Zombieconomics: The Living Death of the Dismal Science in the Age of Neo-Liberalism

Ben Fine

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Introduction

From time to time, the capitalism has been likened to hell on earth not least with those dark satanic mills. Rosa Luxemburg came close to perceiving capitalism as a vampire system in arguing that it could only reproduce itself on an expanded scale by absorbing non-capitalist production, thereby infecting the life-blood on which it depended. This continues to have resonances in the current theory of accumulation by dispossession, Harvey (2003) and Fine (2006) for critique. Frimpong-Ansah (1991) has posited the African vampire state as the antithesis of the developmental state. And there is also the classic contribution by Taussig (1980) in which confrontation with the commodity is perceived as experiencing the devil itself, quite apart from the moneylenders in the temple.[1]

But the ideas that economics itself derives from the underworld is, as far as I know, rare if not unknown. But, as I will argue, the current phase of economics as zombie-like is particularly apt. Not that economics is short of pejorative labels, from the dismal science first put forward by Thomas Carlyle for failing to keep individuals in their designated (servile) positions, through to the autism with which it has most recently been labelled in the pursuit of greater heterodoxy. Even the mainstream itself has garnered unprecedented levels of popularity, hitting the best seller lists, by self-deprecatingly referring to itself as “Freakononomics”, see Levitt and Dubner (2006) and Fine and Milonakis (2008) for critique and for details for much else in this contribution.

There are two reasons why the mainstream economics in the current phase of neo-liberalism is zombie-like. First, it is both dead and alive at the same time, undead as popular culture would have it. That it prevails within its own disciplinary boundaries with little or no contest and with scant respect for alternatives is more or less uncontroversial. No one can doubt that there are zombieconomists out there and that they are extraordinarily powerful and almost impossible to slay. They are totally insensitive to the considerations of the living but merely respond to an inner inescapable logic and, occasionally, perpetrate mysterious jerking movements of their own. The recent emergence of neuroeconomics is an extraordinary testament to this phenomenon. Building upon insights from neuroscience that reveal some of the workings of the brain, it might be thought that the rational economic agent of mainstream economics would have to be rejected since the science shows that other influences on individual behaviour are much faster than rational calculation. But one school of neuroeconomics cleverly suggests that the optimising individual is aware of these flaws and takes them into account in optimising.[2] For Glimcher et al (2005, p. 253), “Neoclassical economics and utility theory on which it is based provide the ultimate set of tools for describing these efficient solutions; and evolutionary theory defines the field within which mechanism is optimized by neoclassical constraints:

and neurobiology provides the tools for elucidating those mechanisms". As the Guardian Newspaper pithily put it ironically citing a journal from which neuroeconomics would draw its inspiration, "The Journal of Cognitive Neuroscience … elegantly show(s) that people will buy into bogus explanations much more readily when they are dressed up with a few technical words from the world of neuroscience", p. 10, February 16th, 2008.

So zombieconomics is alive but it is not well because it is also dead, in two senses, as the genre would have it. On the one hand, it is entirely parasitic upon the living, feeding upon it in order to sustain its own life. It has nothing new of its own to contribute. It can only prosper and must do so by feeding upon the living. On the other hand, in so feeding, it not only degrades whatever it touches but also transforms it into its own condition. The process can only come to an end in that nightmare vision in which we have all become zombies. It is apparent that the appropriate metaphor for economics is one of zombies and not vampires, with Dracula at least a cultured and sophisticated being well-attuned to the sensitivities of both his victims and their cultures and histories.

How did this situation come about and why does it take the form that it does now? In successive sections, we trace the evolution of economics from the marginalist revolution of the 1870s through the Keynesian revolution and the monetarist counterrevolution to the current phase of economics imperialism in which both economic and non-economic analysis is primarily reduced to the optimising behaviour of individuals in face of market imperfections. It is such reductionism that endows zombieconomics with so much life but with so little content both in terms of analytical elements and understanding of contemporary capitalism.

