



the Death of Economics

PAUL ORMEROD

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Preface to the North American Edition

This book is mainly addressed to members of the general public. Economics has assumed a dominant position in the political life of the West, and orthodox economic theory has exercised great influence on the conduct of public policy over the past ten to fifteen years.

Even to the intelligent member of the public, economics is often intimidating. Its practitioners pronounce with great confidence in the media, and have erected around the discipline a barrier of jargon and mathematics which makes the subject difficult to penetrate for the non-initiated.

Yet orthodox economics is in many way an empty box. Its understanding of the world is similar to that of the physical sciences in the Middle Ages. A few insights have been obtained which will stand the test of time, but they are very few indeed, and the whole basis of conventional economics is deeply flawed.

An important purpose of this book is to try to convey this message in a way which is accessible to the general public. This does not mean that the arguments are in some sense diluted, for the book addresses difficult issues which are at the very heart of orthodox economic theory. But the style of the book is designed as an aid to the comprehension of a wider audience. Deliberately, there are relatively few footnotes, and the text is not cluttered with a large number of references to articles in academic journals.

A new introduction to the North American edition is needed for two reasons. First, to take account of developments since the book was written. The text was finalized during 1993, and was published in Europe in 1994. Second, to acknowledge more fully some important differences between economics in Europe and America.

The book received a mixed response in Europe. Non-economists greeted the book favorably, since one of its main purposes was to convey to the non-specialist reader the highly tenuous nature of modern economic orthodoxy.

The reception by conventional economists was in many cases hostile, some to the point of abuse. The very title of the book seems to have enraged many economists. Yet their fury only served to expose the futility of much of their endeavors. Economics is supposed to be, uncontroversially, about how economies work. In particular, the discipline should be about how the Western economies operate, for they are by far the most successful form of economic organization which has ever been invented.

An important aspect of business activity in the West is the marketing function, and the title of the book was chosen with this in mind. A equally valid designation might have been something along the lines of 'A theoretical critique of neo-classical economics from a non-linear systems perspective', but somehow one feels it would not have had the same impact. The failure of many economists to appreciate this speaks volumes for their true understanding of capitalism.

But the title serves a more general function. The study of human societies and economies is of great importance, and it is not the purpose of the book to suggest otherwise. Rather, it is to argue that conventional economics offers a very misleading view of how the world actually operates, and that it needs to be replaced.

Criticisms of the book by economists have been twofold. First, that they are already aware of the problems which I raise for the discipline, and indeed the reviewers themselves know far more about it than I do. Second, that the book is plain wrong. Despite the contradictory nature of these arguments, some economists appear to subscribe to both at the same time.

Taking the reaction to the book of economists as a whole, I cannot help but notice with amusement the clear correlation between the degree of hostility shown and the amount of taxpayers' money which the economist concerned and his or her institution receive to carry out conventional economic research (although, as any economist will tell you, correlation does not necessarily prove causation).

Economic research in most of Europe is carried out along lines which the state planning institution, Gosplan, in the old Soviet Union could only envy. A central committee decrees which lines of research, which methodologies are to be pursued. The diktat is sent out to the factories—the economics faculties—around the country, and enormous piles of articles are produced exactly in accordance with the rules in order to qualify for further state subsidies. The only problem is that very little of what is produced is of the slightest interest to anyone else, and the papers simply gather dust in the offices of the central committee.

Such problems are far from unknown in the United States. Indeed, the discipline with which orthodoxy is enforced in many American universities is truly awesome.

But economics in America operates on curiously schizophrenic lines. For the most part, conventional approaches dominate, and set the tone for work throughout the rest of the world. Yet a great deal of the innovative work

which is being done, and which needs to be done to restore the sanity of the discipline, is accomplished in the United States. The financial organization of the best American universities undoubtedly helps. Support from successful alumni, far-sighted industrial investment and the pride that Americans have in their successful institutions produces a climate which can be quite different from that in Europe. The opportunity exists for the best minds to think original thoughts, to behave as scholars and not as researchers, and not to cower before the exigencies of the next grant application.

Criticisms of economics are by no means new, though many of them can be dismissed readily by the profession. As chapter 4 in particular shows, the most devastating critiques have come from within economics itself, from those equipped with the formal modeling and mathematical skills to expose the limitations of orthodoxy on its own terms. I studied economics as an undergraduate at Cambridge, England, whose leading lights had for decades locked horns in a theoretical tussle with those of Cambridge, MA. Yet these debates now lie largely forgotten, for the British of those days made the fundamental mistake of trying to link criticism of free market economic theory with ideological criticism of the Western market economic system as it exists in practice.

