these stocks.

87 Chart 9 displays our modified version of Shaikh's (2010, p. 48) 'Profit-of-Enterprise' ROP – the rate of profit for US nonfinancial corporations measured as the ratio of *after-tax* profits to the beginning of year current cost of their plant and equipment. It should be noted that this ROP is not the rate of profit of 'productive capital' alone, as it includes profits realised by commercial capital and unproductive capital operating in the service sector as well.

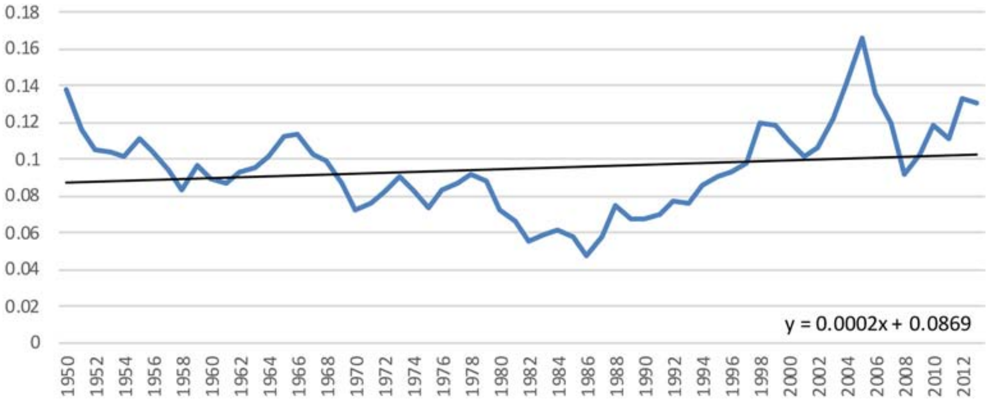

CHART 8 The rate of profit, USA, 1950–2013 (s/c)
SOURCE: SMITH AND BUTOVSKY 2018 (FORTHCOMING)

ted growth in the mass of profits during this period was accompanied by rates of new capital formation that were unusually sluggish in the context of an allegedly booming economy,[88] as well as by a relatively low taxation rate on corporate profits.[89] As investment in capital stocks stagnated, already-high levels of public and private debt soared under the combined impact of the costly Iraq War and the expanding housing bubble. And so, of course, did profits. The conclusion is obvious: the anomalously high mass and rate of profit during the 'era of financialisation' – and most obviously during the 2002–07 period – was made possible only by the accumulation of an enormous volume of debt obligations – that is to say, of fictitious capital understood as claims on future income.

The anomalous 2002–07 ROP was, then, both illusory and unsustainable. The ROP was bound to fall dramatically, and this was duly accomplished in 2008. With slightly higher profits in 2009, the ROP returned to a level closer to its long-term trend line. Overall corporate revenues remained low, however, suggesting that enterprise cost cutting (and some devaluation of capital stock resulting from the recession) was responsible for the improved profit rate. The NIPA estimates for after-tax domestic corporate profits of $666 billion in 2008 and $845 billion in 2009 stood well below the record $1.12 trillion registered in 2006. However, a sharp spike to an estimated $1.07 trillion in 2010, followed by $1.00 trillion in 2011, $1.28 trillion in 2012, and $1.36 trillion in 2013, suggested continuing volatility in the mass of profits, the ratio of financial to non-financial

88 See Bakir and Campbell 2010.
89 See McIntyre and Nguyen 2004.

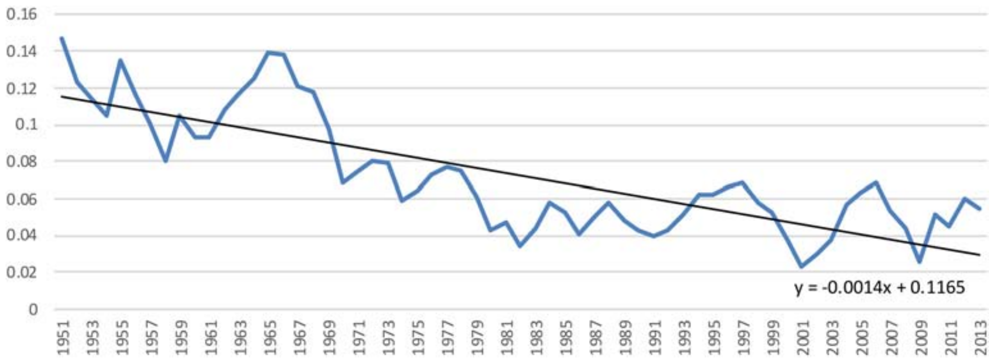

CHART 9 Non-financial corporate rate of profit (after tax), USA, 1950–2013
SOURCE: SMITH AND BUTOVSKY 2018 (FORTHCOMING)

profits, and the nominal ROP. Indeed, this spike was due in good part to the remarkable recovery of financial profits made possible by the government-funded bailout of the big banks as well as the massive infusion of liquidity into the banking system by the US Federal Reserve at zero percent interest. The Fed's continuing 'quantitative-easing' policy beyond 2010 explains a major part of the continuing recovery of profitability over the 2011–13 period. While the ROP of this period undoubtedly benefited from real gains in the rate of exploitation of productive labour (s/v), it is entirely reasonable to think that, due to the continuing presence of massive fictitious profits generated in the financial sector and beyond, the nominal ROP, as reported, remains considerably inflated relative to the 'real' (Marxian) ROP.

Second, with respect to **the rate of surplus-value** (S/V), we find that it averaged 38% in the 1950s, 38% in the 1960s, 42% in the 1970s, 34% in the 1980s, 46% in the 1990s, and 62% from 2000 to 2013 (see Chart 10). While the trend for S/V is essentially flat between 1950 and the 1970s, it falls after 1978, reaching its lowest point in 1986. It then embarks on a strongly upward trend between 1986 and 2007. Its trajectory over this latter period, as well as between 2008 and 2013, is very similar to that of the (anomalous) ROP. These findings support the proposition that the decline in the ROP was arrested in good part due to a significant increase in the rate of exploitation of productive labour (S/V), with a long-term decline in corporate taxation playing a supplementary role. This increased exploitation is reflected in the widening gap between the growth of labour productivity and the growth of hourly real compensation,[90] which itself must be explained in terms of changes in the labour process, on the one hand,

90 See Shaikh 2010, pp. 49–50.

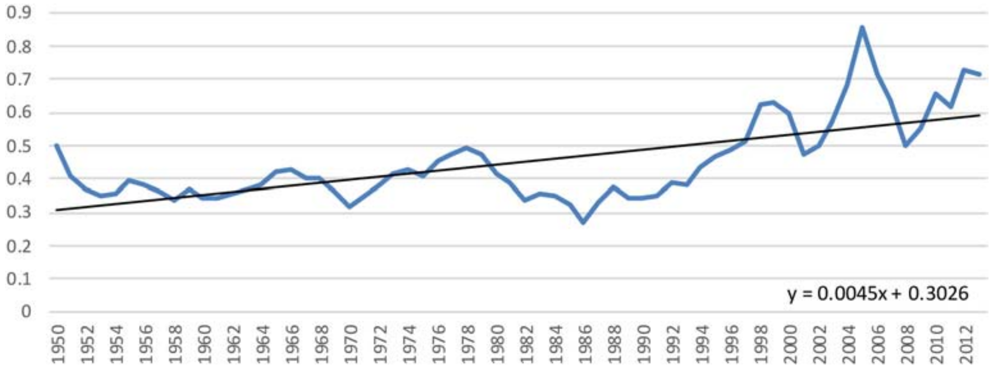

CHART 10 The rate of surplus value, USA, 1950–2013 (S/V)
SOURCE: SMITH AND BUTOVSKY 2018 (FORTHCOMING)

and falling or stagnant real wages, on the other. Again, however, to the extent that it reflects a massive growth of fictitious financial profits, the sharp spikes in S/V between 2002 and 2007, and again between 2010 and 2013, should be viewed as anomalous.[91] That said, it is important to note that while the ROP's trend line increased only slightly over the 63-year period examined, the trend line for s/v nearly doubled. The large discrepancy between these two trends is, of course, attributable to the effect of a rising value and organic composition of capital.

Finally then, with respect to **the organic composition of capital** (OCC), which Marx understood to be the *value expression* of the ratio of 'dead to living labour in production', we find that the current-cost OCC displays a strong upward trend between 1950 and 2007, reaching a peak of 4.54 in 1982 compared to a postwar low of 2.42 in 1950 (see Chart 11).[92] Much of this increase occurs after the onset of the profitability crisis of the 1970s. However, the OCC exhibits a very gradual long term declining trend between 1982 and 2007. The stabilisation of the OCC during this period (in a range that is nevertheless well above that of 1950–74) suggests that the major underlying cause of the profitability malaise of the past 30 to 40 years continues to assert itself. This conclusion is reinforced by the even stronger upward trend of the **value composition of cap-**

91 The trend line for S/V is flat in the 1950–82 phase, but registers a strong, statistically significant rise in the 1983–2013 phase (its unstandardised regression coefficient in the latter phase is 0.014).

92 In Smith and Butovsky (2012), we noted that the 'upward trend for the historical-cost OCC is even more pronounced, with the latter reaching a peak of 2.43 in 2000 compared to 1.16 in 1950'.

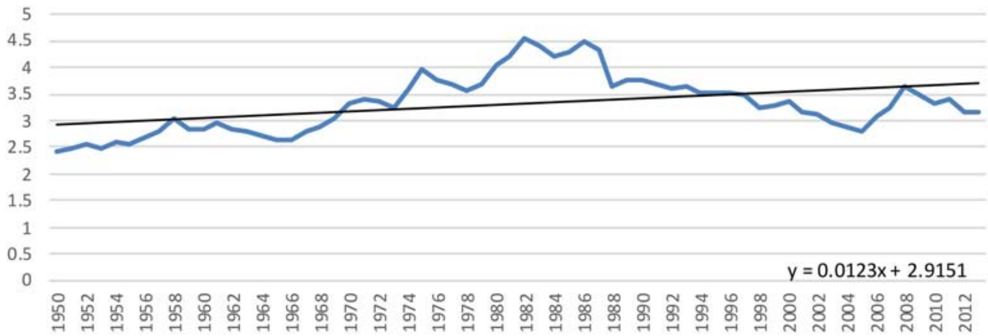

CHART 11 The organic composition of capital, USA, 1950–2013 (C/S+V)
SOURCE: SMITH AND BUTOVSKY 2018 (FORTHCOMING)

ital (C/V), a ratio that effectively removes both actual and fictitious profits from the picture (see Chart 12 for the current-cost C/V).[93]

The steep fall in the OCC in the early 2000s coincides with comparably steep rises in the ROP and S/V. We think that this fall is associated with the proliferation of fictitious capital and profit, the super-profits realised by US 'defence' contractors following the invasions of Afghanistan and Iraq, and the anomalously slow pace of new capital formation during the Bush-era 'boom'. In light of all this, it is reasonable to think that the path of the 'real' OCC may be returning to its historic (upward) trend line even as our reported OCC for 2009–13 remains below it owing to the inflationary effect of fictitious profits on its denominator.

