1. Introduction

From the viewpoint of pure economic theory, Karl Marx can be regarded as
a minor post-Ricardian.

Paul A. Samuelson, 'Economists and the History of Ideas' (1962)

All this prattle about biological methods in economics ... of birds and bees,
giant trees in the forest, and declining entrepreneurial dynasties ...

Paul A. Samuelson, 'The Monopolistic Revolution' (1967)

Many economists would still follow Paul Samuelson and regard Charles Darwin and even Karl Marx as having little relevance for their subject.¹ Marxian economics is absent from most undergraduate and postgraduate curricula. Many economists would not describe Marx as an economist anyway, because his analysis does not fit into the narrow mould of economics as the 'science of choice'. And who would be so daft as to suggest that Darwin, the biologist, has anything to do with economics? We might play with biological metaphors and analogies, but many would agree with Joseph Schumpeter (1954, p. 789) when he argued that economic phenomena 'would have to be analyzed with reference to economic facts alone and no appeal to biology would be of the slightest use'.

However, the exclusion of Marx from economics is unwarranted, even if one is critical of his doctrines. Sciences should not be defined by their methods or assumptions, but by their objects of analysis. Economics should thus be the science of the economy. Marx's *Capital* is about the workings of the capitalist economy, and should thus qualify as economics.

Figure 1.1 below shows that citations to Marx remain high in core mainstream journals of economics, despite the unfashionable status of his ideas. There are good reasons why the spectre of Marx has haunted economics. While several of his other forecasts were wrong, Marx correctly predicted the globalization of markets and the growth of giant firms. Nobel prize winner Lawrence Klein (1947) saw Marxian economics as 'probably the origin of macro-economics'. Overall, Marx made a major contribution to our understanding of the nature and dynamics of the capitalist system.²

¹ This chapter was first drafted for this volume.

² While rejecting his labour theory of value and his theory of the tendency of the rate of profit to fall, Hodgson (1991) argued that Marx had still made a major contribution to economic science. I take the same view today.

The great twentieth-century debate between capitalist markets and socialist planning also put Marx at centre stage. During the Cold War, economists in the West attempted with neoclassical theory to demonstrate the superior efficiency of the market system. Ranged against them were Soviet economists, officially of Marxist hue. Ironically, the theoretical weapons adopted on each side were ill suited to explain the system to which they were affiliated. Neoclassical theory fails to capture the evolutionary and dynamic features of capitalism, and Marx's writings have very little to say about the workings of socialism. Ironically, both Marxism and neoclassical theory share a common ancestor in the economics of David Ricardo. This Cold War debate was largely between two branches of Ricardian economics!

In his 1933 essay on Thomas Robert Malthus, John Maynard Keynes (1972, pp. 100–101) alluded to an alternative tradition and lamented: 'If only Malthus, instead of Ricardo, had been the parent stem from which nineteenth-century economics proceeded, what a much wiser and richer place the world would be today!' Malthus's mode of thinking was less *a prioristic* and more historically oriented than the formal economics of today. His emphasis on dynamism and variety was a crucial inspiration for Darwin. The Malthusian tradition contrasts with Ricardianism and its descendants.

However, even after the collapse of the Soviet Empire in 1989–1991, in some quarters Marxian ideas remain influential. Marxism seems to offer a theoretically systematic and politically radical alternative to orthodoxy. While I am critical of its theory and outlook, Marxism has to be brought into the discussion, so that it may be gainfully understood and surpassed.

Economics has often borrowed ideas from biology. However, biological metaphors and analogies are not merely literary frills. Philosophers such as Mary Hesse (1966) and Max Black (1962) have established that metaphors are constitutive of science. Because biology and economics both address complex evolving systems, there are good reasons to consider Darwinian and other biological metaphors within economics (Hodgson, 1993, 1999b).

There are even stronger arguments for bringing Darwinian ideas into the social sciences. First, as shown in Chapter 2, the philosophical underpinnings of Darwinism are highly relevant for the social sciences.

Second, while the detailed mechanisms of social and biological evolution are very different, they share some general features at a highly abstract level, concerning variation, inheritance and selection. It is not simply that economic evolution is *analogous* to biological evolution in some way. At an abstract level economic evolution *is* Darwinian, in the sense that it involves the key mechanisms of variation, inheritance and selection (Hodgson, 2002b, 2004a).

I also wish to claim – which at first sight may seem extraordinary – that Darwinism offers a more fruitful philosophical worldview for the social sciences than Marxism. This is despite the fact that Marx made an immense

contribution to our understanding of how the capitalist system works, and Darwin had much less to say about social structures or human history.

I am not suggesting that Darwinism itself offers adequate policy guidance. Values and normative statements are much more prominent in Marxism. It has been an infamous error to attempt to use Darwinism to support particular political policies. The strength of Darwinism lies not in any direct guidance for policy but in its explanatory rubric and its basic philosophical outlook.