It is the very success of Western capitalism which makes it so important to comprehend its workings better, and to consider how some of the problems to which it gives rise can best be resolved. This was the motivation of Keynes, a liberal gentleman scholar writing in the 1930s at a time of massive unemployment, who saw himself working to save the capitalist system.

Orthodox economic theory simply does not offer a proper account of the workings of the economies of the West. Indeed, since this book was written, Kenneth Arrow, the American Nobel prizewinner who has done more than anyone to create a modern mathematic basis for conventional theory, has stated that he regards the high levels of unemployment which are frequently observed to exist for long periods of time in Western countries as an 'empirical refutation' of free market theory. Arrow's recent criticisms extend far wider, but it is this which he regards as the single most decisive piece of evidence.

Reflecting on the book, there are two areas on which I would now place more emphasis. The first relates to the amounts of information which economic theory requires its actors both to acquire and to process if they are to behave according to its precepts. In strictly limited environments, where the amount of information to be assessed is small, conventional

theory can be a reasonable approximation to reality. But this is far from being the case when the economy as a whole is considered.

These informational problems are dealt with at some length in the book. But insufficient attention is given to recent developments in economic theory which attempt to relax the rigid assumptions of orthodoxy and to investigate the implications of more realistic assumptions. Even small deviations from the full panoply of postulates required by conventional theory often lead to outcomes which are quite different from those of the textbooks. It is very encouraging that this work takes place. But many of those carrying it out seem to be unable to shake off completely the deadweight of the past, and still look to the orthodox free market model as the Platonic ideal to which we should aspire. The world itself may have fallen from grace, and have properties far removed from those of conventional economics. Yet orthodox models remain the benchmark against which many of these more realistic models are compared.

The second area of potential revision concerns the process by which the individual actors in economics—whether as individual consumers or workers or as companies—relate to each other. This has occupied much of my time since this book was first published.

In almost all the published work on economic theory, whether within or without the conventional view of the world, the tastes and behavior patterns of individual agents—the phrase used habitually by economists to describe both people and firms—are fixed. An individual is assumed to have certain preferences about, say, the available range of consumer products. He or she is presumed to make a rational choice about which ones to buy, on the basis of the prices of the products and on the amount of his or her income or wealth.

In conventional theory, the behavior of other people alters the behavior of any individual *indirectly*. The choices of others affects the prices of products, and the individual decides what to buy on the basis of these prices. Undoubtedly, this does happen. But it is a very partial and incomplete account of how behavior is influenced. Almost everyone but a saint has other motivations. We observe the things our friends and neighbors buy, and *alter* our own behavior in response. The brand new car in the next door drive leads many to covet one for themselves. In short, their tastes and behavior are not fixed, but are influenced *directly* by the behavior of others.

When the foundations of conventional economics were being built, as

long ago as the second half of the nineteenth century, the leading thinkers and those who followed them were perfectly aware of this pervasive fact of life. But the mathematical techniques which would enable them to handle it in theoretical models were simply not available to them at that time. They were therefore obliged to simplify by ignoring the issue. But the founders of economic theory knew all along that their models were based upon assumptions which often ignored important elements of reality. The writings of Alfred Marshall, the great British economist whose work straddled the decades around the turn of the century and who is, on reflection, unjustly neglected in this book, make this absolutely clear.

But this level of awareness has been lost to many current economists. So much of their own intellectual capital and reputation is bound up with orthodox theory that they have forgotten that their work is based on a dramatic simplification of reality. People live in a society, and their actions are constantly influenced by those of others.

The techniques required to deal with this factor have only recently become feasible to implement through the massive development of, and access to, computer power. An awareness of this may have been the source of the alleged remark of the great physicist Max Planck to Keynes in the 1930s. Urged by Keynes to apply his mind to the problems of economics, Planck thought for a moment and said 'No, the math is too hard'. Of course, the level of math used both then and now in conventional economics was trivial to a scientist of Planck's stature and ability.

A world in which individuals react directly to the behavior and actions of others is utterly and completely different from the world of orthodox economic theory. It is also far more realistic. It is this concept which lies behind the book on which I am presently working, and whose elaboration must await publication of that volume.

All this is not to say that conventional economics is completely useless, which some of the more fervent readers of this book appear to believe. Much of the environmental criticism of contemporary economic activity, for example, is given intellectual force by the use of ideas developed in economics. But in many ways, economics at present is like physics before Newton. It is not a completely empty box, and some important insights have been developed. Indeed, a more widespread awareness of these would markedly improve the quality of public discourse on policy. But it is a limited and, ultimately, a flawed account of how the world actually behaves.

An encouraging sign is the rapid fall, on both sides of the Atlantic, in

the number of students who want to study economics as it currently exists. Conventional economics is supposed to understand the workings of the free market, and one would imagine that it is the orthodox who would be the first to react to this signal which is being sent by an important segment of their customer base. But this is far from being the case.