The results of this study of the US economy lend considerable support to the thesis that the crisis of global capitalism that erupted in 2007–08 is due to the persistent profitability problems of productive capital, and that these problems are at the root of the 'financialisation' phenomenon and debt crises that are now destabilising the world system. Furthermore, its findings reinforce the argument that the global capitalist slump is unlikely to be overcome without far more savage attacks on labour by capital than those that characterised the pre-2008 neoliberal era, and without a quite significant devaluation of capital stocks involving widespread bankruptcies and persistently high levels of unemployment. In some significant measure, the super-profits reaped by Wall Street and European banks in the wake of the government bailouts of 2009 must also be seen as having been purchased through an increase in state debt obligations,

93 For the first (1950–82) phase, the regression coefficients for the OCC and the VCC are 0.04 and 0.05 respectively, while for the second (1983–2013) phase it is –0.03 for the OCC. In the second phase, the VCC registers a flat trend.

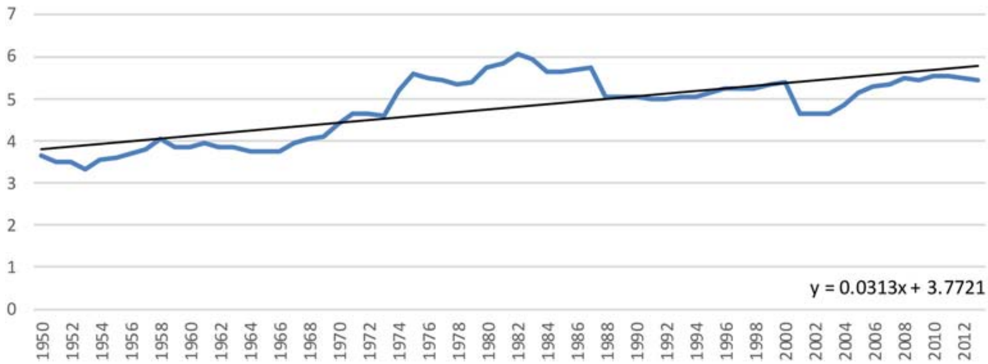

CHART 12 The value composition of capital, USA, 1950–2013 (C/V)
SOURCE: SMITH AND BUTOVSKY 2018 (FORTHCOMING)

a form of fictitious capital. To stem this rising tide of debt, draconian austerity measures and increased levels of exploitation are now being imposed on the international working class.[94]

The period we are entering marks a critical turning point within (or beyond) the neoliberal era. In the absence of concerted and effective working-class resistance, requiring the emergence of a consciously anti-capitalist labour movement, a major restructuring of capital values and class relations is now well underway – one that may augur well for 'real' profitability in the long term but that will also produce greatly increased economic and political instability throughout the world and devastating results for the working class everywhere, including in the 'developed' capitalist countries.

This new period – one that might be dubbed 'neoliberalism with a vengeance' – is clearly fraught with great perils, including the likelihood of intensified rivalry among the major economic powers, the rise of right-wing populism, and an accelerated assault on the rights and living standards that working people took for granted in the liberal-democratic West for decades after World War II – and even well into the neoliberal era.

Taken as a whole, our analysis suggests that, for the working-class majority of the United States and other advanced capitalist countries, improved living

94 After fluctuating between 69 and 76 percent from 1993 to 2005, the total financial liabilities of OECD governments as a percentage of the OECD's combined GDP rose rapidly between 2006 and 2011, from 74.5% to 102.4%. The total deficit for OECD countries saw a six-fold increase as a percentage of combined GDP between 2006 and 2010 (from –1.3% to 7.7%). According to more recent OECD figures, 'general government gross financial liabilities' as a percentage of total OECD GDP was 111.2% in 2015 compared to 79.9% in 2008. See also Roberts 2016, and Carchedi and Roberts 2018.

standards will *not* be achieved through increased taxes on the rich or other modes of 'progressive' income redistribution. To be sure, the capitalist class is hoarding – and in many cases hiding – immense amounts of money profit.[95] But much of this profit has a purely 'fictitious' character, deriving from a growing volume of debt borne by capitalist governments and the working class. The function of the hoarded profit has been to 'buy back' stocks in major corporations and financial institutions with a view to sustaining or inflating stock-market values and to otherwise lubricate a financial system that increasingly resembles a gigantic Ponzi scheme.[96]

Under the rule of capital, this paper wealth – consisting more and more of claims on 'anticipated future value' (AFV) – cannot and will not be made available for investment in the 'real' (productive) economy, and nor will it be transferred to workers with a view to stimulating 'aggregate demand'.[97] The reason is simple: such reallocations of AFV would amount to using existing debt to finance activities that risk increasing the OCC and/or lowering the rate of exploitation, thereby exacerbating the crisis of valorisation and depressing the (actual) rate of profit. Accordingly, any 'left' strategic project predicated on the 'progressive reform of capitalism' can only be regarded as a utopian-reformist illusion – and certainly much less realistic than Marx's own revolutionary-transformative project involving 'the expropriation of a few usurpers by the mass of the people'.[98]

The conclusion is unavoidable. Now, more than ever, Marxist socialists must declare boldly and without equivocation that the time has arrived to replace a socio-economic order geared toward generating profits for the few with a fully socialist system of production to meet the needs of the many.

95 Zucman 2015.

96 Jason Thomas, a researcher for the private equity firm The Carlyle Group, notes that 'since 2009, just after the Federal Reserve took interest rates to near zero, US companies have boosted stock buybacks by 194 percent and dividends by 66.5 percent, but investment by [only] 43 percent'. Major corporations have capped or reduced their capital budgets while boosting dividends. Barry Grey (2016) writes that 'the enormous subsidies from governments and central banks are being used by banks and corporations not to increase the productive forces, but to reward their top executives and major shareholders by bidding up the value of their stock holdings and increasing their capital gains'.

97 This prescription has been advanced in some left social-democratic circles under the rubric of 'popular quantitative easing'.

98 Marx 1977, p. 929.

4 Appendix 1: Data Sources and Methods for Smith (1991b) Study of Canadian Economy, 1947–80

1. *Constant Capital* (*stock*): The sum of fixed and circulating constant capital in both the sphere of production and the sphere of circulation (inclusive of commercial services, trading, and finance, insurance and real estate) in the non-farm, incorporated business sector of the economy. Current-dollar figures on the fixed capital stock were obtained from the Statistics Canada bulletin, *Fixed Capital Flows and Stocks*, 1926–78, and from a more recent bulletin for 1974–80. Figures on the net capital stock (the measure used) include the value of four components of fixed capital expenditure and investment: building construction, engineering construction, machinery and equipment, and capital items charged to operating expenses. The circulating constant capital stock for manufacturing was obtained from the Statistics Canada bulletin, *General Review of the Manufacturing Industries of Canada*, Vol. 1 and calculated as the sum of 'cost of fuel and electricity' and 'cost of materials and supplies used'. Comparable data for the non-manufacturing sectors, unfortunately, could not be located. A detailed description is provided in Smith 1984.

2. *Variable Capital* (*annual flow*): The after-tax income of all workers employed by 'productive capital' plus estimated employer and employee contributions to unemployment insurance and pension plans. Current-dollar figures for V were obtained from the Statistics Canada bulletins, *National Income and Expenditure Accounts. Vol.* 1. 1926–74 and *NIEA*, 1967–81. Excluded from consideration as variable capital were wages and salaries paid out in agriculture, wholesale and retail trade, the FIRE sector, Public Administration and Defence, and community, business and personal services. All figures from Statistics Canada concern before tax income; consequently a comprehensive tax rate table had to be constructed to obtain after-tax estimates. For detailed discussion, see Smith 1984.

3. *Surplus-value* (*annual flow*): The sum of profits and other investment income (after tax), the estimated corporate officer share of 'wages, salaries and supplementary labour income' (from *NIEA*), and the estimated amount of surplus-value transferred to the state. As with variable capital, the after-tax measurement of surplus-value required the use of a comprehensive tax rate table. The ratio of 'total taxes' (received by all levels of government) to 'net national income at factor cost' (Table I, National Income Accounts) was defined as the effective tax rate on income. For detailed discussion, see Smith 1984.

5 Appendix 2: Data Sources and Methods Used in Smith-Taylor (1996) Study of the Canadian Economy, 1947–91

1. *Constant Capital* (*stock*): The current-dollar value of fixed capital in both the sphere of production and the sphere of circulation (inclusive of commercial services, trading, and finance, insurance and real estate) in the non-farm, incorporated business sector of the economy. Current-dollar figures on the fixed capital stock were obtained from the Investment and Capital Stock Division of Statistics Canada. The current-dollar value of the capital stock for the included categories of the economy were reduced by a percentage reflecting the share in GDP of non-farm unincorporated business sector income for each year from 1947 to 1991 (as indicated by figures provided in the Statistics Canada series, *National Income and Expenditure Accounts*). This was done in order to avoid a bias associated with the declining weight of the latter sector in the economy and therefore in the aggregate value of fixed capital. Figures on the net capital stock (adjusted for straight-line depreciation) include the value of four components of fixed capital expenditure and investment: building construction, engineering construction, machinery and equipment, and capital items charged to operating expenses.

2. *Variable Capital* (*annual flow*): The after-tax income of all workers employed by 'productive capital' plus estimated employer and employee contributions to unemployment insurance and pension plans. Current-dollar figures for 'v' were obtained from the Statistics Canada series, *National Income and Expenditure Accounts*. Excluded from consideration as variable capital were wages and salaries paid out in agriculture, wholesale and retail trade, the FIRE sector, Public Administration and Defense, and community, business and personal services. All figures from Statistics Canada refer to before-tax income; consequently, a comprehensive tax table was constructed to calculate after-tax estimates.

3. *Surplus-value* (*annual flow*): The sum of profits and other investment income (after tax and net of inventory valuation adjustment), the estimated corporate officer share of 'wages, salaries and supplementary labour income', and the estimated amount of surplus-value transferred to the state. As with variable capital, the after-tax calculation of surplus-value required the use of a comprehensive tax rate table. The ratio of 'total taxes' (received by all levels of government) to 'net national income at factor cost' was defined as 'the effective tax rate on income'. The income flows were calculated from data provided in the Statistics Canada series, *National Income and Expenditure Accounts*. For further information of methods used, see notes 28 and 30 in Smith and Taylor 1996.

6 Appendix 3: Data Sources and Methods Used in Smith-Butovsky (2018) Study of the US Economy, 1950–2013

1. *Constant capital stock*: Value of the net stock of private assets measured according to both current-cost (*c*) and historic-cost (*c2*) criteria. *c* = current-cost net stock of private fixed assets, year-end estimates (BEA Fixed Assets, Table 6.1, line 2). Our charts refer only to *c* as calculated in our spreadsheet. *c2* = historic-cost net stock of private assets, year-end estimates (BEA Fixed Assets, Table 6.3, line 2) and are referred to in footnotes based on our spreadsheet data. *c2* figures in our spreadsheet, for each year, correspond to the historic-cost figure at the beginning of the year, i.e. the end of the prior year. (For example, the 1980 figure in the BEA table is our spreadsheet figure for 1981. This is the procedure also followed by Kliman 2010).

2. *Surplus-value* (*annual flow*): Corporate Profits after Tax, for Domestic Industries, taken from BEA NIPA Table 6.19 B, line 2 plus after-tax earnings of the top 1 percent of the recipients of 'wage and salary accruals' = S. The proportion of earnings represented by the top 1 percent of wage and salary earners was obtained from Saez 2015.

3. *Variable Capital* (*annual flow*): Total Wages and Salary Accruals (NIPA Table 6.3B, Line 1) *minus* line 50 (wholesale trade), line 51 (retail trade), line 52 (finance, insurance and real estate), line 63 (business services), line 69 (legal services), line 74 (miscellaneous professional services/ other services), line 74 (private household services) and lines 72 and 83 (general government services, federal, state and local) = before-tax wage-bill of productive labour. *v* = before-tax wage-bill of productive labour *minus* estimated tax deductions calculated by multiplying the 'effective tax rate on income' by the productive-labour wage-bill. The effective tax rate was calculated as the ratio of personal current taxes (NIPA Table 3.1, line 3) to personal income (NIPA Table 2.1, line 1).