2 From Marginalist to Formalist Revolution

Putting aside a few technical developments, the core components of orthodox, mainstream neoclassical economics would be readily recognised and understood by the marginalist economists of the 1870s. Indeed, many of the concepts now used were put forward and popularised by Alfred Marshall in his Principles of Economics, first published in 1891 and the main economics textbook for the next fifty years, and running to eight editions. The marginalist revolution put forward the notion of economic rationality and sought to draw out its implications from optimising behaviour for the theory of supply (production) and demand (consumption). It gave rise to what might be termed a technical apparatus associated with a utility function to explain demand and a production function to explain supply, and corresponding marginal utility and productivity.

As far as the development of the current principles of mainstream economics is concerned, the interwar period was dominated by placing the technical apparatus on as sound a footing as possible. In particular, the task was set of incorporating marginalism into a mathematical form in which the consequences of economic rationality could be identified in a tight deductive fashion. For example, does an optimum exist for the consumer, is it unique, is it efficient, do demand curves always slope downwards, and so on. Answers to these questions were elusive especially without the support of an extraordinarily restrictive range of assumptions and methods to accommodate them. Or, to put it more constructively, the goal of answering these

questions became imperative, and almost any sacrifice would be made in order to attain this goal.

The result was what might be termed an implosion of the marginalist principles in upon themselves, a sort of squeezing to death. In brief, first, utility itself was reduced from general well-being to a logic of choice across bundles of goods. Second, preferences as the basis for those choices were assumed to be fixed. Third, these preferences were the only rationale for behaviour. Fourth, technical assumptions were made about consumer choices, such as convexity (a mix is better than a pure consumption) and non-satiation. Similarly, production became a simple technical relationship in which inputs, including labour, are seen as physical entities which make output through given technologies. Fifth, both individuals and goods were stripped of any meaning and became abstract formal symbols of themselves. Sixth, issues of method were simply overlooked as deductivism came to the fore independent of any claims to realism or otherwise.

Significantly, then, in the early 1930s, in the midst of the Great Depression, Lionel Robbins could seek to draw upon what was happening and project it further by defining economics as the allocation of scarce resources between competing ends. But this was, certainly at the time, a mistake in conflating a certain part of economics as it was emerging with economics as a whole, Backhouse and Medema (2007a and b). For the vast majority of economists, and other social scientists, the pursuit of the implications of the optimising individual as a reflection of modern market society was as legitimate academic exercise. But it did and could not fill out the domain of economics either as a discipline or a subject matter. For the latter, for example, Parsons (1934) was highly critical of Robbins for his definition but saw it as fixing a method quite distinct from that of sociology which would examine economic material from a different social perspective. More generally, the other social sciences were in the process of formation at this time and continued to incorporate the economic, economic history being most notable with its attachment to inductive as opposed to deductive methods.

But, equally important, the new marginalist principles were seen to be at most a part of an economic explanation. In particular, they had no purchase upon other motives of individuals as well as systemic behaviour. They were at most the science of reduced individual behaviour in market-type situations. The inadequacy of such principles could not have been more strikingly exposed than by the mass unemployment of the 1930s for which, as microeconomics, they needed to be complemented by an entirely different set of principles and, with them, the division of the discipline into microeconomics and macroeconomics with the latter dominated by Keynesianism. In addition, there remained in place throughout the interwar period, strong commitment to what would now be called heterodox economics, with old institutionalism to the fore.

In short, during the interwar period, microeconomic principles were in the process of being established but only at the expense of an implosion or reductionism to an extraordinarily narrow range of assumptions and methods, ones that were unacceptable to the rest of economics let alone the other social sciences, and whose scope of application was perceived to be confined to the science of market supply and demand. This was, however, not so much to be changed as to be thrown into reverse.

In describing developments within economics between 1945 and 1955 as a "formalist revolution", Blaug (1999, 2001 and 2003) highlights what is an uncontroversial and rapid process in which mathematical and statistical techniques assumed much greater, and ultimately, overwhelming significance. But we are less concerned with the rise of formal techniques than with shift in substantive content and the reasons for it.

