Preface

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Economic systems are complex structures, and their workings and their performance tend to change over time, in many countries progressively. Economics grew up as a discipline dedicated to describing and explaining how economies worked and developed, and achieving a firm enough grasp of the relevant phenomena and mechanisms so that economists could make a useful contribution to the major debates about economic policy. These features of the economic ontology – complexity, change and continuing policy debate – were of central interest to the early classical economists. Adam Smith’s path-breaking analysis of *The Wealth of Nations* is concerned with all of these.

The brute facts of complexity and change mean that simple theoretical arguments will not explain economic systems very well, unless the subject matter is somehow simplified. For economists who hanker after the elegance of physics, this can be frustrating. There clearly is great attraction in a strategy that would simplify the ontology to be explained, and then devise theories to explain that simplified ontology. The Walrasian characterisation of the economy in terms of a vector of input and output quantities, and prices, is a striking example of one proposal to simplify the ontology, a proposal that modern economics has largely embraced. The explanation of a Walrasian configuration as the equilibrium outcome of the decisions made by profit and utility-maximising actors is a theoretical structure tuned to that simplified ontology.

Scientific disciplines, of course, have the right within themselves to define and prune down the empirical subject matter they address, and to set their own standards for what makes for an acceptable theory. Many of the natural sciences have done this fruitfully. Modern neoclassical economic theory has done this too, along the lines I characterised above.

But the tradition of seeing the subject matter of economics as complex and changing remains alive, if diminished, in a scholarly line that runs from Smith to Marx, to Marshall, to Schumpeter, to many contemporary economists. For these economists, a simple characterisation of the economy in terms of Walrasian variables, and in particular a repression or simplification of the patterns of economic change, misses much of the interesting phenomena to be explained. From this perspective, the task of theory is to come to grips with at least the broad characteristics of these
complex and changing phenomena, rather than with a drastically stripped-
down ontology. Only if understanding is of the actual economic processes at
work, as contrasted with a simple model of these, will economic analysis be
able to make a useful contribution to ongoing policy discussions. While
making a useful contribution to economic policy-making is not the sole end
of economic analysis, it is an important end, and further, provides a powerful
test regarding whether or not the theory actually works. While clearly now a
minority position among economists, this tradition lingers on among
economic historians, among a good portion of the economists trying to
advance a new institutional economics, and among a group of economists
trying to develop evolutionary economic theory.

This book is about evolutionary economics and its relationships with
Darwin, and Darwinian, theory. As the editors and many of the authors
recognise, indeed highlight, the range of contemporary economic writing that
has adopted the term ‘evolutionary’ is quite wide. There is, first of all, the
kind of evolutionary economic theorising I have introduced above, a body of
theorising that rejects the modern neoclassical strategy of stripping down
drastically the economic phenomena regarded as appropriate subject matter
of economic analysis, and in particular that attempts to bring the processes of
economic development back to the centre of the picture where they were
with many of the great classical economists, and more recently with
Schumpeter and his contemporary followers. I will focus my subsequent
remarks on this strand of evolutionary economics because this is where I am.
However, as the authors of this book recognise, there are at least two other
strands that I believe are quite different in orientation from the one I have
been discussing.

One is evolutionary game theory, which to a considerable extent has been
motivated by recognition that certain economic contexts modelled as games
might have multiple equilibria. In the absence of assumptions implying
global rationality, which equilibrium will be reached will be determined by
behaviour out of equilibrium. The dynamics of out of equilibrium behaviour
have been modelled by evolutionary game theorists as ‘evolutionary’, or at
least given that name. The other is a collection of models that involves non-
linear dynamics, and the fascinating set of phenomena that non-linear
dynamic processes can generate and the issues they raise. While there is
some overlap, I believe that only a few of the writers in these camps have
been strongly motivated by a desire to significantly enrich the empirical
ontology of economics in the same way that the first group of evolutionary
theorists is trying to do; rather, their key motivation is the interesting analytic
issues posed by relatively simple models. And the interesting questions about
the relationships between these bodies of evolutionary economic theory and
Darwinism, or evolutionary theory in biology more generally, are I believe quite different.

For the most part the evolutionary economic theorists in the first group, which is my focus here, are not particularly motivated by biological ideas, nor are they inclined to simply lift evolutionary ideas from biology and apply them to the domain of their own inquiry. Technological advance, the dynamics of industry structure and competition, and institutional change, have been the three principal topics addressed by this group of economists. Their colleagues located in business schools have worked from the concepts of evolutionary economics, and added to those concepts, by building a theory in which the capabilities of a firm to lead in or take on board new technology or identify the right way to manage or market new technology is the key to firm success. These subjects comprise complex dynamic phenomena in their own right, and as I have stressed, for most members of this group the task is defined in terms of understanding these phenomena. Theories lifted from another discipline, and addressing very different subject matter, are unlikely to be satisfactory in this endeavour, and this group of evolutionary economists generally knows that. Indeed, I would stress the inclinations of this group of evolutionary economists to actually do, or at least to keep their analysis close to, empirical research.

Inductivism as an epistemological strategy is not in good repute. However, it is clear that many successful fields of natural science have been advanced by researchers whose philosophy has been pretty inductive, and that theory building in many successful fields has been strongly oriented towards the empirical phenomena the scientists were trying to understand. As noted, much (certainly not all) of modern evolutionary economics has been developed by economists who had and have a central interest in technological advance as the key driving force behind economic growth, a fact or perception highlighted by neoclassical as well as evolutionary economists. Their interpretation of the available empirical evidence about technological advance led them to highlight the competition among different alternatives that seem always to be present in fields where technological advance is rapid, the central importance of ex-post selection in determining the winners and losers in this competition, and the disequilibrium nature of the processes involved. This led them to a very different kind of theory than that which dominates standard economics. And the resemblance of at least certain aspects of that theory to Darwin’s theory is obvious.

But my argument is that they were not led to that theory by thinking about Darwin, but rather by thinking about how to explain the phenomena that were observed. Schumpeter’s theory is very much an evolutionary theory, in the sense I am describing, and many of the contemporary evolutionary economists I have been discussing were profoundly influenced by
Schumpeter. But Schumpeter himself strongly resisted the idea that his theory was Darwinian.

But if Schumpeter could deny and ignore the connection, this generation of evolutionary economists cannot. They cannot avoid having had their conceptualisations as economic theorists influenced by their understandings of Darwin and evolutionary biology, even if Schumpeter and not Darwin was their direct theoretical inspiration. And they cannot avoid reflecting on the intellectual similarities and differences, and the connections more generally, particularly in an era when some scholars have proposed a ‘Universal Darwinism’.

If my own feelings are any indication, most contemporary economists who embrace an ‘evolutionary’ theory of economic change, and who propose that satisfactory explanation for prevailing economic phenomena generally must involve in an essential way examination of how the current configuration ‘evolved’, certainly are interested in exploring the relationships between the economic evolutionary theory they espouse, biological evolutionary theory and Universal Darwinism, but also sceptical regarding efforts to establish common principles. They are interested because it is useful and friendly to get to know one’s relatives, and those who claim they are one’s relatives, and to sort out which of the latter are also the former. One certainly can learn a lot about oneself by studying one’s true relatives. But they also are sceptical because they know they surely are different from any of one’s relatives in certain essential ways, and thus resistant to the notion that even well-founded conceptions regarding relatives (for example the misconceptions of Lamarck regarding the processes of biological evolution) can easily carry over to evolutionary economics.

However, the purpose of a preface is not to summarise the book that follows, but to whet the reader’s appetite. This is a fascinating and provocative book, and those delving into it will have good reading.