4. *After-tax, non-financial ROP*: The procedure for calculating this (Chart 9) follows Shaikh (2010) in all respects, with the exception that we used *after-tax profit figures* while Shaikh used before-tax figures. 'Corporate profit as listed in NIPA is net of actual net monetary interest paid, so we need to add the latter item back in order to get profits before interest' (Shaikh 2010, p. 58, Appendix).

CHAPTER 11

Beyond the Law of Value: Class Struggle and Socialist Transformation

> If only one tenth of the human energy that is now expended on reforming capitalism, protesting its depredations and cobbling together electoral alliances within the arena of bourgeois politics could be channelled instead into an effective revolutionary/transformative political practice, one suspects that the era of socialist globalization would be close at hand … The objective, historical conditions for a socialist transformation are not only ripe; they have become altogether rotten. The global capitalist order is presently in an advanced state of decay. The vital task today is to bring human consciousness and activity – the 'subjective factor' – into correspondence with the urgent need to confront and transform that objective reality.[1]

Such was my assessment in *Global Capitalism in Crisis*, published in the immediate aftermath of the Great Recession of 2008–09. Nearly a decade on, one must concede perforce that little progress has been made in accomplishing the vital task prescribed. The capitalist class has waged a remarkably successful campaign to suppress the emergence of a mass socialist workers movement capable of addressing the 'triple crisis' of twenty-first-century capitalism that was outlined in Chapter 1.

In the face of persistent global economic malaise, growing inequality, accelerating climate change, and worsening international relations portending world war, global capitalism has avoided a crisis of legitimacy proportionate to the dangers facing humanity. This anomaly speaks volumes about *the power of ideology*, as deployed by the main beneficiaries of the capitalist order, to 'obscure social reality and deflect attention from the demonstrable connections that exist between the capitalist profit system and the multiple crises of the contemporary world'.[2]

In *The German Ideology*, Marx and Engels wrote: 'The ideas of the ruling class are in every epoch the ruling ideas: i.e. the class, which is the ruling material

1 Smith 2010, p. 134.
2 Smith 2014, pp. 13–14.

 DOI:10.1163/9789004312203_012

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'.[3] For the founders of scientific socialism, however, this was by no means the whole story, since the consciousness of those who lack 'means of mental production' is determined not only by the reigning ideologies of the ruling class but also – in the end, more profoundly – by their own lived experiences and the glaring contradictions of their social being. For this reason, powerful socialist workers movements were able to emerge from the thick fog of ideology and tradition in the nineteenth and twentieth centuries, movements which not only forced the capitalist class to make real concessions to the working-class masses (in a bid to secure 'class peace'), but which also posed the question of working-class power and socialist transformation. The most famous anthem of the class-conscious proletariat, *The Internationale*, took up these great themes in the following stirring lyrics:

> Arise, ye prisoners of starvation!
> Arise, ye wretched of the earth,
> For justice thunders condemnation,
> A better world's in birth.
> No more tradition's chains shall bind us,
> Arise, ye slaves; no more in thrall!
> The earth shall rise on new foundations,
> We have been naught, we shall be all![4]

Today, in the twilight of capitalism, we are confronted by the paradox that while the conditions of social being are becoming more and more intolerable, the ideological dominance of the capitalist class (its 'hegemony') remains relatively secure. To explain this adequately, however, requires something more than an invocation of Marx and Engels's time-honoured dictums; it requires a willingness and ability to take the full measure of the immense historical defeat inflicted on the working class by the rise and fall of Stalinism in the twentieth century.[5]

3 Marx and Engels 1968, p. 89.

4 Eugène Edine Pottier 1871.

5 See Smith 2014, especially Chapters 8 and 10, entitled respectively 'Revisiting Trotsky: Reflections on the Stalinist Debacle and Trotskyism as Alternative' and 'Socialist Strategy Yesterday

Stalinism was (and remains) much more than an ideological perversion of Marxist socialism; it was/is, fundamentally, the social phenomenon of *bureaucratic-oligarchic rule* on the basis of collectivised property forms. The damage done by this phenomenon has been wide-ranging and incalculably grave – in its betrayal of the great promise of the Russian socialist revolution of 1917, its besmirching of the 'socialist ideal', its murderous repression of its revolutionary Marxist opponents, its perfidious and essentially counter-revolutionary influence on the most class-conscious workers' movements in the world, and its false self-identification (cynically abetted by the ideologues of capitalism) with the project of Marxist socialism. The sudden collapse of Stalinist 'real socialism' in the former Soviet bloc between 1989 and 1991 and its protracted withering away in China over the past quarter century could only have lent powerful credence to the plethora of well-orchestrated verdicts on Marx's theory and programme that are as stridently negative as they are ignorantly tendentious.

Owing to the fact that the crisis of Stalinist bureaucratic rule found partial but unmistakable expression as a 'crisis of planned economy', the lesson most easily drawn and widely promulgated by virtually all opponents of Marxist socialism was that 'free market forces' are indispensable to the optimisation of economic productivity and prosperity. Due in good part to the deepening crisis of global capitalism, however, this pro-capitalist lesson has lost much of its credibility since the early 1990s. Even so, the contradictory and often bitter experience of Stalinist 'real socialism' continues to be summoned with real effect against the programmatic thrust of Marx's theory: the need to achieve a society in which the relations of people to people are no longer dominated by 'objective bonds' and in which 'universally developed individuals, whose social relations, as their own communal relations, are … subordinated to their own communal control' can fulfill the promise of a non-alienated individuality marked by 'universality and the comprehensiveness of … relations and capacities.'[6]

As the historical-structural crisis of capitalism continues to unfold, Marx's unified theoretical and political project is sure to be embraced once again by many millions of people striving for rational answers to the enormous problems of our twenty-first-century world. But for this to happen in the most propitious of ways, the hegemonic forms of 'Marxist-socialist practice' in the last century (social-democratic gradualism and Stalinist 'national reformism') will

and Today: Notes on Classical Marxism and the Contemporary Radical Left' (the latter co-authored by Joshua D. Dumont).

6 Marx 1973, p. 162.

need to be exposed for what they were: fundamental departures from Marx's value-theoretic critique of capitalism and programme for human emancipation.

Fortunately, this exposure should be much easier to undertake in the years to come than at any other time in the past.

Recent historical experiences, several of which were referenced in Chapter 1, have revealed to growing numbers that no good reasons exist to believe that the working class ought to conciliate the bourgeoisie with a programme of reforms *within* the framework of capitalism, or that progress toward a rationally planned socialist economy can be made *without* the full and democratic participation of the associated producers and consumers, and *without* the support of a globalised socialist division of labour. To claim that Marx thought otherwise, as many purported 'Marxists' still do, is to engage in the worst kind of chicanery. Marx's analysis of capitalism points socialist practice precisely and unmistakably toward a revolutionary confrontation with the capitalist order – a social order that relies on the operations of the law of value to divide, disorient, and blackmail the working class into abiding by capital's 'rules of the game'. And just as decisively, Marx's critique of capitalist alienation suggests that the material and social bases for authentic socialism can only be laid through a commitment to internationalist (universalist) principles and a qualitative extension of individual human capacities – something that is impossible to achieve so long as society remains in the grip of a bureaucratic dictatorship.

For revolutionary Marxists, Marx's true followers, the debilitating contradictions of advanced capitalism necessitate the scrapping of both the 'free market' and bureaucracy as the dominant (mutually reinforcing) modes of social organisation in favour of a system of socialist 'self-administration' and rational planning – a system whose prerequisite (a radical reduction in 'necessary labour' through an accelerating technological revolution and automisation of production) has been brought into being by capitalism itself, even as the latter must continue to block its full realisation in compliance with the law of value.

This internationalist-socialist vision of real human progress needs to be vigorously promoted as a counterweight to the reactionary forces and ideas now being unleashed in response to the decay of capitalism. Accordingly, Marxists must shed their traditional reticence to 'construct in thought' an appealing vision of an alternative socialist society, not least because such a vision is more than ever necessary to motivating an authentically socialist human agency. Only on this condition can the pervasive 'cynical reason' of our time be overcome and confidence in human progress recaptured, for only then can we begin to anticipate the end of the abhorrent rule of capital – and the increasingly irrational domination of the Invisible Leviathan.

The practical, 'programmatic' relevance of the law of value to the revolutionary socialist project that all of Marx's theoretical work was intended to serve has been referenced throughout this book, and yet most participants in the controversy surrounding value theory have been reluctant to explore the intimate link it has always had with practical political concerns. This final chapter seeks to redress this deficit by focusing on two interrelated aspects of the interface between the theory of value and socialist politics: the first pertaining to the urgent task of delineating a programmatic orientation for the workers' movement to end the rule of capital, and the second pertaining to issues of 'socialist construction'. Given the enormous scope and highly contentious nature of the questions addressed, as well as the limited space that can be given to them here, the aim of the following discussion is essentially exploratory – to suggest *some* of the ways in which value theory can be articulated with the class-struggle politics of Marxist socialism. Needless to say, no pretence is made here to exhausting the topic.

1 The Working Class, Value, and Anti-capitalist Struggle

The questions we begin with are these: Can Marx's value-theoretical analysis of capitalism contribute significantly to explaining historical changes in the physiognomy and social weight of the working class? And if it can, does a value-theoretical analysis of class help us to understand the uneven and discontinuous development of working-class consciousness and class struggle over the history of capitalism? The answers to these two questions are of signal importance to Marxism understood as an 'integrated' theoretical-political project, for this project has always been predicated on the idea that the working class not only has an 'historical interest' in ending the rule of capital and abolishing capitalist relations of production, but is also strategically positioned to undertake the reorganisation of society along socialist lines.

From the perspective of the early twenty-first century, Marx's original vision of workers' revolution may seem quixotic to many, particularly if the 'working class' is defined, as it so often has been, to exclude the more skilled and better educated wage and salary earners. But once it is understood that the working class, as Marx defined it, constitutes a decisive majority of the population of the developed capitalist countries and an emerging majority in many newly industrialising ones, and once it is stipulated that this majority should be able to rally the support of at least some segments of the professional-managerial and intellectual 'middle class' in its more serious confrontations with a capitalist order that is not merely in decline but in an advanced state of decay, Marx's vision of proletarian revolution begins to lose it aura of 'unrealism' – while the antithetical notion of capital's 'eternal rule' acquires the unmistakable aspect of a fantastic dystopia.

1.1 *Marx's Proletarianisation Thesis*

In the *Communist Manifesto* and some of his other writings, Marx refers to the inevitability of a process of polarisation between the two fundamental social classes of capitalist society, the bourgeoisie and the proletariat, and a concomitant decline of all other classes. Furthermore, in the famous climactic chapter of *Capital*, Volume I, entitled 'The General Law of Capitalist Accumulation', Marx predicted the historical eclipse of the middle class and its proletarianisation consequent to the concentration and centralisation of capital. This may be referred to as Marx's 'proletarianisation' thesis.

