Economics: From emperor to vassal?

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For years economics has been engaged in a bitter turf-war with its disciplinary rivals in marketing and management. Its war-cry has been its command of science and theory. Steve Keen argues that the exodus of students to the more pragmatic rival disciplines is more than a coincidence. Economic theory is moribund, and in comparison the 'real-world' disciplines inevitably look attractive.

Thirty years ago, economics saw itself as the emperor of the social sciences, and believed that it was on the verge of subsuming all other disciplines under its mantle. Today, it is so seriously in decline that many academic economists feel like members of an endangered species. What on earth happened?

There are many causes, some of which are not unique to economics. The Dawkins reforms, the shift of universities towards vocational training—and of students towards credentialism—all reduced the appeal of "hard" subjects like economics.

But most losses by the economics team were the product of own goals.

Firstly, the discipline deliberately turned away from the broad social science it once was in an attempt to recast itself as a science akin to physics. Regardless of whether this was or could be successful, it made economics far less appealing to the majority of potential students. The damage was not limited to a failure to attract students in the first place: the emphasis upon mathematical formalism also caused an even more drastic failure to stop commencing students decamping to other disciplines.

Secondly, this narrowing of focus virtually forced the formation of other specialist disciplines, to teach the issues economics could not or would not consider. Thirty years ago, the only other flatmate in the Commerce household was Accounting. Now, there are Marketing, Management, and many others, and relations between these newcomers and the once dominant resident are far from cordial.

While economists rarely express these sentiments out loud, the truth is that they think most of these other disciplines shouldn't exist. Economic theory tells economists that marketing is unnecessary–consumers already know their preferences, just put the stuff on the shelves and let them shop. Nor is management training necessary: just equate marginal cost to marginal revenue, and "Bob's your uncle".

Marketing and Management academics beg to differ, and this has cost Economics dearly in terms of student bums on seats. Economists argue vehemently at Faculty meetings that students need more training in economics, and therefore that any commerce degree should contain several units of micro and macroeconomics. The other members of the household listen politely, and then vote for less compulsory economics, not more. In 1987, UNSW required six economics units in any Commerce degree. Now there are three–and that is still a very strong position compared to the situation at most other universities today. In many Australian universities, it is possible to get a degree in, say, Accounting, with just one unit of economics—and economists are now revising textbooks to take account of this predicament.

The stealth war against economics isn't limited to business faculties. Since economists willingly tossed out Marx, Veblen, Schumpeter, and all manner of other woolly thinkers and woolly topics, they were in no position to stop departments of Sociology, Political Science—even Architecture—occupying the space they vacated. Many such departments now run courses which have "economics" in their titles—though they often teach concepts that conventionally trained economists would not recognise as "economics".

How have academic economists responded to this crisis? Apart from getting personally and collectively depressed, in general they have stuck to "business as usual".

This lack of innovation from an academic sect which normally champions the innovative spirit would be rather puzzling, except for one thing: economists feel that they shouldn't change because they are right and everyone else is wrong. Why change when you know the eternal truths, and everyone else is misinformed?

Unfortunately, it is the economists who are misinformed, not their critics. Their faith in the ultimate truth of economic theory reflects a lack of knowledge of their own discipline. This allegedly scientific social science practices

not science but, as Hugh Stretton put it in his recent book, "scientism", in which the appearance of scientific behaviour masks a crucially unscientific approach.

Many economists would regard that statement as sheer hyperbole. But it is easily substantiated, as I have done recently in *Debunking economics: the naked emperor of the social sciences* (Pluto Press, Sydney 2001). The problems with economic theory begin at the very beginning: the manner in which they characterise the behaviour of the fundamental components of a market economy, consumers, corporations, and the market mechanism itself.

A conventional education in economics teaches that a competitive market economy achieves the highest possible social welfare, because it allows "utility-maximising individuals" and "profit maximising firms" to determine an equilibrium set of prices and quantities of all commodities. This belief makes economists aggressive proponents of "market fundamentalism", in which market is put forward, not only as the superior mechanism for every social purpose, but as the *only* mechanism that should exist except where "market failures" can be clearly identified. But ironically, this belief is *not* supported by economic theory: each element of this argument has been shown to be unsound.

Starting with the theory of utility-maximising behaviour by consumers, economists derive a single individual consumer's "demand curve" for a particular commodity, and then add up all these individual demand curves to generate a market demand curve. Undergraduate students are taught this procedure as if it were both logical, and empirically sound.

It is neither.

Almost fifty years ago, it was shown that this "adding up" of individual demand curves could only work if two conditions applied. Firstly, all consumers had to have identical tastes. Secondly, these "clones" could never alter the ratio in which they consumed different commodities: if at a poverty income level, thirty per cent of income was spent on sausages, then at a profligate level, 30 per cent *still* had to be spent on sausages.

Clearly these conditions are absurd. But the economist who first worked them out commented that "The necessary and sufficient condition quoted above is intuitively reasonable. It says, in effect, that an extra unit of purchasing power should be spent in the same way no matter to whom it is given" (Gorman 1953).

The theory of consumer behaviour hasn't fared well empirically either, even at the level of a single individual: both times the model was tested empirically, it failed. The majority of test subjects didn't behave as economists predicted, instead behaving in a way that economists classified as "irrational".

In a true science, such a result would eventually lead to questioning of the underlying notion of what is rational behaviour—since it hardly helps to have a theory of rational behaviour which classifies the entire human race as irrational (this indeed was the fate of a related model of human behaviour in psychology, behaviourism—see Bond 2000). But economists in general refuse to consider the possibility that the economic definition of rationality is flawed, because they prefer their *a priori* notions of rationality to anything they might deduce from experimental results.

