

The book is written in an informal way and is highly readable. However, most readers would like to find more rigorous treatment of the mathematical concepts and the technical tools that are mentioned here and there. Indeed, without any analytical description, concepts like phase-transition, self-organised criticality, fractals, chaos, fitness landscape, and so on, remain a little too vague. As a result, what the reader may grasp is just a flavour of what complex system theory and artificial economics are about. The readers lack a reliable chaperone through the mathematical world underlying complex economic systems and all the secrets of this fascinating world still remain mysterious to them.

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Surfing Economics: Essays for the Inquiring Economist. By DIXON (HUW DAVID). (Basingstoke: Palgrave, 2001. Pp. xvii+222, £35.99 hardback. ISBN 0 333 760611.)

University teaching in economics is increasingly dependent on textbooks. Students are now required to devote a good deal of time to mastering formal techniques of analysis and their application to various stylised settings. A good textbook can do much to facilitate this process. However, this state of affairs carries a twofold danger. First, the emphasis on technicalities makes it eminently possible for students to miss the wood for the trees, focusing so intently on technical minutiae that they lose sight of the ultimate purpose and significance of economic analysis. As the report produced by the American Economic Association's *Commission into Graduate Education* put it, 'We might teach the language of mathematics but not the logic of economics, and end up valuing the grammar of the discipline, rather than its substance' (Krueger *et al.*, 1991, p. 1041). A second and related risk is that the process of distilling economic theory down to a form suitable for a textbook may yield an over-simplified and so ultimately misleading treatment that fails to do justice to the full richness of the theoretical framework in question. The limitations of textbook treatments of the Arrow-Debreu model of general equilibrium, which all-too-often ignore the possibility and significance of multiple equilibria, exemplify this point (Hahn, 1990).

Huw David Dixon's splendid collection of essays provides a very welcome bulwark against the dangers just described. Dixon's admirable intention, and one in which he succeeds to an impressive degree, is to provide a clear and intelligible account of some fundamental themes in contemporary economics, the significance of which students (and, indeed, more senior practitioners) may have forgotten in their efforts to master the technical intricacies of modern economics. As Hayek (1948, p. 56) argued, if the relevance of economic analysis for the real world is not to be obscured by a fascination with elaborate details then 'from time to time it is probably necessary to detach one's self from the technicalities of the argument and to ask quite naively what it is all about'.

The collection comprises eight self-contained essays and is divided into three parts. Part I sets the scene, opening with a clear and enticing overview of the nature of economics, understood as the discipline which studies the behaviour of

self-interested agents in decentralised market economies (Chapter 1), before going on to advance a thought-provoking assessment of the role played in this endeavour by the central organising concepts of modern orthodox economics, namely rational choice and the notion of equilibrium (Chapter 2). This part of the book introduces the unifying theme of the collection, namely the substantial gains in understanding to be had from moving beyond the study of perfectly competitive economies in which prices are adjusted by the fictitious Walrasian auctioneer in favour of approaches which explicitly model the price-setting behaviour of economic agents.

The remainder of the collection explores various implications of the introduction of imperfectly competitive behaviour into microeconomic and macroeconomic theory. Part II of the book focuses on macroeconomics, providing a critical overview of the natural rate hypothesis (Chapter 3), and examining recent new Keynesian accounts of how price-setting behaviour can generate nominal rigidities and involuntary unemployment (Chapters 4 and 5). Part III sees Dixon turn his attention to microeconomics. Chapters 6 provides a clear and thorough introduction to oligopoly theory. Chapters 8 and 9 are more speculative in nature, examining the scope for recent developments in artificial intelligence and evolutionary biology to inform a more convincing account of the disequilibrium behaviour of economic agents than that provided by standard rational choice theory, thereby helping economists to develop more convincing analyses of the stability of economic equilibria.

Dixon's book provides a useful antidote to the dangers, described above, of a loss of perspective and over-simplification. This is exemplified by his excellent deconstruction of the notion of the natural rate of unemployment (Chapter 3). Notwithstanding its claims to be based upon rigorous microfoundations, much of the literature on the natural rate fails to do justice to the full richness of microeconomic theory because it ignores the fact that multiple equilibria are endemic to the Arrow–Debreu model. Dixon develops this point via an insightful account of the possibility of multiple natural rates and its implications for macroeconomic policy, centred on a lucid exposition of Peter Diamond's (1982) seminal search-theoretic model of unemployment.

Dixon has succeeded in his aim of producing a valuable companion to textbook treatments of economic theory. The book deserves to be widely read, not only by students of economics but also by their teachers.

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