Has this prediction been borne out by history? Before this question can be answered, two preliminary observations are in order. The first is that Marx, unlike many Marxists, never disqualified 'unproductive' labourers from the ranks of the working class – understood, in Carchedi's sense, as the 'collective labourer'.[7] The second is that Marx appeared to believe that unproductive labour was a phenomenon subject to gradual historical decline with the further development of capitalism. In this latter regard, however, he turned out to be both correct and incorrect. Marx was certainly right to expect that the traditional ranks of the unproductive labour force – domestic servants and other hangers-on of the privileged classes – would diminish over time. But his expectation was wrong inasmuch as it failed to anticipate the emergence and momentous expansion of new types of unproductive labour – the socially necessary yet unproductive workers employed by the state and by commercial, financial and industrial capital. Arguably, Marx's failure in this respect can be attributed to an unduly 'optimistic' view that capitalism would not overstay its historical welcome: the growth of socially necessary unproductive labour may be seen, after all, as a by-product of a rather long and drawn-out historical-structural crisis of the capitalist mode of production. All the same, the proliferation of such labour, as discussed in Chapters 8 and 10, can only be properly understood in light of the operations of the capitalist law of value – and the long-term effects of the law of the falling rate of profit.

While Marx never disqualified all unproductive labourers from the ranks of the proletariat, the same cannot be said for a great many twentieth-century class theorists, Marxist and non-Marxist alike. It has been remarkably com-

7 Carchedi 1977 and 1983.

mon for neo-Weberian and functionalist sociologists to distinguish between 'white collar' and 'blue collar' workers and to rather impressionistically draw a class line between them. In a similar vein, Nicos Poulantzas has argued, from a purportedly Marxist standpoint, that wage-labourers who are not directly productive of 'material' commodities, and/or who are engaged instead in mental labour or supervisory functions, are properly classified as non-proletarian constituents of a 'new petty bourgeoisie'.[8]

Other Marxist theorists have maintained that membership in the working class should be reserved to those wage-labourers who create surplus-value, whether in the course of producing material or service commodities. J.K. Lindsey, a good representative of this approach, argues that the 'production working class' should be distinguished from the 'circulation working class' on the grounds that the former is exploited while the latter is merely 'oppressed'.[9] Lindsey makes the unobjectionable point that the relation between production and circulation workers is not an antagonistic one; yet this sits uneasily with his thesis that circulation workers, along with the members of what he calls 'an ideological class', live off the surplus-value appropriated by capitalists. Like many other Marxists, he conflates the various categories of unproductive labour and then asserts that all unproductive labour is 'exchanged with revenue'. In this way, socially necessary unproductive labourers are treated, in value-theoretical terms, as a kind of 'luxury good' of the social capital, employed at the sufferance of the bourgeoisie and supported out of the revenue component of social surplus-value. Even though socially necessary to the reproduction process of capitalist society, these workers are regarded no more as victims of capitalist exploitation than are the domestic servants with whom they are conceptually assimilated.

An extended argument for rejecting such an understanding of socially necessary unproductive labour has already been made in Chapters 8 and 10 and need not be repeated here. The different locations of production and circula-

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8 Ellen Meiksins Wood, in her important book *The Retreat from Class*, identifies Poulantzas (1978) as the forerunner of a non-class-struggle 'new "true" socialism' that has been embraced by many erstwhile Marxists, among them Gorz (1982) and Laclau and Mouffe (1985). As Wood demonstrates so well, Poulantzas's erroneous theoretical conceptualisations of class were very much in the service of first a Maoist and then a Eurocommunist politics oriented toward subordinating the independent workers' movement to class-collaborationist, 'popular front' alliances. The influence of such Stalinist conceptions continues to inform the theory and politics of many who now identify with 'post-Marxist socialism', as well as a majority of ostensible Marxists. On this, see also Smith 1996–97 and Smith 2014, Chapters 8 and 10.

9 Lindsey 1980.

tion workers within the overall process of capitalist reproduction should nevertheless be appreciated. Circulation workers, along with workers employed or maintained by the capitalist state, are rather 'directly' involved (whether consciously or unconsciously) in the reproduction of capitalist social relations, while production workers are more directly involved in the reproduction of the 'physical' elements of society. Theoretically, this circumstance may make circulation workers less likely than production workers to develop anti-capitalist attitudes. Even so, such a hypothetical difference in consciousness is an inadequate basis for contending that circulation workers are 'not exploited' and therefore belong to a 'different class' than production workers. One should add that it is highly questionable whether such a difference in consciousness can be convincingly established, much less linked to different structural locations in reproduction.[10] Indeed, over the last few decades, unproductive public-sector workers (teachers, civil servants, healthcare workers, etc.) have often been in the forefront of working-class struggles against worsening capitalist austerity and privatisation of social services and infrastructures.

Although a clarification of Marx's ideas regarding socially necessary unproductive labour is of great moment to a value-theoretical mapping of the contemporary class structure, it hardly resolves all of the pertinent questions under debate. For example, Erik Olin Wright, following a cogent critique of Poulantzas's catch-all category of the 'new petty bourgeoisie', fruitfully suggested in an early work that 'positions within the social division of labour can be objectively contradictory', and, proceeding from this insight, identified several 'contradictory class locations' situated at the boundaries of the three principal social classes of capitalist society: the bourgeoisie, the proletariat, and the (traditional, self-employed) petty bourgeoisie.[11] For Wright, contradictory class locations can exist between any pair of these classes, suggesting that the individuals occupying such locations share structural characteristics in common with more than one class (for example, a foreman, who 'commands' the labour of others but who remains subject to exploitation by capital).[12] Robert Weil takes Wright's analysis a step further, arguing persuasively that petty-bourgeois

10 See Wright 1985 and Carchedi 1988 for contrasting insights on these issues.

11 Wright 1978.

12 Wright's later 'neo-Marxist' works on social class (which reflect, among other things, a movement in the direction of Weberian and neo-Weberian conceptions) are decisively influenced by the neo-Ricardian critique of Marx, a major influence on the Analytical Marxism school to which he belongs. While often hailed by non-Marxist sociologists as more 'rigorous' than his earlier work, these studies evince weaknesses that can be traced back to Wright's abandonment of the Marxian value theory he once espoused.

commodity producers within capitalist society also constitute a contradictory class location, insofar as they act out the roles of both capital and wage labour.[13]

Whether ambiguously positioned wage labourers like engineers and managers should be conceptualised as members of a contradictory class location, a 'service class' or a 'new middle class',[14] the analysis of their proliferation under advanced capitalism can only benefit from a Marxist value-theoretical perspective that recognises that the problems of value production and realisation call forth an ever-more elaborate technical and social division of labour – that is to say, an increasingly complex and differentiated occupational structure that tends to obscure the real contours of the class structure.

How then do these observations pertain to Marx's thesis concerning the progressive polarisation of the capitalist class structure and the historical tendency toward the proletarianisation of ever-larger segments of the population under contemporary capitalism? In my view, they substantially support it. The complexity of the contemporary class structure is most apparent within the working class itself, which has become increasingly differentiated with respect to its roles in social reproduction. At the same time, the increasing weight of the working class is also indirectly reflected in the fact that the 'contradictory class location' or 'new middle class stratum' that has experienced the greatest expansion in advanced capitalist societies over the course of the past century is precisely the one straddling the bourgeoisie and the proletariat.

1.2 *Value, Class Struggle and Bureaucracy*

The problem of how the productivity-increasing imperative of the capitalist law of value has been 'adulterated' during the era of capitalist decline cannot be adequately specified without reference to the central role played by class conflict. Purely structuralist accounts of Marx's economic laws of motion tend to view the class struggle as a mere epiphenomenon of the 'objective' contradictions of capitalist production/reproduction. The implication of such a view is that class practices, mediated by consciousness, can have little impact on the overall direction of capitalist development. Yet precisely because subjectively-oriented practices do not belong to a realm autonomous from 'objective laws', but, to the contrary, belong to the same order of social being, a value-theoretical account of capitalist development must specify the ways in which the class struggle impacts on the expression – that is, the concrete historical forms – of these laws.

13 Weil 1995; see also Smith 2014, Chapter 11, 'Rethinking "The Middle Class": Ideological Constructions and Contradictory Structural Locations'.

14 Abercombrie and Urry 1983, Carchedi 1983 and 1987.

Precisely because capital encompasses an antagonistic relation between capitalists and workers, as well as a competitive relation between commodity producers, a strong incentive exists for capitalists to reduce their costs of production through labour-saving and/or labour-displacing innovation. In this connection, capitalists derive two main functional benefits from the resulting increase in the technical composition of capital: (1) it promotes the real subsumption of labour under capital; and (2) it reproduces the reserve army of unemployed and underemployed workers required to maintain a downward pressure on wages. Both of these benefits to capital are substantial and even indispensable for subjective as well as objective reasons. The reproduction of unemployment, for example, is not only useful in keeping the labour movement 'off balance' and in mitigating wage-push/profit-squeeze phenomena; it is also vital to instilling a sense of insecurity in workers, rendering them less likely to undertake militant anti-capitalist action. Similarly, while the real subsumption of labour by capital involves an increased production of relative surplus-value, it also entails a continuous deskilling of 'qualified labour', a process that fosters the capital-fetishistic notion that labour is a mere adjunct to the independent power of capital.

But these points hardly exhaust the matter. Not only do workers resist technological redundancies and deskilling technical change, they also *react* to the crisis tendencies bred by a rising organic composition of capital. Moreover, it is precisely because workers have an anti-capitalist option open to them (namely, the struggle for the socialist transformation of society) that the capitalist class must tread carefully in its efforts to follow the objective dictates of the capitalist law of value (euphemistically referred to by its defenders as 'free market forces'). While workers (consciously or unconsciously) can and do challenge the limits of the law of value, capitalists can seek only to modify its effects in accordance with their class interests, which includes an interest in maintaining some reasonable level of 'class peace'. What this suggests is that the laws of motion of capital create a framework within which a multitude of choices are made pertaining to class practices. Capitalists have no option but to limit their class practices to this framework, and they bend every effort to get the working class to do the same – very often, it must be said, with the vital assistance of trade union officials and reform-oriented 'socialists'. Yet the working class remains within this framework only to the degree that the consciousness of workers remains limited to it. There is no real 'community of interests' between capitalists and workers. Bourgeois class interest dictates that capitalists 'respect' and 'obey' the law of value (by 'putting profits first'), just as proletarian class interest dictates that workers repudiate and seek to supersede it (by constructing a social order geared toward meeting human needs).

That said, the historical tendency of the class struggle within capitalism has been to push toward an ever-greater 'objective socialisation' of the reproduction process. On the one hand, a key aspect of the progressive historical mission of capitalism has been to promote 'the growth of technical coordination, interdependence and integration *in production*, by which capitalism increasingly generates the negation of the private labour and private production from which it was born – first inside single factories, then within a number of production units and branches of industry, and finally between countries'.[15] On the other hand, the pressure of the class struggle and capitalism's sharpening objective contradictions have forced the capitalist class to submit to a process of 'unproductive socialisation', through which the overhead costs of capitalist reproduction (the state, the administration of industry, the sales effort, finance and credit) have grown enormously. Given the necessarily antagonistic and exploitative character of capitalist social relations of production, the predominant organisational mode emerging from these socialisation tendencies has been the *bureaucratic* mode.

The essence of all bureaucracy, and especially industrial bureaucracy, is a thoroughgoing division between mental and manual labour.[16] Such a division is implicit in the real subsumption of labour by capital (as analysed by Marx), and is rendered explicit in the principles of 'scientific management' elaborated by Frederick W. Taylor among others. Short of a complete elimination of living labour from production, what capital seeks to achieve is effective control over the labour process and a qualitative attenuation of the class struggle at the point of production on terms favourable to surplus-value production. In general, this project is furthered by efforts to continuously 'transfer' to machinery the skills formerly wielded by living labourers, thereby eliminating all vestiges of craft production – a state of affairs in which the more skilled workers perform both brain work (planning) and manual functions.