This has a number of elements. First, during this period, the goal of perfecting the technical apparatus was finally accomplished both for the consequences of the optimising individual (the Hicks-Slutsky-Samuelson conditions) but also for general equilibrium theory (Arrow-Debreu) focusing upon the conditions under which optimising individuals as a whole are coordinated through the market mechanism. Second, the centre of gravity for economics switched from the UK to the US, symbolised by the rise of importance of Samuelson in place of Marshall/Keynes. And Samuelson (1947) had not only been at the forefront of advancing the technical apparatus, he also authored the single most important textbook, Samuelson (1948), see below, that now appears in its eighteenth edition as well as a reprint of the original so important is it to the history of (the teaching of) economic thought. Third, a remarkable flip in the analytical status of the core technical apparatus began to gather momentum, from implosion to allow itself to be established to explosion of scope of application.

The latter gave rise to "economics imperialism". This involves appropriating the subject matter of other disciplines by reducing it to the principles of marginalism. There is a historical logic underpinning this process. The logic is that, once obtained, the marginalist principles have no limitations set upon their scope of application since they are universal in content. Optimising and utility and production functions, after all, have no ties to historical or social specificity by time, place or activity. They can, in principle, be applied to anything. In practice, though, historically the principles were first obtained, as indicated, by confining them to a particular type of behaviour in a particular context, the market. Consequently, and subsequently, where and how the boundaries are drawn between the application of these principles and those of the other social sciences is contingent, both upon the internal character and dynamics of the constituent disciplines of the social sciences themselves and the external influences upon them.

In particular, in the wake of the formalist revolution, attempts were first made to extend the application of the "economic approach" to non-economic subject matter, in the first phase of economics imperialism. The phrase derives from Gary Becker, dubbed by Demsetz (1997, p. 1), in the context of economics imperialism, as having "earned Commander-in-chief ranking in the EEF (Economics Expeditionary Forces)". For Becker, all social phenomena should be treated as if the consequence of economic rationality in an as if market situation. Alongside the new economic history, the economic approach achieved considerable success, not least with public choice theory and human capital theory.

3 From Formalist to Keynesian Revolution[3]

But what it did not achieve with or even on the basis of the formalist revolution was the triumph of neo-liberal economics. The period straddling the formalist revolution was undoubtedly Keynesian in character despite the undoubted

bias, if not predetermined predisposition, towards laissez-faire that is part and parcel of the technical apparatus of mainstream economics. There are a number of reasons for this with implications for the continuing prospects for economics as a discipline. First, the experience of interwar depression and war-time controls more or less precluded an exclusive let alone a predominance of laissez-faire economics. Second, though, this does not mean an absence of influence from this direction in the anti-communist Cold War environment. These conclusions are confirmed, and with wider significance, by considering "The Coming of Keynesianism to America", a volume edited by Colander and Landreth.[4] J. K. Galbraith (1975, p. 141) takes for granted, possibly as late as was feasible in light of the imminent monetarist counter-revolution, that,[5] "Keynesian policies are the new orthodoxy". He judges that Samuelson "almost from the outset was the acknowledged leader of the younger Keynesian community", p. 136. With the comfortable hindsight of the victor, he also treats the ideological context of the construction of Keynesianism in the immediate post-war period as something of a joke, with those promoting it, "identifying Keynesianism with socialism, Fabian socialism, Marxism, Communism, Fascism and also literary incest, meaning that one Keynesian always reviewed the works of another Keynesian", p. 139. By contrast, those of "conservative mood … who objected to Keynes were also invariably handicapped by the fact that they hadn't (and couldn't) read the book. It was like attacking the original Kama Sutra for obscenity without being able to read Sanskrit. Still, where social change is involved, there are men who can surmount any handicap", pp. 138-9.

Such lingering sarcasm over the cursory knowledge and scholarship of anti-Keynesians no doubt reflects the relatively mild and short-term discomfort that Galbraith himself experienced as a result of the fall-out for Keynesians from anti-communism.[6] His appointment to Harvard was held up for a year in the late 1940s as a result of concerted opposition from Harvard graduates, members of the inappropriately named Veritas Foundation, with books such as <u>God and Man at Yale</u> in 1951, through to <u>Keynes at Harvard</u> in 1960, being published in the campaign against Keynesianism and Keynesians, Colander and Landreth (1996, pp. 12-3). The latter cite the President of Harvard at the beginning of this period to the effect that, "Keynes name had taken on a symbolic value …To a certain type of businessman, it was a proverbial red rag. In the eyes of many economically illiterate but deeply patriotic (and well-to-do) citizens, to accuse a professor of being a Keynesian was almost equivalent to branding him a subversive agent", p. 12. As Backhouse (2006, p. 16) puts it, "Prominent Keynesians, from Galbraith to Samuelson were vilified and labelled Marxists or communists".[7]

