SURFING ECONOMICS

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Essays for the Inquiring Economist

HUW DAVID DIXON

palgrave

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This book is dedicated to Carol, Clare and Adam

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Preface

Economics is a social process. Economics is taught in schools and universities; economic research is written, some of it published in books and learned journals; in the public and private sectors economists advise on a variety of issues (sometimes giving good advice, sometimes bad!); economics graduates go on to prosper in a variety of professions, the ideas they have learned influencing the way they think; economic ideas, often in distorted caricatures, circulate around society in newspapers and political debate. Economics is a social phenomenon, it is how society thinks about the economy in which they find themselves. Somewhere within this social process you will find me: lecturing, marking exams, writing research papers, submitting them to journals, refereeing papers submitted by other people, advising government, presenting my research at conferences and seminars. Like any professional or academic economist, I am part of this big show, this evolving monster, sailing through the mist of history to goodness knows where.

We are all part of a process by which human society comes to understand the economy and indeed itself. Much of this ‘thinking’ goes on behind closed doors between consenting adults. The closed doors are not so much physical, but social. Academic economists write and speak in a special language that is largely incomprehensible to non-economists: it uses lots of specialist jargon and is often mathematical. Indeed, the assumptions made by economists might look bizarre and fantastic to any but the initiated: people live forever, can see into the future with perfect foresight, adopt elaborate statistical methods and live in highly stylised worlds. Indeed, with increasing specialism in economics, there is even a growing gap between what is treated as standard in one part of economics and others.

There is a danger that the world of academic economics will fail to communicate with the rest of society. This would be a real shame: the ideas, concepts and tools of economics deserve a wider audience. It is our duty as economists to convince and engage with others, be they students, government policy-makers or the general public.

The essays in this book are certainly academic in nature: indeed, some have been published in academic journals and learned volumes; and some chapters contain equations and diagrams that may baffle the layperson. However, they are aimed to communicate ideas in a simple and direct way to the student of economics who is interested in thinking a bit more about economics and doing more than just mechanically learning what is in textbooks. I very much hope that this collection will play a small but useful and enjoyable part in the social process of economics.

HUW DAVID DIXON

Acknowledgements

The chapters in this book have been written over a long period. I would like to thank my wife Carol for putting up with me throughout this period: being married to an academic and (even worse) an economist deserves a medal. I would also like to thank the various generations of students at Birkbeck College, Essex and York Universities on whom earlier versions of most of these chapters (or parts thereof) were tried out. Teaching is always a good way to make your own thoughts clear, and I have benefitted from much valuable feedback. Lastly, I would like to thank the publishers for nudging me repeatedly to get the book finished.

I would like to thank the following publishers for giving me permission to reprint the various chapters in this collection, reproduced with minor amendments: Blackwells for permission to reprint 'Equilibrium and Explanation', in J. Creedy (ed.), *The Foundations of Economic Thought*, Blackwell 1990, chapter 13, pp. 356–94. Cambridge University Press for permission to reprint 'Of Coconuts, Decomposition, and a Jackass: A Geneology of the Natural Rate of Unemployment', in R. Cross (ed.), *The Natural Rate 25 Years on*, Cambridge University Press 1995, pp. 57–74. Edward Elgar for permission to reprint 'Some Thoughts on Artificial Intelligence and Economic Theory', in S. Moss and J. Rae (eds), *Artificial Intelligence and Economic Analysis*, Edward Elgar 1992, pp. 131–154; 'Reflections on New Keynesian Economics; the Role of Imperfect Competition', in H. Vane and B. Snowden (eds), *Reflections on Modern Macroeconomics*, Edward Elgar 1998, pp. 158–203. Pearson Group for permission to reprint 'Oligopoly Theory made Simple', in S. Davies *et al.* (eds), *The Economics of Industrial Organisation*, Longmans 1988, chapter 4, pp. 127–63. Taylor & Francis Ltd for permission to reprint 'New Keynesian Economics, Nominal Rigidities and Involuntary Unemployment', *Journal of Economic Methodology*, 1999, vol. 6, pp. 221–38 <<http://www.tandf.co.uk/journals/.htm>>.

Introduction

I remember sitting in my fourth-floor office on a sunny day. I was a young lecturer (assistant Professor in US terms) at Birkbeck College in London, busy teaching and establishing my research career. The phone rang, and I heard the voice of my friend Steve Davies asking me if I would like to write a chapter on oligopoly theory for a book he was writing on Industrial Organisation. Well, yes, this seemed like an excellent opportunity. I was teaching a course on IO for the graduate students at Birkbeck, and it was already apparent to me that there was a real gap in what was going on in IO. On the one hand, the real action was happening in conferences and seminars around the world: researchers were busy talking to each other and developing many new and interesting ideas (the early mid-1980s were an exciting time for IO!). Much of this could be read about, but only in a highly technical and condensed form found in academic journals; not really suitable for students. On the other hand, there were a variety of textbooks that tended to rehash the same old things that other people had done before. However, what I wanted to get over was the truly exciting and fundamental ideas that were being developed, but in a simple form. Well, I only had a few weeks to write the chapter (six weeks I seem to remember), so I just developed my lecture notes. The end result was ‘Oligopoly Theory made Simple’ (1988). What I tried to achieve was to communicate the fundamental ideas in a rigorous but simple manner, so that people reading the chapter would know what was going on at the frontier of research: maybe not the details of course, it was the spirit that mattered.