The separation of conception and execution, together with the relegation of living manual labour to mechanically repetitive tasks, is integral to a capitalist class strategy to enforce the domination of capital – the 'hegemony of valorisation' – over the working class within production. This constitutes the perfection of what Marx calls the 'despotism of the factory regime'. The essential content of this strategy is a 'cognitive appropriation' of the skills and technical knowledge of skilled craftspeople, their incorporation into machinery through scientific and technological innovation, and the development of a managerial-

15 Mandel 1975, p. 595, emphasis added.
16 Deutscher 1973, Braverman 1974, Söhn-Rethel 1978, Clawson 1980, Mandel 1992.

bureaucratic layer whose goal is to both ensure the technical efficiency of the production process and, under the guise of 'maintaining labour discipline', thwart any tendencies toward worker control of the labour process.

It should be emphasised that the above features of the bureaucratisation of industry are promoted by value relations in general, and not only by class struggle at the point of production. Moreover, the tendency toward the deskilling and dequalification of labour is partially offset by a counter-tendency toward the creation of new types of skilled labour, a process which is itself a consequence of the drive of capitalist firms to reduce production costs per unit of output in order to more effectively meet the challenges of competition.

The real subsumption of labour by capital attests to the ongoing role of capital in enhancing the productivity of labour at the level of the individual productive enterprise. For Marx, this role is historically progressive and its results form the material presuppositions of socialism: '[To] the degree that large industry develops, the creation of real wealth comes to depend less on labour-time and on the amount of labour employed than on the power of the agencies set in motion during labour-time, whose powerful effectiveness is … out of all proportion to the direct labour-time spent on their production, but depends rather on the general state of science and on the progress of technology, or the application of science to production.'[17]

This passage clearly shows that Marx refrained from condemning capitalism for its tendency to free material production from the need for living human labour of all types; rather, he indicted it for not realising the full potential of the technological revolutions that it sponsored under the whip of the law of value. The tragedy, for Marx, was not that craft skill, a relic of the 'artisanal mode of production', was giving way to automation; the tragedy was rather that capitalist relations of production, involving the measurement of social wealth in terms of labour-time, reserved all the benefits of automation for the capitalists, while condemning the workers to increasing alienation, economic insecurity, and cognitive degradation.

Technological revolutions are one thing, however, and bureaucratisation something else again. The claim of most sociological apologists of industrial bureaucracy is that bureaucratic organisation – the centralisation of knowledge about production in the hands of a 'hired-gun' managerial stratum enjoying the confidence of the capitalist owners – is an 'essential ingredient' to optimal productivity and efficiency in industrial enterprises. But this claim can be easily dismissed. For while the separation of conception and execution

17 Marx 1973, p. 705.

might indeed be a necessary feature of labour-saving technological innovation, the 'division of head and hand' need not follow from this, especially as the role of the 'hand' declines in importance with the automisation/ robotisation of large-scale industrial production processes. There is really no reason why 'conception' cannot be the privilege – or, better, the right – of *all* of the associated producers, regardless of their specialised roles in the technical division of labour – no reason *except* for the class imperative of capital to hoard an esoteric body of knowledge useful to fortifying its domination over the labour process.

In sum, it is vitally important from a value-theoretical standpoint to distinguish those aspects of the real subsumption of labour by capital that promote the productivity of labour and real progress in liberating human labour from toil and drudgery, from those aspects that involve a bureaucratic appropriation and centralisation of knowledge and decision-making in the hands of capitalist management. The latter aspects pertain to the exploitative capitalist form of the law of value, while the former pertain to a perennial tendency of the law of value to promote technical rationality – a tendency that capital supports only up to a point. To pose this matter a little differently, the bureaucratic organisation of the production process is not at all a necessary by-product of labour-saving technological innovation. To the contrary, the displacement of living labour from production and the spread of automation, robotics and digital technologies should undermine any purely 'technicist' rationale for bureaucratic relations of authority, while liberating the social time required for educating and involving all of the 'associated producers' in the management not only of workplaces but society as a whole.

1.3 *The Value of Labour Power: Labour-Market Segmentation and Working-Class Fragmentation*

As already pointed out, the tendency toward the deskilling and homogenisation of the working class is offset to some extent by a counter-tendency toward the creation of new skills and qualifications. This counter-tendency is partly dictated by the exigencies of technological innovation in the ongoing quest of capitals to reduce unit costs of production. However, differentials in wages are not solely the result of differences in levels of skill, and processes of deskilling/reskilling may be somewhat incidental or tangential to other factors that contribute significantly to labour-market segmentation and class fragmentation.

The value of individual labour powers is not determined simply by an 'objective' calculus in which the cost of reproducing the ability to work is defined in terms of physiological subsistence expenditures plus the educational and other costs incurred by workers in acquiring, exercising and maintaining a particular set of skills. In *Capital I*, Marx argues that the value of labour power has a historical and moral component as well.[18] Although Marx is ambiguous on the point, it seems appropriate to apply this consideration to the definition of the value of both 'simple' and 'qualified' labour power. From this perspective, the incorporation of a social-constructionist view into a theory of labour power valuation becomes a rather straightforward matter.[19]

Qualified labour is not entirely synonymous with skilled labour. Nor are skills entirely objective attributes of individual workers who have incurred determinate costs in acquiring them. To put the matter bluntly, a qualification for a relatively 'privileged' and well-paid position within the division of labour may simply be maleness, a white skin, or the right social connections (whether with upper capitalist management or the director of a union hiring hall). Similarly, the criteria for distinguishing between skilled, semiskilled and unskilled work tasks may have less to do with formal education and training than with how gender, race, and other 'status' considerations influence their distribution. For example, a highly talented seamstress may be defined as semi-skilled and a male truck driver as skilled simply because the very notion of skill has traditionally been associated with male craft organisation.

The value of labour power then is determined to a considerable extent by prevailing social norms, lifestyle expectations, racial, ethnic and gender inequalities, and other strictly non-economic considerations. In the world of commodities, the social equality of commodity-producing labour is the rule, and the 'level playing field' the accepted norm. But commodities share the real world with human beings whose social relations and consciousness reflect the influence not only of commodity production and exchange but also longstanding cultural traditions and cross-cultural antagonisms – many of which are of considerable strategic importance to capital in keeping the working class divided. Not surprisingly, it is precisely in the area of determining the value of individual labour powers that these relatively autonomous 'cultural' influences can be most profoundly felt – trampling underfoot all attempts to 'objectively' compare the 'value' of different work tasks.

In a provocative contribution, Michael Lebowitz argues:

> [The] value of labour-power has a tendency to adjust to its price – rather than the reverse! Accordingly, Marx was wrong to state [in *Value, Price and Profit* – MS] that 'as with all other commodities, so with labour, its

18 Marx 1977, pp. 274–5.
19 Thompson 1989.

> market price will, in the long run, adapt itself to its value'. Rather than a fixed magnitude, the set of necessities entering into the value of labour-power is inherently variable: 'This historical or social element, entering into the value of labour, may be expanded or contracted, or altogether extinguished, so that nothing remains but the physical limit'.[20]

In my view the burden of Lebowitz's criticism of the Marx of *Value, Price and Profit* is unobjectionable, and I share his regret that neither Marx nor his immediate successors elaborated the sort of 'political economy of the working class' that Marx had apparently envisaged for his planned volume on wage labour. The consciousness and struggles of workers, both their victories and defeats, have a major bearing on how the price and therefore the historically and morally determined value of labour power are established in any given period.[21] The same point applies to 'qualified' as well as 'unqualified' labour powers.

Even so, one should always bear in mind that the variability of the value of labour power pertains principally to the historical, social, or moral elements in its determination, while definite physical limits provide an enduring objective floor below which the quality of even the simplest, most unskilled labour power is seriously compromised. The value of the necessities entering into this physical floor may be said to determine the subsistence component of the price of labour power, just as the total price of specific labour powers, mediated by cultural and class-struggle factors, will determine the historically constituted value of labour power.[22] Yet the necessities comprising the subsistence com-

20 Lebowitz 1991, pp. 144–5.

21 My agreement with Lebowitz on this point does not extend to all aspects of his argument concerning the 'political economy of the working class'. See Lebowitz 2003 for a more complete statement of his views. For one of several important critiques, see Fine 2008.

22 Not the least of these 'cultural' circumstances concerns the issue of whether the value of labour power is normatively equated with an individual or family wage. Marx suggests that the value of labour power must take into account the wage-labourer's obligation to support non-wage-earning family members (a spouse, dependent children, etc.). But this obligation – a 'moral' determinant of the value of labour-power – can be seriously attenuated, especially under conditions of increased labour force participation by women (a factor that may or may not be the result of a decline in the real wages of male workers and that may or may not promote such a decline). Related to this issue is the ongoing debate surrounding the contribution of unpaid domestic labour to the reproduction of the commodity labour power and therewith (indirectly) the production of surplus-value in the public economy. For a recent overview and several searching contributions on these issues, see the 'Special Issue on Social Reproduction', *Historical Materialism*, 24, no. 2 (2016).

ponent of the wage are themselves subject to changing historical conditions. For example, in the early days of the industrial revolution, workers usually lived within walking distance of their workplaces, and for this reason, transportation costs rarely entered into the value of labour power. Today, at least in the 'developed' capitalist world, such costs are unavoidable, and the worker's wage must be adequate to cover them. What is still subject to historical, moral or class-struggle adjudication, however, is whether the wage will be sufficient to provide the worker with a bicycle, bus fare, a modest automobile or a sport utility vehicle!

The substantially arbitrary or contingent ways in which the value of labour power is determined beyond the physiological minimum necessary to the social reproduction of its simplest forms suggests that a redistribution of value may occur among workers just as it occurs among capitals – even though, of course, for different reasons and through different mechanisms. Diverse levels of class organisation (unionisation, in particular), gender, ethnic and racial discrimination, and 'cultural constructions' pertaining to skills or qualifications may affect the distribution of the total value 'available' to wage and salary earners, and may thereby contribute to invidious political divisions within the working class. Whether furthered by the capitalist ruling class or by workers themselves, such fragmentation can only contribute to the emergence of disparate, and sharply contradictory, forms of working-class consciousness.

1.4 *Cognitive Labour in Twenty-First-Century 'Digitised' Capitalism*[23]

A significant recent development in the advanced capitalist societies (and indeed in some not so advanced) has been the emergence of a new layer of wage and salary earners employed in the digital-technology industries, a phenomenon some theorists suggest is fundamentally transfiguring twenty-first-century capitalism. A school of thought influenced by the 'post-Marxist' (and essentially capital-fetishistic) views of Michael Hardt and Antonio Negri has argued that an age of 'cognitive capitalism' has arrived, one in which manual wage-labour has been eclipsed as the principal source of surplus-value by the cognitive labour of highly skilled workers overseeing the production and development of enormously profitable digital devices whose market value depends much more on the technical information they embody than on the labour required for their production.[24] These well-paid 'middle-class knowledge work-

23 This section is adapted from Smith 2014, p. 294.

24 See Hardt and Negri 2000 and 2004, and Boutang 2011. For a critique of Hardt and Negri's capital fetishism and misconstrual of Marx's value theory, see Smith 2014, Chapter 4, and Camfield 2007.

ers' are seen as central to contemporary capitalism not so much because of their numerical weight (which is understood to be insubstantial) but by dint of the increasingly crucial role they purportedly play in the valorisation of capital.