In short, Keynesianism in the immediate post-war period was a hot political and ideological potato, sharpening and representing major differences between Republicans and Democrats, and differing responses both to the experience of interwar depression and the way in which to preclude such in the future. With the post-war boom and the passage through the extremes of McCarthyite anti-communism, such differences were tempered as Keynesianism became the orthodoxy. But, even if its ultimate triumph was inevitable – and as long as the economy was doing well and this could be imputed to macroeconomic management – the forms and direction taken by Keynesianism were not fixed at the outset.[8]

In this light, Colander and Landreth usefully point to the Keynesian revolution as comprising theoretical, political and textbook elements. But it is inappropriate to see these as separate from one another. Whilst Samuelson became the leading figure in promoting Keynesianism in the United States, he was not in the lead initially, especially as far as a textbook is concerned. That he should be considered to have dominated Keynesianism in the United States at the outset is understandable. His text Economics first appeared in 1948, and is now in its eighteenth edition with William Nordhaus as co-author from 1985. It has spawned many imitators apart from its own adoption across the US and elsewhere as textbook. It is sufficiently important as a text in the history of economic thought to have been reissued in 1998 in its original edition. Significantly, Samuelson had published what were essentially the results from his own PhD thesis one year earlier than his textbook. His Foundations of Economic Analysis is a classic of a different type. It is based on the application of the principles of thermodynamics to economic problems, particularly those of individual optimisation and the corresponding equilibrium of economic systems.

It is easy to recognise that the two books are entirely different, especially as far as motivation and level are concerned. But each contributed to the revolution in economic theory in its own way across both theory and text. For, in the revolution in economic thought around Keynesianism, the distinction between theory and textbook (and politics) is not so sharp until the new ideas become orthodoxy. In the first decade after the second world war, economics as a discipline was undergoing multiple shifts in content and technique. Significantly, in the forefront of Keynesian texts in the United States before Samuelson was the now unknown Lorie Tarshis, someone who had had the advantage of studying at Cambridge in the 1930s. His text was published in 1947, and rapidly became adopted throughout the United States. As he puts it, Colander and Landreth (1996, p. 68):

> In the first two or three months in which the book came out I would get letters … saying Brown had adopted it, maybe Middlebury adopted it, Yale had adopted it – one place after another had adopted it. Every time I got a letter like this that indicated ten more adoptions or twenty more adoptions, I thought, "Boy, that bank account will be picking up".

But then came the reaction, "It was a nasty performance, an organized campaign in which they sent newsletters to all the trustees of all the universities that had adopted the book". Orders started being cancelled as universities became concerned about, even suffering threats of, loss of endowments. "Sales, instead of staying at that beautiful peak, went down just like that … But it really died in 1948 or 1949. And then Paul Samuelson's book came out a year later, in 1948".

But why should Samuelson have been able to rescue, save, appropriate and/or promote the Keynesian revolution and, in doing so, was it made into something different than it would otherwise have been? Tarshis himself is tart to the point of sarcasm about Samuelson's Keynesianism, "Paul Samuelson was not in the Keynesian [discussion] group. He was busy working on his own thing. That he became a Keynesian was laughable", Colander and Landreth (1996, p. 64). Interestingly, though, both Samuelson, p. 160, and Tarshis, p. 69, seem mystified over why one should have replaced the other. But it is worth ranging over Tarshis' (1947) text to understand why, bearing in mind that the slightest deviation from market

fundamentalism is liable to attract outrage from his opponents. His treatment of Keynes comes at the end of his book, after a full coverage of microeconomics and other topics. He bends over backwards to disassociate himself from political attachments. Thus, p. 347:

> A word must be said, before we begin our analysis, about the political implications of the Keynesian theory … The truth is simple. The Keynesian theory no more supports the New Deal stand or the Republican stand than do the newest data on atomic fission … It is possible, as we shall see later, to frame either the Republican or the Democratic economic dogma in terms of the theory. After all, both good Republicans and good Democrats can analyze the causes of mental illness or of faulty timing in an automobile engine. And so the following chapters are neither an attack upon, nor a defense of, the beliefs of individual political parties. Rather, they are intended to show how a good many modern economists analyze this primary economic problem.