Furthermore, I am not proposing that explanations of socio-economic phenomena can or should be reduced largely to biological terms. For reasons elaborated elsewhere (Hodgson, 1993, 2004a), biological reductionism is not a viable strategy for the social sciences.

Instead, this call for a Darwinian turn in the social sciences relies on arguments similar to those made by David Ritchie (1896), Thorstein Veblen (1899, 1919) and Albert Keller (1915) long ago. Their works emerged during a spell of interest in Darwinian themes in social science in the early years of the twentieth century. Their ideas lay underdeveloped in the subsequent years, when any intellectual intercourse between the social and the biological sciences was highly unpopular. Only recently has the situation changed, when Darwinian themes have again re-emerged in the social sciences.

When Marx lambasted Malthus he dismissed the problem of overpopulation with finite resources, which we face with some urgency today. Darwinism spans the natural and the human world, and reminds us of the ecological context of human activity. Marxism emphasizes class, but has relatively little to say about the enduring issues of gender or ethnicity. When freed of racist or sexist pseudo-science, Darwinian theory can add to our understanding of some of these phenomena (Lopreato and Crippen, 1999).

Citation analysis illustrates the ups and downs in interest in Marxism and Darwinism by economists. Figure 1.1 charts the number of items (including articles and reviews) in the *American Economic Review* (founded 1911), *Economic Journal* (founded 1891), *Journal of Political Economy* (founded 1892) and *Quarterly Journal of Economics* (founded 1886), that cited Marx (plus derivative words such as Marxism), Darwin (plus derivative words such as Darwinism), Veblen (plus derivative words such as Veblenian), and Walras (plus derivative words such as Walrasian). Walras serves as a benchmark figure to indicate the rise of the pre-eminent post-war version of neoclassical economics. Indeed, this citation analysis identifies the rise and prominence of Walrasian economics from the 1950s to the 1980s.

The tiny and short-lived flurry of interest in Darwinism in these leading journals in economics did not survive the First World War. By contrast, interest in Marxism in the same publications grew to a zenith in the 1950s, during the Cold War. In the 1990s, after the collapse of the Eastern Bloc, citations to Marx and Marxism declined.

Figure 1.1 Appearances of Darwin, Marx, Veblen and Walras in Four Leading Journals in Economics

In Figure 1.1, Darwin and Marx are compared with the leading neoclassical economist Léon Walras. Interest in Walrasian ideas did not become strong until after the Second World War, but throughout this period he remained overshadowed by Marx, despite energetic efforts by orthodoxy to exclude Marxism from the terrain of economics.

In *The Evolution of Institutional Economics* (Hodgson, 2004a), I examined the central role of Darwinism in the formation and early development of American institutional economics, particularly in the work of Thorstein Veblen. Darwinism was also a major inspiration for pragmatist philosophers and psychologists, including Charles Sanders Peirce, William James and John Dewey, who all influenced Veblen. With the exception of Chapter 3 and two sections in Chapter 2, the present book does not take a historical perspective. Instead it addresses contemporary concerns and themes.

In explaining both persistence and change in complex systems, Marx and Darwin emerge as two towering and enduringly relevant intellects. But in some fundamental respects their doctrines are antagonistic. Despite remaining strongly influenced by Marx, Veblen (1919) sensed this conflict in his essays. He proposed that Darwinism offered a superior philosophical outlook that was helpful in understanding the shifting mechanisms of institutional conservatism and change (Hodgson, 2004a). Veblen criticized Marxism as supporting the view that individuals were largely explained by

their social circumstances. Such doctrines do not explain how social forces impel individual actors to think and act, and they lack a meticulous examination of the causal mechanisms at the micro and psychological level. By contrast, Darwinism focused on detailed analyses of the causes of change, including at the level of the individual. In contrast, Marxism does not descend to this level of detail and does not explain how social or cultural ‘forces’ affect individual dispositions or actions. Veblen (1901b, p. 76 n.) ironically described Marxism’s ‘theory of self-determining cultural exfoliation’. In contrast to views of the human agent as a mere receptacle of culture, Veblen emphasized that individuals created institutions and culture, just as individuals were moulded by them.

The enduring figure of Veblen emerges from the shadows of Darwin and Marx. Once the mutual importance yet divergence of the outlooks of Darwin and Marx are acknowledged, then we are led towards an institutional economics of Veblenian hue. Veblen proposed that the social sciences should be brought into a ‘post-Darwinian’ era. The elaboration of Darwinism within the social sciences leads inexorably to a form of institutionalism. Consequently, within this conception, ‘evolutionary economics’ and ‘institutional economics’ are two faces of the same coin.³

Part 1 here begins with a discussion of some aspects of Marxism and Darwinism. Therein I refute the notion, promoted today by both leftists and Christian creationists, that Darwin was a racist. Chapter 3 discusses the historical use of the term ‘Social Darwinism’ and produces some surprises concerning its past meaning and chronology. A major barrier to the incorporation of Darwinism into the social sciences is removed. Chapter 4 brings the Veblenian institutionalist perspective more to the fore, in a transcript of a debate with the Marxist social theorist Alex Callinicos.