This 'cognitive capitalism' thesis – the latest in a never-ending series of attempts to demonstrate the 'outmoded' character of Marxist theory and politics – must be recognised as resting upon a very weak theoretical foundation. As Carchedi, Starosta and Huws have argued (albeit in somewhat different veins), the theorists of cognitive capitalism and 'digital labour' have failed to make a convincing case that the primary source of surplus-value has ceased to be the exploitation of the mass of wage-earners or that the production of 'wealth' in contemporary capitalism has somehow been liberated from the imperatives of the law of value.[25] Indeed, the deepening valorisation crisis and accompanying financialisation of global capitalism over the last few decades testify to the manifest failure of digital technology to even stabilise much less reinvigorate the latter. From the standpoint of the global, macro-economic requirements of capital, this new technology may instead be much more a part of the problem than a solution to the persistent malaise and structural crisis of twenty-first-century capitalism.

1.5 *Class Consciousness: Regional and International Dimensions*

International capital mobility and the dismantling of barriers to 'free trade' within the capitalist world market provide the basis for the formation of tendentially uniform prices of production across national lines and even on a world scale. This, in turn, allows for the possibility of significant transfers of surplus-value between countries. The more prominent the tendency toward the international equalisation of profit rates, the more scope there is for technologically superior capitalist countries to offset crises of profitability at the expense of their weaker trading partners. The pool of social surplus-value available for distribution amongst individual capitals becomes internationalised, and how it is distributed comes to decisively shape the relative fortunes of regions, countries, and even whole continents.

On a world scale, the distribution of internationalised social surplus-value comes close to resembling a zero-sum game, particularly under conditions of economic contraction and crisis within the capitalist world economy as a whole. The condition for prosperity, growth and rising average living standards in a particular zone of capitalist economic activity becomes the failure

25 See Carchedi 2011b, Starosta 2012, and Huws 2013.

of other zones to adequately compete and thereby prevent a transfer of value to more competitive zones.

Workers living in the more 'advanced' or 'developed' zones of the world capitalist economy enjoy the benefits of an economic environment that is not only wealthier but also less prone to the most severe manifestations of capitalist economic crisis. Indeed, through the various mechanisms of international value transfer, the most developed capitalist zones can often use the less developed zones as shock absorbers for the crisis tendencies originating in their own economies. The Latin American debt crisis of the 1980s is a prime example of this phenomenon, as is the debt crisis that has afflicted the southern tier of the European Union, above all Greece, in more recent times.[26]

The possibility of resolving the domestic manifestations of capitalist crisis at the expense of other regions, other countries and other nations encourages a tendency on the part of working people, and especially the bureaucratic officialdoms of organised labour, to seek a solution to their economic problems in regional, national or continental (trade-bloc) terms. Such strategies almost invariably involve a perspective of collaboration with one's 'own' capitalist class in a cross-class project of 'winning the war for markets' and are frequently permeated with racism and xenophobia. As such, they are profoundly at odds with the internationalist working-class perspective which alone can counter the logic of a law of value that refuses to recognise either national boundaries or regional peculiarities, and that operates in such a way as to seduce the unwary into a class-collaborationist perspective of 'beggar my neighbour' competition.

1.6 *The Social Psychology of the Exchange Abstraction*

In Chapter 2, I argued that Alfred Söhn-Rethel's thesis concerning the development of the 'real abstraction of exchange' offers a materialist explanation of the origin of the 'categories a priori' at the heart of Kant's philosophy. At the same time, however, Söhn-Rethel points to the division of mental and manual labour as critical to a materialist critique of Kantian epistemology:

> The presuppositions of Kant's epistemology are quite correct in so far as the exact sciences are indeed created by mental labour in total separation from and independence of the manual labour carried out in production. The division between head and hand, and particularly in relation to science and technology, has an importance for bourgeois class rule as vital as that of the private ownership of the means of production …

26 See George 1988, Magdoff 1992 on the third-world debt crisis, and Rasmus 2016 on Greece.

> The class antagonism of capital and labour is linked intrinsically with the division of head and hand.[27]

Kant's antinomies and his epistemological account of the division of mental and manual labour reflect the profound impact of the exchange abstraction in engendering a *dualistic* consciousness and worldview. Indeed, Kant's very opposition of principles *a posteriori* to principles *a priori* (corresponding to the division between the contribution of the senses and the contribution of reason to human knowledge) could only have occurred to a philosopher living in an era in which the division of mental and manual labour had been powerfully ramified by the development of a body of scientific knowledge and 'method' increasingly dissociated from 'practical' manual tasks. Kant took for granted this epistemological dualism, without inquiring into its socio-historical provenance; indeed, he linked it to a none-too-disguised ontological dualism (noumena-phenomena, *Müssen-Sollen*, and so on). Other philosophers have suggested that cognitive dualism is deeply rooted in 'human nature' and is consequently a 'natural' way of regarding the world. By contrast, Söhn-Rethel's analysis suggests that cognitive dualism appears natural only so long as its roots in the division of head and hand, and in determinate elements of the commodity-exchange abstraction, remain hidden.

The unfolding of the capitalist law of value has not only brought the division of mental and manual labour to its apotheosis; it has also, through the generalisation of the exchange abstraction, encouraged a generalised dualistic consciousness. This consciousness is characteristic not only of the dominant forms of bourgeois philosophy and social theory, but of the worldviews of broad sections of the population, including the working class.

The significance of this should not be missed, for the dualistic outlook is profoundly at odds with the standpoint that 'the material' can be brought into alignment with 'the ideal' – that conscious activity can reshape reality if it is properly informed by both science (defined by Marx as 'the general product of social development') and morality (defined as ideas in the service of human well-being and flourishing).[28]

Thus dualism encourages a fundamentally conservative and 'anti-utopian' posture according to which 'what ought to be' (Kant's *Sollen*) is always at odds with 'what is (or must be)' (*Müssen*). What's more, the dualistic conception of the relationship between social form and material content perpetuates the

27 Söhn-Rethel 1978, p. 37.
28 See Smith 2014 for an elaboration of these themes.

ideologically potent notion that social forms are *externally* linked to persistent and unyielding 'material realities'. This too has conservative implications, for it opens the door wide to a veritable avalanche of commodity- and capital-fetishistic notions, while undermining the capacity of the human imagination to erect in thought a social order that positively transcends the 'eternal verities' of capitalism, the market economy and class society.

The commodity-exchange abstraction is a powerful element of that 'social being' that Marx says 'determines' human consciousness. Throughout history, it has influenced the latter in ways that have encouraged scientific rationality – but also in ways that perpetuate deeply engrained ideological notions that are crucial to conferring legitimacy on the power and privileges of dominant classes. Its generalisation under capitalism therefore constitutes a factor of some importance in determining the highly uneven and discontinuous development of socialist consciousness within the workers' movement and the working class as a whole.

1.7 *The Uneven and Discontinuous Growth of Class Consciousness*

Our discussion up to this point has identified a plethora of factors that may impact upon the consciousness of working people as they wrestle with the persistent social and economic problems bred by capitalism. These factors range from the uneven impact of capitalist crisis tendencies on different segments of the international working class, to racial and gender inequalities countenanced by cultural traditions, to skill differentials, to the dull compulsion of fending for one's self and one's family in an insecure economic environment, to the mystifying effects of commodity and capital fetishism, to the insidious naturalisation of capitalist relations engendered by the exchange abstraction. To these factors should be added, of course, the conscious efforts of the capitalist class to diffuse its values and worldview to the wider working population through the mass media, the churches, the educational system, the entertainment industry, and the family.

Despite the many factors that serve to obstruct the emergence of an anti-capitalist, socialist consciousness on the part of the working class, such a consciousness has nevertheless repeatedly and stubbornly asserted itself. Often it is confined to relatively small segments of the class, as in most of the 'developed world' today. But at other times, it has embraced a majority or near-majority, and seriously posed the question of working-class power and the socialist transformation of society (as it did, for example, in Russia in 1917, in Germany in 1917–23, in Spain in 1936–37, in Italy in 1920, 1944–48 and 1969, in France in 1936 and 1968, in Chile in 1970–73, in Portugal in 1974–75, and arguably in South Africa, Greece and some Latin American countries today). The fact that such a consciousness could emerge at all, given the strength of the factors arrayed against it, calls for an explanation. The explanation that Marx himself adduced remains the most compelling: the working class – despite its divisions, its relative dearth of resources and its susceptibility to the incessant pressures of bourgeois hegemony – is united by powerful common interests that periodically assert themselves in the most unexpected of ways and that demand the formulation of a common working-class programme based on socialist principles and goals.

The development of socialist consciousness within the working class is a powerful tendency apparent in the 'real history of the capitalist mode of production' – one rooted in the social being and common historical interests of working people. But like every tendency it is confronted by powerful countertendencies that determine a definite unevenness in its articulation and spread, and that always threaten its reversal. This uneven and discontinuous quality of the development of socialist class-consciousness poses serious programmatic and strategic problems for those who have achieved something more than a visceral dislike of capitalism and a vague attraction to the socialist idea. For those who have internalised Marx's critique of capitalist political economy and come to understand the necessity of socialism, the task becomes one of informing the strategic and programmatic perspectives of the workers' movement with the results of Marx's scientific analysis and winning its *avant-garde* to a revolutionary socialist political project.

1.8 *The Role of Value Theory in the Anti-capitalist Struggle*

Marx's theory of value and his critique of capitalist political economy are concerned above all with defining the historical limits of the capitalist mode of production and disclosing the social forms that conceal them. His scientific analysis is at once an explication of the laws of motion of the capitalist economy and an account of how false, or one-sided, ideas about that economy come to arise and flourish. No other theory, however critical of capitalism, has come close to elucidating both of these problems, much less establishing their common foundation in value relations.

The essential programmatic conclusion emerging from Marx's analysis is that capitalism is constitutionally incapable of a 'progressive', 'crisis-free' evolution that would render the socialist project 'unnecessary', and furthermore, that a socialist transformation cannot be brought about through a process of gradual, incremental reform. Capitalism must be destroyed root and branch before there can be any hope of social reconstruction on fundamentally different foundations – and such a reconstruction is vitally necessary to ensuring further human progress. This revolutionary process requires and begins with the expropriation of capitalist property by a workers' government, one based on a system of council democracy and unreservedly committed to rational, socialist economic planning in the interests of the associated producers and consumers.

Despite the urgency of socialist transformation, none of the objective laws of motion of capitalism can bring about an irrevocable breakdown of the system. Capitalism may be 'digging its own grave', but it stops short of carrying out its own execution. Its final defeat awaits the concerted action of a class-conscious working class. The central practical problem facing Marxian socialism is that under conditions of advanced capitalism – which alone can furnish the material prerequisites for a dynamic socialist transformation – the working class has thus far failed to carry through its anti-capitalist struggle to the end.

In part, this failure may be attributed to insufficient class-consciousness, in part to strategic errors on the part of revolutionary workers' movements (Germany 1919–23) and in part to the outright betrayal of workers' revolutions by the ostensible leaders of the working class (Spain 1936–37). By themselves these factors go quite far toward explaining why, despite the experience of depressions and wars, and social decay amidst material plenty, the working class in advanced capitalism has not yet risen to its historic task of overthrowing the regime of capital. The question is therefore posed: what programme can assist the proletariat in bridging the gap between its existing consciousness and practices and the consciousness and action needed for successful anti-capitalist struggle?[29]

In the history of Marxist socialism, programmes embodying a strategic orientation to bridge that gap have often been called 'transitional'. *The Communist Manifesto* is in this tradition, as are the *Theses on Tactics* and other declarations of the first four congresses of the Third (Communist) International. Its most comprehensive and eloquent expression is *The Death Agony of Capitalism and the Tasks of the Fourth International*, the famous 'Transitional Program' written by Russian revolutionary leader Leon Trotsky and adopted at the founding conference of his Fourth International in 1938.[30]

29 In providing some essential elements of an answer to this question, I will focus here on programmatic issues (narrowly defined) and leave many of the great strategic and tactical issues of working-class political organisation and struggle to the side.