Now if you are anti-Keynesian and see it as thin end of the wedge of communism, you are not going to take kindly to such claims of irrefutability across all political positions, and you might find it more palatable if Keynesian were presented in neutral terms without political claims at all. And, the problem referred to as primary follows immediately in the next paragraph, “The importance of avoiding unemployment cannot be overstressed”. And it can be avoided, “The upshot of the analysis … is that unemployment can be cured”, p. 528. And this is also taken, some might think provocatively, as meaning that capitalism does not have to be overthrown, “Our knowledge of how capitalism works shows us that we can prevent that suffering [from unemployment]. And we have certainly found no reason to conclude that we have to scrap the system to do it”, p. 529.

Tarshis has already indicated some sympathy for working people as far as employment is concerned. For him, wages should be raised as far as possible as is consistent with full employment, not least because this is the most important way of improving the gains of all and, in veiled terms, of guarding against social unrest, “Labor’s primary interest is to maintain full employment; but that is not at all in conflict with the interests of other groups, for the employer, the farmer, and the investor all gain when we have peak prosperity. If we can keep the national income at its maximum, it will not be necessary for labor to live ‘across the tracks’. Our economy can produce enough to provide a decent livelihood for all if we do away with depression”, p. 657.

But such a community of interests, harmonised by Keynesianism, does not extend to monopolisation. For, “As long as so great a degree of monopoly exists, it is probable that output will be below capacity, distribution of the output will be unequal, and the pattern of production will remain unbalanced … Thus, growing monopoly is likely to be harmful to the rest of the economy which is left behind in the race to secure monopoly status, and it may even injure the groups that achieve it, since their prosperity depends in part upon the prosperity of the economy as a whole. Nonetheless, it is difficult to control monopoly, as the most casual glance at the world about us will show”, pp. 679-80. Whilst this does place monopoly capital in the dock, with labour as potentially unemployment victim, Tarshis close his book in more

neutral terms, with Keynesianism as the cure-all as opposed to detailed intervention, p. 687:

> While it may be legitimate for each group to improve its lot at the expense of competing groups, the struggle to do so becomes anti-social when it causes a reduction in the total output of the economy. The damage done by such a struggle can be most successfully prevented, not by legislative restraint, but by society's adopting measures to keep the total output as high as possible, its composition as nearly ideal as possible, and the distribution as fair as possible. When that is done, the economic problem will be solved.

Tarshis does combine an ethos of scientific neutrality and the preservation of capitalism with tinges of pro-labour sympathy and anti-monopoly antipathy. Place this in the context of Keynesianism for conservatives as representing a conscious, possibly deliberately veiled, or unconscious strategy for more deep-rooted change, and it is hardly surprising that he should attract a vitriolic campaign against his text being universally adopted across American universities.

It follows that the political climate may not have prevented the rise of Keynesianism in the United State, but it seems to have had some influence over both its theoretical direction and its textbook content, most obviously as dictated by Samuelson. As Backhouse (2006, p. 16) puts it, surely too cautiously, "doubts about its closeness to communism did not prevent Keynesianism from becoming widely accepted in academia, though that may have contributed to its being expressed in more careful, technical language than might otherwise have been the case". But it is not simply a matter of whether Keynesianism but also of what Keynesianism. For there are sufficient differences in substance between Samuelson's treatment and that of Tarshis, whose style and content of analysis is unrecognisable by comparison with macroeconomic texts today. And it is not simply a matter of the differences as they were but as they might have become. Tarshis', for example, is not so far short of the approach being offered by Kalecki, the major difference being the latter's denial of the possibility of eliminating unemployment under capitalism for want of its capacity to discipline workers when jobs can be left without fear of being unable to gain another. But the emphasis on monopoly as a key characteristic of the Keynesian system – as output restricting and distributionally disadvantageous to real wages and effective demand - was inspired by Kalecki but has only survived in the heterodoxy of post-Keynesianism.