Too much of economics has deteriorated into intellectual games subsidized at the expense of the taxpayer. A better understanding of economies and societies will inevitably involve difficult ideas and concepts for, as Max Planck hinted, these human systems are in many ways more complex than the physical universe itself.

The best economists are fully aware of the limitations of their discipline. It is an exciting time, for more and more attention is being paid to developing views outside the mainstream which give a better understanding of the world. Progress is slow, in part because of the difficulty of the task, and in part because of the fierce resistance of the bulk of the economics profession to criticism, whether implicit or explicit, of the ideas which they have all labored so hard to understand.

We live in paradoxical times. At one level, the Western world enjoys material living standards beyond the wildest dreams of those who, for example, lived through the problems of the 1930s. In the Far East, successful economic development is beginning to relieve millions upon millions of people from lives of ceaseless drudgery and poverty. Yet, side by side, the problems of Africa worsen, and in the countries of the West themselves, social divides deepen. Even the lives of many amongst the affluent majority are blighted by new levels of uncertainty.

The ultimate purpose of the discipline of economics, or of political economy as its founding father, Adam Smith, called it, both was and should be severely practical. Smith's own masterpiece, *The Wealth of Nations*, was intended to provide an account of why some nations were wealthy whilst others remained poor. Insights into the success of the former might help the latter escape their poverty. And the study of how economies work remains as important as ever, in order to illuminate both long-standing and new problems which societies face as we move into the next century.

Paul Ormerod
London, June 1997

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PART I

**THE PRESENT STATE OF
ECONOMICS**

Economics in Crisis

The world economy is in crisis. Unemployment in Western Europe rises towards the 20 million mark. America faces the deep-seated problem of the twin deficits, the federal budget and the balance of trade. Vast tracts of the former Soviet empire are on the brink of economic collapse. Japanese companies, faced by the deepest recession since the war, are on the verge of breaking the long-standing and deep-rooted social convention of lifetime employment.

The orthodoxy of economics, trapped in an idealised, mechanistic view of the world, is powerless to assist.

In Western Europe, the economics profession eulogised the Exchange Rate Mechanism and monetary union, despite frequent bouts of massive currency speculation and the inexorable rise of unemployment throughout Europe during its years of existence. Teams of economists descend on the former Soviet Union, proclaiming not just the virtues but the absolute necessity of moving to a free-market system as rapidly as possible. Such prescriptions involve the establishment of market economies of greater purity than those contemplated by Ronald Reagan and Margaret Thatcher. But despite governments in the former Soviet bloc doing everything they are told, their economic situation worsens.

From the pensioned security of their vast bureaucracies, economists from the International Monetary Fund and the World Bank preach salvation through the market to the Third World. Austerity and discipline are the hallmarks of the favoured policies of the IMF throughout the world, yet its own salary bill has risen by 38 per cent in the last two years, and is budgeted to rise by a further 22 per cent in 1994.

On a more mundane level, economic forecasts are the subject of open derision. Throughout the Western world, their accuracy is appalling. Within the past twelve months alone, as this book is being written, forecasters have failed to predict the Japanese recession, the strength of the American recovery, the depth of the collapse in the German economy, and the turmoil in the European ERM.

Yet to the true believers, within the profession itself, the ability of economics to understand the world has never been greater. Indeed, in

terms of influence in the world the standing of the profession appears high. Economics dominates political debate, to the extent that it is scarcely possible to have a serious political career in many Western countries without being able to repeat more or less accurately its current fashionable orthodoxies. Television seeks out the views of economists on Wall Street and in the City of London, anxious that the viewing public should be informed of the impact of the latest monthly statistic on the entire economy over the coming years. The numbers of students seeking to read economics grew dramatically during the 1980s.

Academically, the discipline seems to have developed enormously, particularly over the past decade, the mathematical sophistication especially having increased in terms both of theoretical work and of the approved methodologies of applied economics.

Of course, disputes still exist, such as the well publicised arguments between monetarists and Keynesians as to how the economy as a whole operates. For example, the former argue that increases in government expenditure will ultimately have no impact on the overall level of economic activity and employment. Both sides agree that such increases can have a positive effect on a time horizon of two or three years. Keynesians believe that some of this impact persists. But such tiffs merely conceal the large body of shared belief which characterises present-day economics. The old joke that twelve economists in a room could be guaranteed to hold twelve different opinions, and thirteen if one of them were Keynes, is becoming less and less true. An intellectual orthodoxy has emerged.