30 See Trotsky 1973, an edition that contains transcripts of Trotsky's discussions on the transitional programme with leaders of the US Socialist Workers Party in the late 1930s. See also Trotsky 1998, an edition produced by the International Bolshevik Tendency that contains a valuable introduction along with important related materials.

The hallmark of the transitional programmatic conception is its attempt to overcome the dichotomisation of a 'minimum program' of struggle for reforms within capitalism and an abstract 'maximum program' that promises the eventual substitution of socialism for capitalism (a dichotomisation first formalised in the German Social Democratic Party's Erfurt Programme of 1891). A socialist transitional programme seeks to transcend this dichotomy by articulating a system of demands that anticipate the social and political content of a workers' state and the early stages of the transition to socialism. These demands (a sliding scale of wages and hours, workers' control of production, the expropriation of industry without compensation, workers' defence guards, etc.) are meant to intersect the immediate, largely defensive struggles of the working class as these unfold within capitalism, while at the same time projecting 'solutions' that, taken together, disintegrate the social, political and military power of the capitalist class. In the words of the Third International: 'In place of the minimum programme of the centrists and reformists, the Communist International offers a struggle for the concrete demands of the proletariat which, in their totality, challenge the power of the bourgeoisie, organise the proletariat and mark out the different stages of the struggle for its dictatorship.'[31]

Fundamentally, the transitional programme is predicated on the inevitability of heightened levels of class struggle stemming from the inherent contradictions, crisis tendencies and general irrationality of capitalism. The programme permits the vanguard of the working class to build a bridge, at first in practice, then in consciousness, between the immediate struggles of the class and the programmatic goal of a workers' socialist government.

A basic theoretical presupposition of the transitional programme is that socialists must take into account two essential factors affecting the development of workers' class consciousness: on the one hand, that this consciousness is profoundly conditioned by the fetishisms inherent in the capitalist relations of production and by ideologies rooted in the 'appearance of things' under capitalism; on the other hand, that it is shaped by the experience of struggle against the material depredations of the capitalist system, and under conditions of systemic crisis, the floodgates of consciousness can be opened to possibilities that are not 'normally' entertained by the great mass of working people.

Although sometimes conceived as akin to Andre Gorz's 'anti-capitalist structural reforms',[32] transitional demands form part of an articulated programme

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31 Third International 1980 [1921], p. 286.

32 Gorz 1973.

of open-ended anti-capitalist struggle. Only when they are individually dissociated from the overall system of demands and thereby 'fetishised' (which invariably involves a qualitative attenuation of their anti-capitalist thrust) can they devolve into simple reform measures serving a closure of struggle. As a 'system' of demands, in irrevocable opposition to all bourgeois-reformist programmes, they lead 'unalterably to one final conclusion: the conquest of power by the proletariat'.[33]

The logic of the transitional programmatic conception is illustrated by even so modest and partial a transitional demand as the 'sliding scale of wages and hours'. The sliding scale of hours is not only the 'socialist solution' to the problem of unemployment under capitalism; it is a veritable prefiguration of the system of work in socialist society – 'the total number of workers divided into the total number of hours'.[34] Entirely at odds with the bourgeois-reformist conception of 'work-sharing', it proposes that any shortening of the workweek to address the problem of unemployment must entail no diminution in the living standards of workers. A concrete application of the demand is the call for '30 hours work for 40 hours pay' in response to layoffs resulting from labour-saving technological innovation and/or economic contraction. The social logic of this demand is quite clear: technological innovation should accrue to the benefit of workers rather than capitalists, and the right of workers to employment should not be threatened by episodic market conditions. Similarly, the demand for a full sliding scale of wages (also known as 'indexation for inflation') seeks to guarantee the workers' share of national income by removing wage levels from the adjustments of the capitalist price structure. Overall, the thrust of the 'sliding scale of wages and hours' is to strike a blow against the reification of labour power in the capitalist economy by forcefully and systematically challenging its status as a commodity. Challenges of this sort to the social logic of the capitalist law of value are absolutely necessary if the workers' movement is ever to advance its struggle to the level of establishing a workers' government and expropriating capitalist property.

An adequate class-struggle socialist programme must also address the many factors that contribute to the fragmentation of working-class struggles. Transitional and democratic demands pertaining to the specific grievances and problems confronting women, minority and immigrant workers must be integrated into the programme if it is to build a bridge wide enough and strong enough to accommodate the working class as a whole. Indeed, it is only in this way that

33 Trotsky 1973, p. 75.
34 Trotsky 1973, p. 128.

a socialist workers' movement can politically defeat both 'business unionism' and the liberal sectoralism associated with postmodern 'lifestyle' and 'identity' politics.

Above all, however, the perspective of struggle around a transitional programme must be linked to an internationalist strategy of organising workers across national lines. Only through a conscious internationalisation of their struggle can workers avoid tying their material interests to the competitive performance of their 'own' capitalists on the world market – and resist being drawn into political support for one side or another in 'great power' conflicts leading to world war.

The transitional programme and the strategic orientation it embodies for mobilising the working class against capital is fully in accord with Marx's theory in the sense that it challenges the social logic of value relations. But certain limitations of this programmatic-strategic conception should be noted. First, its efficacy is largely predicated on the existence of widespread sympathy for socialism (the 'maximum' programme) as the pre-eminent goal of the labour movement, as well as a layer of working-class militants who consciously seek the ousting of pro-capitalist labour leaders and the construction of a class-struggle leadership. While present to some degree in Latin America, South Africa and certain parts of Asia, neither of these conditions obtains today in North America, and they are clearly less present in Europe than at most other times over the past century. These circumstances underscore the need for those who have achieved a revolutionary socialist consciousness to wage a determined fight to preserve and disseminate the programmatic legacy of Marxism, both through education and cadre development and through exemplary forms of trade union activity and other mass work based on a transitional programme and the promulgation of socialist ideas. Only by waging such a fight – and not only on a national terrain but on an international scale – can socialists prepare the way for linking the programme of Marxist socialism to the mass anti-capitalist struggles that are likely to emerge and multiply as the crisis of contemporary capitalism deepens.

In the end, the current crisis of confidence in socialism as a practical political project can only be fully overcome to the extent that a new vision of socialism is successfully articulated and promulgated, one firmly based on the principle of working-class political independence from capital but also fully engaged with all of the actually existing struggles aimed at resolving the multiple crises of our time. As previously argued, an essential element of such a vision must be a comprehensive Marxist balance sheet on the experience of Stalinist 'real socialism', a matter we will come to shortly.

1.9 *Value Theory and the Struggle for Ecological Sustainability*

The growing awareness amongst working people and elements of the petty-bourgeois intelligentsia concerning the depth and seriousness of the worsening metabolic rift between human activity and the natural conditions of human sustainability has served to open the minds of many in this century to the urgent need for 'system' change. Minqi Li summarises a view toward which growing numbers are being drawn:

> … for a human society to function sustainably, that is, without causing irremediable damage to the ecological systems on which survival depends, it needs to minimize the use of non-renewable resources and its consumption of renewable resources and its generation of material wastes must not exceed the ecological systems' regenerative and absorptive capacities.
>
> It does not take a rocket scientist to see that there is an apparent contradiction between a system based on the endless accumulation of capital and the requirements of ecological sustainability. The drive for endless accumulation inevitably leads to the incessant expansion of material production and consumption. On the other hand, ecological sustainability is possible only with steady (or declining) material production and consumption.[35]

Due to the abysmal environmental record of 'actually existing socialism' and to pervasive ignorance of Marx's own views on the relationship between humanity and nature, it is widely believed – even amongst many ostensible Marxists – that Marxist socialism is necessarily committed, for better or for worse, to a Promethean project of 'human domination over nature' and that Marx's theories thus have little to offer the struggle for ecological sustainability. This has begun to change in recent years thanks to the efforts of scholars like John Bellamy Foster and Paul Burkett who recognise that Marx and Engels (allowing for their time and place) were remarkably cognisant of the grave dangers that the capitalist mode of production posed to the delicate balance between the extension of human productive capacities and the natural conditions on which those capacities rest.[36]

To be sure, the two founders of 'scientific socialism' could not possibly have foreseen, from their historical vantage point, the possibility of run-away

35 Li 2008, pp. 17–18. See also Angus 2016.
36 See Foster 2000, and Burkett 1996 and 2006.

global warming and massive climate change resulting from the unrestrained consumption of fossil fuels, something that has been integral to the capitalist expansion of the productive forces since the advent of the steam engine. Nor could they have reckoned with the enormous pressure that human population growth, not to mention the insidious ideology of consumerism, would place upon non-renewable resources. But they certainly grasped that the logic of capitalism was fundamentally inimical to responsible human 'stewardship' of the natural environment, for the very good reason that capital cannot help but regard the 'gifts of nature' as an inexhaustible source of accumulation and profit.

Foster comments that 'it is impossible to avoid the conclusion that Marx's view of capitalist agriculture and of the metabolic rift in the nature-imposed relations between human beings and the soil led him to a wider concept of ecological sustainability – a notion that he thought of very little practical relevance to capitalist society, which was incapable of applying rational scientific methods in this area, but essential for a society of associated producers.' In this regard, the author of *Marx's Ecology* cites two important passages from *Capital III*:

> The way that the cultivation of particular crops depends on fluctuations in market prices and the constant changes in cultivation with these price fluctuations – the entire spirit of capitalist production, which is oriented towards the immediate monetary profits – stands in contradiction to agriculture, which has to concern itself with the whole gamut of permanent conditions of life required by the chain of human generations.
>
> From the standpoint of a higher socio-economic formation, the private property of particular individuals in the earth will appear just as absurd as the private property of one man in other men. Even an entire society, a nation, or all simultaneously existing societies taken together, are not owners of the earth. They are simply its possessors, its beneficiaries, and have to bequeath it in an improved state to succeeding generations as *boni patres familias* [good heads of the household].[37]

Marx perceived that the disjunction that capitalism creates between 'value' and 'real wealth' is at the root of what we now recognise to be a grave threat to human survival. As a mode of production and exchange, and as a system of class domination and exploitation, capitalism is irrevocably committed to the

37 Foster 2000, p. 164.

measurement of 'wealth' solely in terms of 'value' and 'surplus-value' – that is to say, solely in terms of the abstract social labour time represented in commodities. Real human wealth – the wealth associated with the production of use-values that can satisfy human needs and the demands of 'all round' human development – is inimical to such a measurement, which, in the last analysis, serves only the reproduction of the capital-wage labour relation and therefore only the interests of the capitalist class.

Hence, the case for an ecologically sustainable socialism is intimately linked to and dependent upon Marx's value-theoretic critique of capitalism. That case must form an integral part of the programme of class-struggle socialism in the years to come if the working class and its (potential) allies are to be attracted to socialism *en masse*, and if the struggle for ecological sustainability is to succeed in the only way possible: through the revolutionary socialist transcendence of capitalism.

Only a planned socialist economy on a global scale can meet the challenges of the climate and broader environmental crises generated by capitalism. To believe otherwise is to imagine that capitalism, as a determinate class-antagonistic mode of production, can somehow dispense with the law of value; and it is thus to wager the future of humanity on achieving what can only be described as a capitalist utopia.