Partly because this book addresses philosophical fundamentals, it includes some discussion of critical realism. Three essays on this philosophical approach are gathered together in Part 2.⁴ Several leading critical realists are openly Marxist, and two of the essays here examine the connections between critical realism and Marxism. While some critical realist writings are inspirational, there are also disturbing and negative features.

Part 3 goes into more depth, by addressing issues fundamental to an institutionalist approach. Chapter 8 addresses the definitions of institutions and related entities, such as organizations, conventions and rules. Chapter 9 is

³ Notably, in a masterly presentation of cutting edge developments in institutional and evolutionary microeconomics, Bowles (2004) acknowledges the inspiration of both Darwin and Marx. A ‘kind of marriage of Marx and Darwin’ has been discussed in anthropology (Sanderson 2001; Dawson, 2002).

⁴ My unpublished essay ‘Structures and Institutions’ also focuses on critical realism. Some of the material in this essay made its way into Hodgson (2004a).

on the role of habit in institutional formation and evolution. Such aspects of institutional evolution are addressed in the agent-based simulation in Chapter 10. Finally, Chapter 11 addresses a prominent theme in modern evolutionary economics: the concept of a routine. It indicates how a Darwinian approach can be developed in the social sciences.

Ideology has always played a strong role in the social sciences. Even the most incisive of theorists is driven by motives to improve the world. Adam Smith wished to augment national wealth, David Ricardo promoted free trade, Karl Marx sought a socialist revolution, John Maynard Keynes railed against unemployment and Friedrich Hayek campaigned for individual liberty. Ideology is often the fuel of theoretical endeavour. But things go awfully wrong for science when:

- (1) unwarranted policy claims are made for theoretical analysis;
- (2) a jump is made from the theoretical to the normative without adequate consideration of questions of feasibility and mechanisms of implementation; or
- (3) a particular scientific approach is evaluated by exclusively ideological considerations.

Examples of all three types of error, concerning the relationship between ideology and science, are criticized in this volume. Chapter 3 shows that ‘Social Darwinism’ was not simply used as a label for racist, militant, nationalist and other objectionable attempts to hijack Darwinism for political ends. It was also used to disallow the use of Darwinian theoretical ideas in the social sciences. This is a classic example of an error of type (3).

Errors of all three types are revealed in my discussion of critical realism below. Not all critical realists describe themselves as Marxists or socialists, but they remain amazingly tolerant of repeated ideological claims by leading critical realists, that their doctrine undermines social democratic politics, and points to an extreme version of socialism in which markets are entirely absent (Bhaskar, 1989b, p. 6; Collier, 1994, p. 195; Bhaskar and Collier, 1998, p. 392). I find these shallow arguments to be very worrying, and symptomatic of a deeper intellectual malaise within critical realism.

I am not saying that considerations of fact and value can, or should, be entirely separated. Values unavoidably infuse our preoccupations and priorities, even within science. The danger lies in the use of science as the uncritical instrument of ideology, rather than as the engine of enquiry.⁵

⁵ This error is facilitated by attempts to see science itself as merely an ideological and institutional mechanism of social power (Aronowitz, 1988). There is no space to counter this debilitating reading of science here. Marxism, Darwinism and critical realism all commendably uphold a view of science as a search for truth, which is an

Just as many pro-market economists promulgate economic theory with the mistaken claim that it generally supports a free-market solution to policy problems, we find other social scientists making the unwarranted contention that their theoretical standpoint supports some type of socialism (Hodgson, 1999b). On the contrary, a deeper excursion into economic theory and realist philosophy leads directly to none of these ideological outcomes. Instead, they offer a much more open-ended agenda for the policy-inclined practitioner.

But academics are only human. We all prefer certainty to doubt, and simplicity to confusion. The appeal of an ideological solution with apparently strong theoretical underpinnings can be irresistible. Worriers and sceptics are not the obvious leaders of a distinctive and successful school of thought. Instead, the accolades go to the forthright, with their offers of clear solutions. But this is often the road to religion rather than science.

The world itself is muddled and uncertain. However, this is not an excuse for muddle and confusion in our own minds; instead it means that we must acknowledge the immense complexity of the real world, and be more cautious about our capacities to predict and to prescribe. It is here that the spirit of Darwin enters our discourse. It is a world of enormous variety, in which entities interact in rich and often unpredictable ways. In principle, we cannot disengage from this world, but any judicious intervention has to be cautious and experimental. The world is so complex that we will always be mystified by events. Yet if we can do anything to obtain greater understanding of the intricate mechanisms of human social life, then it will be worthwhile, especially if we wish to grope for improvements to the human condition.

anathema to the cultural relativist and other believers that science is merely a system of social power. Readers who believe that one person's truth-claims are simply as good as another's will find little comfort in this volume.