That is but for one exception of possibly more than symbolic significance. The treatment of monopoly as a source of systemic stagnation was soon to become the major element in the leading Marxist approach to US capitalism, and most closely associated with Paul Sweezy, the country's leading Marxist over the last fifty years of the twentieth century.[9] For him, monopolies were capable of generating a surplus that they were incapable of realising through sale on the market. However, Sweezy had been an orthodox Harvard economist in the early 1930s before converting via Keynesianism to Marxism during that decade. And he was a close associate of Lorie Tarshis. They first met in the early 1930s in London (at the well-known restaurant, Bertorelli's,[10] Sweezy being a student at the London School of Economics). As Tarshis puts it, "he was so Hayekian, even Hayek was too far to the left for Paul Sweezy in those days", Colander and Landreth (1996, p. 58). They met again at

Harvard in 1936, “By then he’d already gone all the way over to Keynes and a little bit more”. For those, looking for reds under the beds, Tarshis innocently confesses, “I saw an awful lot of Paul from then till 1930 or 1940”, p. 59. For those looking to associate Keynesianism with something worse, potentially or otherwise, Tarshis’ text and his association with Paul Sweezy would appear to have been more than damning.

In short, given outside influences, it is hardly surprising that Keynesianism should take the route laid out by Samuelson as opposed to Tarshis. But this was not just a matter of external influence on what may or may not have been acceptable. It also reflected developments within the discipline itself. It is, for example, apparent that Keynes himself, as he was formulating The General Theory, became opposed to methodological individualism, to mathematical modelling (other than as a guide to clear thinking and presentation) and, most of all, to econometrics (for fixing parameter values to an economy necessarily subject to uncertainty and waves of expectations). Yet, with the exception of the methodological individualism, the Keynesian revolution that bore his name was to be developed along these lines, most notably in the IS/LM approach to macroeconomics and the building and estimation of macroeconomic models.

The exception here of methodological individualism is important. For, despite its consolidation through the formalist revolution, mainstream macroeconomics remained for the time-being immune from its charms and drew upon more or less theoretically arbitrary ways of constructing macroeconomic aggregates. One reason for this is that the way in which the microeconomic principles had been established, and the qualifications associated with them, remained fresh in the mind of the new generation of mathematical economists. It was not simply a matter of the difficulty of extrapolating the behaviour of the individual to the behaviour of the economic system as a whole, as had been accomplished with general equilibrium theory. But, in addition, the newly completed principles were extraordinarily vulnerable to the introduction of any rogue element, at least until established as a conventional wisdom. There could be no externalities, interdependent preferences, market imperfections, uncertainty, institutions, non-economic behaviour and so on. No role could be found for money. As a result, mainstream economics remained aloof from developments that it would embrace so warmly later on precisely because of their destructive implications for its core principles.

This is apparent from Amadae’s (2003) account of the promotion and rise of rational choice across US social science. During the period of the formalist revolution, as the neoclassical technical apparatus was consolidating its hold over the discipline, “within the university, rational choice theory developed as a series of overlapping, multidisciplinary revolutions … three distinct disciplinary transformations … social choice, public choice, and positive political theory … The path-breaking rational choice scholars all shared two institutional foci crucial to the institutional and professional success of rational choice”, pp. 11-2. These were the RAND (Research and Development Corporation) and the Public Choice Society. The aim of RAND was in part to inform US military strategy, and it called upon economists and other social scientists to investigate self-interested behaviour from a variety of perspectives. So, long before they were taken up in economics in its now latest phase of economics imperialism, see below, there was a focus on game theory, behaviouralism, and strategising. As Amadae puts it, p. 77:

> The theory of rational choice has interlocking descriptive, normative, and prescriptive components, and was developed to inform action respecting nuclear strategy and complex questions of weapon procurement.

As a result, it deployed a diverse toolbox and, at least in principle, exhibited a close attachment to US Cold War policy.