Increasingly, the subject is taught not as a way of learning to think about how the world *might* operate, but as a set of discovered truths as to how the world *does* operate. The content of degree courses is becoming increasingly standardised. Substantial and impressive textbooks exist, both in micro- and in macro-economics, consisting in the main of the mathematical technique of differential calculus applied to linear systems.

It cannot be stated too often that very little of the content of such textbooks is known to be true, in the sense that many of the statements in textbooks on, say, engineering, are known to be true: formulae for building bridges exist, and when these formulae are applied in practice, bridges in general remain upright. The same does not apply in economics and yet the confidence of the true believers in economics has grow'd and grow'd like Topsy. As they themselves would doubtless prefer to say, to give the description an authentic mathematical air, it has grown exponentially.

Sociologists and psychologists have documented many case studies

concerning the reactions of groups when views which they hold about the world are shown to be false. In such situations, far from recognising the problem, a common reaction of individuals is to intensify the fervour of their belief.

A classic study of this kind, *When Prophecy Fails*, published in 1956, was carried out by American psychologists. It describes the experiences of researchers who joined a group which was making specific predictions of imminent catastrophic floods. When the floods failed to appear, the group, far from disbanding, intensified enormously its efforts to convert others to its beliefs. Another example is provided by James Patrick, a young sociologist who infiltrated a gang of Glasgow youths in the late 1960s.* These gangs, while being almost model citizens by the standards of the American inner city, were notorious for perpetrating acts of violence, mainly on each other but occasionally on the public at large, which were thought extreme in Northern Europe. The gang believed as a point of honour that no member would betray another to the police. Yet, as the author noted:

One prominent member of the gang was arrested and within twenty-four hours all other members had been questioned by the police. The inference was obvious to everyone except the gang. Yet their misplaced belief in gang loyalty was not discarded or even diminished, but became all the more extreme and passionate.

The intensity of faith shown by most professional economists is well illustrated by two passages from *Liar's Poker*† by Michael Lewis, who began his career as a successful trader on world capital markets. His descriptions of how such markets operate are in many ways far removed from the received wisdom of orthodox economics. The first passage deals with the aspect of the growth of economics as a discipline. Writing about the major US universities in the mid-1980s, Lewis states:

[An effect] which struck me as tragic at the time was a strange surge in the study of economics. At Harvard, the enrolment had tripled in ten years. At Princeton, in my senior year, for the first time in the history of the school, economics became the single most popular area of concentration. And the more people studied economics, the more an economics degree became a requirement for a job on Wall Street. There was a good reason for this. Economics satisfied the two most basic needs of investment bankers. First, bankers wanted practical people, willing to

*L. Feininger, H. Rieken, S. Schuster, *When Prophecy Fails*, University of Minnesota Press, 1956, and James Patrick, *A Glasgow Gang Observed*, Eyre Methuen, London, 1973.

†Michael Lewis, *Liar's Poker*, Coronet Books, 1990.

subordinate their education to their careers. Economics seemed designed as a sifting device. Economics was practical. It got people jobs. And it did this because it demonstrated that they were among the most fervent believers in the primacy of economic life.

Economics allowed investment bankers directly to compare the academic records of the recruits. The only inexplicable part of the process was that economic theory (which is what, after all, economics students were supposed to know) *served almost no function in an investment bank.*

In other words, at the very centre of world financial markets, where the principles of the free market should be at their clearest, economics as an intellectual discipline served almost no practical function.

The second example from Lewis's book provides even more food for thought, both as an intellectual challenge for economics and as an illustration of how the study of the subject can affect a person's mind. A fundamental belief in economics for many years has been that the price of a commodity – whether it is bananas or people – is determined by the relative levels of demand and supply. The higher the demand relative to supply, the higher the price.

At an early stage in Lewis's career on Wall Street, during his training programme, a group of his colleagues was asked why they were so well paid. 'A person who had just taken an MBA from the University of Chicago explained: "It's supply and demand. My sister teaches kids with learning disabilities, and earns much less than I do. If nobody else wanted to teach, she'd make more money."' In fact, as all the trainees were acutely aware, there had been intense competition to secure places on their programme. Over 6000 people, most of them from economics programmes at the major American universities, had applied for just 127 places on the Salomon Brothers' training programme. Yet as Lewis drily remarks: 'Paycheques at Salomon Brothers spiralled higher in spite of the willingness of others who would do the same job for less.'

In other words, an apparently intelligent graduate from one of the major economics courses in the United States was able to assert, thanks to his understanding of the principles of economics, and in particular the law of supply and demand, that the reason he as an investment banker was paid a salary many times higher than that of his sister who taught children with learning disabilities was that fewer people were available to do his job, relative to demand, than was the case with his sister's. And this was despite overwhelming evidence on a daily basis that the empirical foundation for such an assertion was worthless.