The experimenters themselves were not so dismissive, concluding that "we should pay closer attention to the limits of this theory as a description of how people actually behave" and "we economists should perhaps be a little more modest in our 'imperialist ambitions' of explaining non-market behaviour by economic principles" (Sippel 1997: 1443). Indeed!

The theory of corporate behaviour fares little better. Economists believe that competitive markets are superior to monopolised ones, because their theory tells them that competitive markets will produce a larger output at a lower price. But as I show in *Debunking Economics*, their analysis is based on a simple but profound mathematical error (the technical details are explained verbally in Chapter 4 of the book "Size does matter", and mathematically on my webpage www.debunking-economics.com). The source of their error is their desire to argue that the demand price falls as output rises at the market level, but that each firm faces a "horizontal" demand curve. Unfortunately for economists, these two assumptions are incompatible: they amount to believing that a long downward sloping line can be broken in to many perfectly flat lines, or that lots of perfectly flat lines can be added up to yield one downward sloping line. Either alternative is mathematically impossible.

When this error is corrected, the equilibrium for a competitive market turns out to be exactly the same as the equilibrium for a monopoly—which implies on theoretical grounds that the Australian Competition and Consumer Commission's crusade to promote competition is a waste of time. What economists describe as the "deadweight loss of monopoly" is more correctly described as "the deadweight loss of profit maximising behaviour".

Many other errors abound in economic theory: the welfare comparison of competitive firms to monopolies contradicts the economic concept of diminishing returns (even if we ignore the mathematical problem outlined above); the "U-shaped cost curves" that economists love drawing are feasible only for trivially small levels of output; the meritocratic model of income distribution can't explain the distribution of income, the theory of finance is only valid in a world where everyone knows the future and can borrow limitless amounts of money, and so on.

These and many other technical errors in economic theory have been pointed out by all manner of economists—both supporters and critics—over the past 80 years, and these are detailed in *Debunking Economics*. But still mainstream economics is taught as if it is an unassailable truth.

This is scientism, not science. It is high time that economics abandoned its pre-Galilean approach, and got its hands dirty finding out how the real world actually works.

Fortunately, there are some isolated minorities of economists who have split ranks with the mainstream, and are trying to develop approaches to economics that are dominated by realism rather than *a priori* theorising. The main realist alternatives are post-Keynesian Economics, Evolutionary Economics, and Econophysics.

Post-Keynesians, as their name implies, believe that the work of John Maynard Keynes in the 1930s provides a more realistic foundation for economic theory. Their theories work at a more aggregative level than neoclassical economics, and they emphasise the essential role of money and the impact of an uncertain future on economic behaviour.

Evolutionary economists believe that the appropriate foundation for economic theory is not the mechanical statics that underpins neoclassical economics, but evolutionary biology. While their technical repertoire is still underdeveloped, practitioners tend to be highly skilled in modern mathematics and computing—with a knowledge of differential equations, complexity theory and computer simulations which easily exceeds the mathematical knowledge of conventional economists. They are also slowly subsuming the pre-existing school of Institutional Economics in a peaceful takeover.

Econophysics is a recent phenomenon, as physicists who have developed an interest in economic issues have started to apply their formidable analytic skills to economic issues. This school promises to bring substantial change from outside the mainstream economics profession—something which, many years ago, Thomas Kuhn commented was often necessary to achieve a "paradigm shift" in a discipline which had reached an intellectual impasse that its current practitioners were unable to surmount.

While these schools are infants when compared to the dominant mainstream, there is some hope that they could become meaningful schools of thought if sufficient intellectual and financial resources were devoted to their development. But that is highly unlikely to occur from within economics departments themselves, given their continuing dominance by neoclassical economists. It may take a complete reversal of the "economic imperialism" that economists once envisaged for the new schools of thought to gain the ascendancy: other disciplines may have to invade the economic domain to bring realism to the fore, and to return those "woolly topics and woolly thinkers" to legitimacy within economic discourse. Such an external reformation would not be necessary if economics could develop the ability to keep its own room in order, but past behaviour gives little room for confidence.

There are, fortunately, some signs of change. Some economics departments are embracing, albeit tentatively, a more pluralistic approach to economic instruction—and several Australian departments figure prominently here. Non-orthodox economists—and again Australia has an active minority who fit this description—have formed associations to try to bring about change, and there is now even an umbrella organisation ICAPE (The International Confederation of Associations for Pluralism in Economics, http://www.econ.tcu.edu/econ/icare/main.html). Some students of economics—notably PAECON, the "Protest Against Autistic Economics" movement that originated in France (http://www.paecon.net), and the group of 27 Cambridge UK PhD students who recently published an anonymous call for pluralism in economics. Reform groups have been formed in several countries, including the New Economic Foundation in England (http://www.neweconomics.org), and Economic Reform Australia (http://dove.net.au/~hermann/erahome.htm)—though these tend to stand outside academic economics, and have little contact with it.

These movements for reform are important, because while conventional economic analysis is, in my opinion, dangerously irrelevant, society cannot afford to leave economics in this state. Economic analysis matters, both because our views on how the economy operates influence our behaviour, and because the operation of something as complex as a market economy is not obvious, and does require deep analysis to understand. The problem with conventional economics is that it has taken the easy option—making outrageous assumptions to simplify difficult problems, perverting its own development in its desire to prove that the unfettered market economy represents pinnacle of human civilisation, hanging on to outmoded equilibrium modes of thinking when all true sciences long ago abandoned this fixation.

But reform will not come easily, given how resistant economic theory has proven to change over the years. A reverse imperialism may well be necessary: sociologists, political scientists, applied mathematicians and physicists may need to make inroads into economic instruction to bring about true change. The would-be emperor of the social sciences may one day find his empire subjugated, and proper economics— analysis of the evolutionary dynamics of the complex social system in which we actually live—may ultimately be the winner.

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