These were not particularly attractive to a neoclassical economics, consolidating around Keynesianism and Pigovian welfarism. But the relative lack of interest by economists in these at the time did not reflect a lack of involvement. On the contrary, Arrow served as an intern at RAND in 1948, "charged with determining a mathematical expression for the Soviet Union's collective utility function that would be useful for game theoretic strategy computations of nuclear brinkmanship", p. 85. But, for Arrow himself, the consequences of his research were always contradictory, promoting the technical and conceptual apparatus associated with the methodological individualism of neoclassical economics at the same time as expressing its limitations. Thus, his famous impossibility theorem for social choice is rooted in individualism and idealist democratic values. Indeed, even if a social choice could be found, it requires a dictator to implement it, as the approach is entirely devoid of political process other than a formal, mathematical mechanism translating to social from individual choices. More generally, Mirowski (2007a) dubs Arrow the "Cowles poster boy", with his popularity within the profession reflecting the irony of repudiating at one time or another each of the mainstream advances that he had himself made, and Cowles itself reflecting an interventionist stance at macro and micro levels, see also Mirowski (2007b).

Thus, if Arrow's approach straddled both developing neoclassical economics and exposing its limitations in pursuit of a Keynesian and welfarist democracy, the goals of the Public Choice Society set the opposite extreme. It had relatively little interest in contributing to the formalist revolution as such other than in appropriating any argument, past or present, that would limit the role of the state and promote individual freedom as they saw it. It was violently opposed to the very idea of social (as opposed to public) choice, Arrowian or otherwise, with their most famous and influential product being public choice theory. As Amadae (2003, p. 136) puts it, "Buchanan and his collaborators … strictly upheld the premise that *any* discussion of public interest or social welfare violated their commitment to individualistic philosophy". Crucial in this respect is the figure of Hayek. As Mirowski (2007c) perceptively observes, his own intellectual trajectory draws upon very different approaches. But what they have in common is the wish to popularise intellectually the case for neo-liberalism. Initially, these may have drawn upon orthodox economic thinking in the dispute with Keynes and the market socialism debate but, ultimately, the Road to Serfdom, the founding document for neo-liberalism, involves an entire break from mainstream economics and is entirely incompatible with it, drawing upon uncertainty, innovation and spontaneous order.

So, with the formalist revolution focused upon and inspired by the individual, neo-liberalism in theory was confined to the individual, too vulnerable to be extended to the economy as a whole as such or to incorporate previously excluded elements underpinning the systemic case for neo-liberalism based on spontaneous order,

inventiveness, or uncertainty. Samuelson's own account of conversion to Keynesianism in Colander and Landreth (1996) is extraordinarily revealing in these respects. For him, becoming a Keynesian was a matter of overcoming or, more exactly, unsuccessfully reconciling it with his prior predilection for micro-foundations. He confesses, "What I resisted in Keynes the most was the notion that there could be equilibrium unemployment", p. 159. Indeed, "I was like a tuna: the Keynesian system had to land me, and I was fighting every inch of the line. I was worried about micro foundations", p. 161. He places considerable emphasis on his own personal experience of unemployment, finding himself unable to get a summer job as a student at any wage to relieve family poverty, p. 161. So Samuelson wanted to be a Keynesian but could not marry it with microeconomic principles. How did he resolve this conundrum? The plain answer is that he did not and simply accepted this. For, "I was content to assume that there was enough rigidity in relative prices and wages to make the Keynesian alternative to Walras operative", the presumption being the presence of some "substructure of administered prices and imperfect competition", p. 160. And, in retrospect, he judges that, "It's a modern desire to have impeccable micro foundations for macro … I decided that life was more fruitful not worrying about it … Moreover, the search today for micro foundations for macro does not have a rich set of results … It's because I get a better positivistic macroeconomics to do some worrying about the micro foundations that I do the worrying, and not because I have a tidy conscience that everybody's micro foundations must be tidy", p. 162.

3 From Keynesian Revolution to Monetarist Counterrevolution

Samuelson's retrospective account has a modern ring about it in its mode of expression, with its reference to micro-foundations for macroeconomics. For his attitude is embedded in his and the discipline's past, with an ill-concealed contempt for such micro-foundations in and of themselves as a logical exercise in mathematical consistency (with his target being the New Classical Economics, see below). For Samuelson's generation, Keynesianism was macro, and it floated systemically free from micro, although the latter might offer ideas on how to go about the former. Thus, Samuelson offers a remarkably frank confession, that his Keynesian macro had not been landed in the sense of being founded on sound micro foundations, and he had ceased to care about this. But it is a little bit too convenient in the extent to which the presumed microfoundations are those of a little bit of rigidity in prices, derived from "imperfect competition", and incorporated into an equilibrium, possibly at less than full employment for the economy as a whole. For the reference to imperfect competition, and the use to which it is put, scarcely begins to get to grips with the systemic consequences of the monopolisation of modern capitalism, and other features, and its implications for its dynamic let alone its level of economic activity. To some extent this helps us to explain why Tarshis should have given way to Samuelson, even though both were Keynesians, and without relying upon relatively less important factors such as Samuelson's powers of exposition and his use of mathematics as a neutrally professional and more acceptable form of exposition.