2 Value Theory and Socialist Construction

As late as the 1970s, the Soviet model of 'socialist construction' remained an immensely powerful pole of attraction for major segments of the Western working class as well as for the impoverished masses of the colonial and semi-colonial world. The Soviet Union's successes in 'extensive' economic growth in the 1930s and again in the immediate postwar period (up to about 1965) commanded the admiration of the great majority of those who longed to throw off the yoke of capitalism and imperialism, and to embark on the building of a socialist society free of want and extreme social inequality. Not surprisingly, many admirers of the Soviet achievement were inclined to regard the draconian, corrupt, repressive and anti-democratic features of the Soviet system as 'necessary evils' – departures from socialist principle that were, in any case, hypocritically exaggerated by anti-socialist forces. What seemed unarguable to those who 'wanted to believe' was that Soviet 'real socialism' had eliminated unemployment, modernised a vast and backward economy at breakneck speed, and provided by the 1950s a level of basic material security for its people that was, in certain respects, superior to conditions prevailing in the developed capitalist countries. By the early 1960s, Premier Nikita Khrushchev's boast that the Soviet Union would soon reach the stage of full-fledged 'communism' appeared quite plausible to many who had already been awed by the rapid recovery of the Soviet economy in the aftermath of the terrible devastation of World War II.

As early as 1936 in *The Revolution Betrayed*, Leon Trotsky had provided an incisive account of the impressive accomplishments of the Soviet planned economy while also pointing to the contradictions and limits of the Stalinist bureaucratic-command structure that administered it:

> The progressive role of the Soviet bureaucracy coincides with the period devoted to introducing into the Soviet Union the most important elements of capitalist technique. The rough work of borrowing, imitating, transplanting and grafting was accomplished on the bases lain down by the revolution. There was, thus far, no question of any new word in the sphere of technique, science or art. It is possible to build gigantic factories according to a ready-made Western pattern by bureaucratic command – although, to be sure, at triple the normal cost. But the further you go, the more the economy runs into the problem of quality, which slips out of the hands of the bureaucracy like a shadow. The Soviet products are as though branded with the gray label of indifference. Under a nationalised economy, quality demands a democracy of producers and consumers, freedom of criticism and initiative – conditions incompatible with a totalitarian regime of fear, lies and flattery.[38]

A faint echo of Trotsky's indictment of bureaucratic commandism in the Soviet 'degenerated workers' state' was sounded some fifty years later by Mikhail Gorbachev as part of his call for 'restructuring' following the Brezhnev 'era of stagnation': 'In the last fifteen years the national income growth rates had declined by more than a half and by the beginning of the eighties had fallen to a level close to economic stagnation. A country that was once quickly closing on the world's advanced nations began to lose one position after another.'[39]

Initially, Gorbachev's reform policies of *glasnost* (openness) and *perestroika* (restructuring) appeared to some to be close to Trotsky's programmatic admonition of 1932: 'Only the interaction of three elements, of state planning, of the market and of Soviet democracy can provide the country with correct leader-

38 Trotsky 1970, pp. 275–6.
39 Gorbachev 1987, p. 19.

ship in the transitional epoch [to socialism]'.[40] But it soon became apparent that Gorbachev's policies were reminiscent not of Trotsky, the leader of the Left Opposition to Stalin, but much more of Nikolai Bukharin, co-author with Stalin of the anti-Marxist doctrine of 'building socialism in one country' and later the leader of the so-called Right Opposition to Stalin's regime.

Bukharin was the prophet, within ostensibly Marxist thought, if not within the socialist tradition as a whole, of what became known as 'market socialism'.[41] The attraction this notion exerted later on reform-minded bureaucrats like Gorbachev is not difficult to understand, for it is an approach that seeks to resolve the problems associated with 'transitional socialist economies' *without* introducing the political forms of an authentic workers democracy and *without* seeking a socialist division of labour on an international scale. As the experiences of Yugoslavia, Hungary, and ultimately the Soviet Union amply confirm, however, it also turned out to be an approach manifestly incapable of addressing the immense accumulated problems and contradictions of Stalinist bureaucratic mismanagement, waste and heavy-handed authoritarian rule.

The tendency of Stalinist bureaucracies, Gorbachev's included, to pursue a solution to the crisis of the 'command-administrative' system by resorting to 'pro-market reforms' owed nothing to the alleged practicality or feasibility of the 'market socialist' alternative. Rather, it reflected the conviction of these bureaucratic oligarchies that 'market-oriented reform' was the only departure from the status quo compatible with the perpetuation of their material privileges and their monopoly of political power. In the end, the Gorbachevite resort to market socialism in the USSR turned out to be simply the penultimate chapter in a process of counter-revolution that began with the Stalinist clique's political expropriation of the working class in the 1920s and culminated with the installation of Boris Yeltsin's openly pro-capitalist regime in 1991.[42]

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40 Trotsky 1973, p. 275.

41 Spartacist 1988.

42 In saying this I am, of course, accepting Trotsky's judgement that the Soviet Union was a 'degenerated workers' state' from 1924 on. Central to Trotsky's view is the idea that the Stalinist bureaucracy was by no means a full-blown 'ruling class' but rather a 'parasitic oligarchy' that would either be removed by a working-class political revolution or pave the way for the return of capitalism. On this view, the Soviet 'transitional' society was not indicative of the 'general laws of modern society from capitalism to socialism … but a special, exceptional and temporary refraction of those laws under the conditions of a backward revolutionary country in a capitalist environment' (Trotsky 1970a, p. 7). Accordingly, the lessons of the Soviet experience pertain mainly to 'the application of *socialist* methods to the solution of *pre-socialist* problems' (Trotsky 1970b, p. 57), in circumstances of extreme *bureaucratic deformation* of those methods. See also Smith 1996/97 and 2014.

It is not possible to enter here into a fuller analysis of the lessons of so-called socialist construction in the former countries of 'actually existing socialism', or the factors leading to the terminal crisis of this system. But the still-strong influence of the 'market socialism' idea on socialist-minded workers and intellectuals suggests that the lesson most widely drawn has been that the crisis of the Stalinist regimes was pre-eminently a crisis of planned economy and that the indicated antidote was a reassertion of the role of market relations in co-ordinating economic activity and enforcing efficiency. True, most advocates of market socialism also invoke the necessity for democracy and 'human rights' in a healthy socialist society. But the prevailing tendency is to view democracy as an end in itself rather than as a key ingredient in socialist economic development. Indeed, on this (essentially liberal) view, democracy for the producers and consumers is conceived to be one of those 'institutional externalities' that may even impede economic efficiency and growth.

The optimal articulation of the three elements that Trotsky pointed to as indispensable to socialist economic development – central planning, the market, and workers democracy – is undoubtedly difficult to achieve. But this problem will remain endemically resistant to satisfactory resolution so long as debate on the political economy of socialism is confined within the parameters of the false dilemma – *either* bureaucratically centralised state planning *or* workers' self-management of enterprises within a 'socialist market economy'. Other possibilities deserve to be explored, and it is gratifying to see that a growing body of literature is now seriously engaging the issue.[43] A touchstone for this discussion should certainly remain Trotsky's own proposal for a democratically centralised planning system, one that would continue to rely on (socialised) market mechanisms for as long as these prove necessary:

> The problem of the proportionality of the elements of production and the branches of the economy constitutes the very heart of socialist economy … The innumerable living participants in the economy, collective and individual, must serve notice of their needs and of their relative strength not only through the statistical determinations of plan commissions but by the direct pressure of supply and demand. The plan is checked and, to a considerable degree, realised through the market. The regulation

43 Spartacist 1988; Mandel 1986, 1988, 1992; Elson 1988; Devine 1988; Bottomore 1990; Samary 1991; Laibman 1992; Flaherty 1992; URPE 1992; McNally 1993; Cockshott and Cottrell 1993, 1997; Schweickart, Lawler, Ticktin and Ollman, 1998; Albert and Callinicos 2003; Albert 2004; Lebowitz 2012; Hudis 2013; Dolack 2016.

> of the market itself must depend upon the tendencies that are brought out through its mechanism. The blueprints produced by the departments must demonstrate their efficacy through commercial calculation … The art of socialist planning does not drop from heaven nor is it presented full-blown into one's hands with the conquest of power. This art may be mastered only by struggle, step by step, not by a few but by millions, as a component part of the new economy and culture.[44]

Elsewhere, Trotsky emphasised that planning is not a self-sufficient method of regulating the economic affairs of human beings, but rather critically dependent on certain other principles of social and economic organisation:

> [A] successful socialist construction is unthinkable without including in the planned system the direct personal interests of the producer and consumer, their egoism – which in its turn may reveal itself fruitfully only if it has in its service the customary reliable and flexible instrument, money. The raising of the productivity of labour and bettering of the quality of its products is quite unattainable without an accurate measure freely penetrating into all the cells of industry – that is, without a stable unit of currency … For the regulation and application of plans two levers are needed: the political lever, in the form of a real participation in leadership of the interested masses themselves, a thing which is unthinkable without Soviet [council – MS] democracy; and a financial lever, in the form of a real testing out of *a priori* calculations with the help of a universal equivalent, a thing which is unthinkable without a stable money system.[45]

This vision of socialist construction may seem to be something of a retreat from Marx's programme of fully transcending market and monetary relations in the creation of a society in which human beings consciously direct their affairs. But it should be borne in mind that Trotsky is speaking here of the *transition* to socialism, and that he regards 'socialist planning' as 'an art' that must be mastered by millions, 'as a component part of the new economy and culture'. What vistas will open up with the democratic involvement of millions of people in social and economic planning cannot be predicted from our present vantage point. All that can be said with certainty is that for some time following

44 Trotsky 1932, pp. 265, 274, 260.
45 Trotsky 1937, pp. 67–8.

the conquest of power by the working class and its allies, socialist planning will continue to rely heavily on the assistance of market forces and monetary instruments.

But the question remains: would the survival of money and the market signify the survival of the law of value? The answer is … yes, up to a point. The persistence of market and money categories could only mean that society is continuing to allocate resources and distribute income in accordance with the measurement of labour time. But in a centrally planned economy, under the democratic administration of the associated producers and consumers, the measurement of wealth in terms of socially necessary labour time would cease to be the *dominant* principle of economic regulation and resource allocation. Moreover, the abolition of private ownership in the means of production and of enterprise competition geared toward profit maximisation would undercut two of the central pillars of the capitalist law of value, rendering obsolete the quest for surplus-value as the motor force of economic activity. The survival of 'exchange-value' in such a post-capitalist society would not, in other words, entail the survival of surplus-value. Human activity could henceforth be geared toward the satisfaction of human needs and the all-round development of the human personality rather than toward the appropriation of wealth in the socially antagonistic form of private profit. But for this to happen 'socialist exchange-value' would have to be the 'form of appearance' of a new set of social relations based pre-eminently upon co-operation, solidarity and proletarian democracy, and not upon the invidious enterprise competition that currently fashionable models of market socialism unabashedly posit and even celebrate.[46]

This much is clear: the models of market socialism that have issued from the crisis of Stalinism could not fail to perpetuate and entrench all the characteristic evils associated with the value relation – from unemployment to the division of mental and manual labour – that Marxist socialism has always set its sights on eliminating. Marx's theory of value stands as a constant reminder of the limits to the historically progressive role of commodity exchange and as a challenge to reconstruct society on fundamentally different foundations. As such, it directs us to look beyond that which exists – beyond a social order dominated by the 'Invisible Leviathan' – to that which ought to and could exist once human beings determine, in defiance of the capitalist law of value, to assume mastery of their own collective destiny.

46 See, for example, Nove 1983, 1987; Le Grand and Estrin 1989; and more recently Wolff 2014.

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