I could tell a similar story for most of the chapters in this book. In each case, an invitation by letter or phone (and later still by e-mail) provided me with the opportunity to communicate something I felt passionately about. John Creedy asked me to write about the concept of equilibrium: the end result was ‘Equilibrium and Explanation’ (1990). This reflects very much my thoughts arising out of various lectures: at Birkbeck College again on general equilibrium theory and introductory micro and macro. Also, my interest in philosophy found an outlet (I had read economics and philosophy as an undergraduate at Balliol College Oxford). Rod Cross asked me to write about the Natural Rate: this was a real joy, because I felt that the textbook treatment was so bad! You can read the end result in ‘Of Coconuts, Decomposition, and a Jackass: The Genealogy of the Natural Rate’ (1995).

Two of the chapters have arisen from academic conferences. The first was an excellent conference organised by Scott Moss at Manchester on Artificial Intelligence and Economics, with a mixture of computer scientists, economic theorists and management scientists. This conference made a big impact on me. As a student at Balliol, I had always been suspicious of the assumption of

optimising behaviour, becoming a great fan of the writings of people like Herbert Simon, Brian Loasby, George Shackle and Axel Leijohufvud (amongst many others!). However, as a doctoral student I set to learning all of the technical stuff and spent more time reading Apostol's *Real Analysis* than worrying about the meaning of it all. However, whilst I went with the flow and adopted the necessary conventions for professional success, I never forgot what I had known. The paper that resulted was 'Some Thoughts on Economic Theory and Artificial Intelligence'. The other conference was organised by Roger Backhouse and Andrea Salanti in the beautiful city of Bergamo. This gave me the chance to write a paper that really got to the bottom of what was wrong with the competitive model of the labour market and why a model of involuntary unemployment was so central to any reasonable macroeconomic theory. 'New Keynesian Economics, Nominal Rigidities and Involuntary Unemployment' is the only chapter in this volume that has been published in an economic journal.

None of the chapters mentioned previously were written explicitly for undergraduate students. Things changed when around 1997 Brian Snowden and Howard Vane invited me to write a chapter on new Keynesian economics for an undergraduate text. In 'The Role of Imperfect Competition in New Keynesian Economics', I took part of my then graduate lectures at York and made them simple, trying to get the basic ideas over without too much technicality. As always, what is important is the conceptual framework, not the equations! Lastly, there are the two chapters written exclusively for this book. In 'The Joy of Economics', I bring out the big picture and explain why we should not think of economics as a dismal science. There are some really interesting issues and questions underlying economics which are often left out as lecturers and examiners tend to concentrate on the equations. Lastly, there is 'Donut World and the Duopoly Archipelago'. This is the result of the process started at the Manchester conference. The 1990s were an exciting time for the issues for bounded rationality and social learning. They had a real renaissance in mainstream economics: particularly game theory, behavioural finance and experimental economics. These ideas deserve to be made much more widely available to undergraduates, to serve as an antidote to the otherwise relentless and rather far-fetched notions of rationality that predominate in undergraduate textbooks. As I argue in 'Some Thoughts on Artificial Intelligence and Economics', whilst the standard model of rationality might be a useful tool and a good approximation in certain cases, it should not be the only model we use to the exclusion of all others.

Lastly, a couple of comments on the style of the book. I have left the chapters largely unchanged except for introducing uniformity in terms of numbering of figures and so on. *This means that the chapters are completely self-contained:* each one can be read in complete isolation from the others. I have added cross references, but these are only very general. One result of this is that there is some repetition. However, the repetition serves a purpose: the same material is approached from different directions, giving it a different perspective each time. Thus, for example, the Cournot model of oligopoly appears in three chapters: in

'Equilibrium and Explanantion' it is explored as an equilibrium concept; in 'Oligopoly Theory Made Simple' it is very much worked out as a practical modelling tool; in 'Donut World and the Duopoly Archipelago' it is treated as a social learning model and linked to evolutionary models. Finally, if you read these chapters you will see the evolution of my English style over the last 16 years! This has changed considerably. Perhaps the main shift has been towards a simpler world English. Over the years, I have become much more sensitive to the knowledge that most people reading my work will not have English as a first language: writing for a native British or American reader is a different exercise from writing for a Chinese or Turkish reader. A large vocabulary or common concepts cannot be expected. However, since my prime concern has always been towards clarity and content rather than style, I do not see this as something bad. Lastly, I am an inveterate and incorrigible infinitive splitter. For those poor souls who are still under the misapprehension that there is anything wrong in this, I would direct you to the excellent discussion in *The Cambridge Encyclopaedia of the English Language* by David Crystal.

It is very much hoped that these essays will be able to accompany a student of economics through his or her studies. The 'level' of the chapters differs in terms of content and technical know-how required and the exact place in an undergraduate programme will differ from country to country and the exact nature of the degree programme. However, as a general rule, I think that the chapters can be divided into two by the earliest point at which they can be most usefully read.

The first group are clearly appropriate for students who are studying intermediate macro or micro texts: these are all of the chapters *except* Chapters 6 and 7, which are more appropriate for students who have mastered the intermediate micro course and are specialising in microeconomics. Some chapters are a mixture: for example, 'Equilibrium and Explanation' in the early sections is suitable for intermediate students, but contains some material (on information and signalling) that is often not dealt with until later. Likewise, whilst 'Donut World' is at an intermediate level, the 'Duopoly Archipelago' is more advanced.

These chapters will, hopefully, have something useful for economists at all levels. I very much hope that you enjoy reading them as much as I did writing them.