For one of the consequences of the Keynesian and formalist revolutions was to divide the discipline into microeconomics and macroeconomics as its core constituent theoretical components, with the remainder of the subject matter relegated to the applied or policy backburner both for its lesser analytical principles and practical

significance. By the same token, the conventional wisdom became one in which the postwar boom was perceived to have been the triumph of interventionist Keynesian policymaking over the instability created by unfettered markets. In addition, somewhat inconsistently, analytically, macroeconomics became pre-occupied with short-run deviations around given long-term trends. In this way, the major factors underpinning the postwar boom were simply overlooked or reduced to epiphenomena. In these, I would include the interpenetration of trade and investment within the advanced countries, and the role of the state in expanding health, education and welfare and in intervening to restructure domestic economies through measures ranging across industrial policy to public ownership.

Consequently, with the collapse of the post-war boom in the 1970s, the crisis of Keynesianism, and the resurgence of monetarism, the prospects for neo-liberalism were entirely different than at the time of the formalist revolution. Not only were the marginalist principles sacrosanct, they were also unburdened by any memory of the extraordinary qualifications that had been necessary to allow them in the first place either by assumption or scope of application. Becker-style economics imperialism was well-established. And Thatcherism and Reaganism reigned supreme. The time was more than ripe for the emergence of monetarism in its most extreme form, the New Classical Economics, with the presumption that all markets work perfectly but for random shocks, and that the principles of marginalist economics should be extended to the macroeconomy. In addition, following Friedman, the idea of expectations is reduced to the domain of knowable outcomes with attached probabilities as opposed to the irreducible uncertainty associated with Keynesianism. Further, the principle of optimisation is extended to include the processing of information, in the theory of rational expectations so that individuals now optimise by modelling the economy and, thereby, have the capacity to neutralise interventions by the state as long as they can be anticipated. Other than in distorting microeconomic functioning, the state is ineffective in macroeconomic policy. Indeed, in the wake of the stagflation of the 1970s, it is truly remarkable that it should be felt possible to understand the economy in terms of single representative individuals for households and firms, with the leading New Classical Economists proclaiming, “the term ‘macroeconomic’ will simply disappear from use and the modifier ‘micro’ will be superfluous”, Lucas (1987, p. 108), cited by Davis (2003, p. 35).

New Classical Economics, then, sought to wash Keynesianism away and, without wishing to blame the victim, it could do so because of the latter’s narrow understanding of macroeconomic theory itself, in leaving aside those systemic factors that were not reducible to macroeconomic aggregates that could be incorporated into mathematical models of supply and demand. But it is important to recognise, or recall, that the neo-liberalism in scholarship of the New Classical Economics is highly peculiar relative to the neo-liberalism both of ideology and practice. It is totally orthogonal to neo-Austrian arguments concerning the virtues of free markets. And, in practice, neo-liberalism has always been highly interventionist. This can be understood in two ways. On the one hand, the free market is a myth and the state can and does intervene to make markets work in particular ways and in favour of particular interests. On the other hand, the ideology of non-intervention is more appropriately seen as a rationale for discretionary and not minimal intervention.

In this light, it is not surprising that there are many different accounts of, and forms taken by, neo-liberalism. They all involve a transformation as opposed to a reduction of the role of the state. But what we can now see after thirty years of neo-liberalism is that it is heavily driven by the vested interests, practices and ideology of finance, not least through what has been appropriately termed financialisation. This involves both the proliferation of "fictitious" financial markets built upon existing activities as well as the creation of new spheres of operation for finance, Fine (2007a) for an account. For the New Classical Economics, of course, this proliferation of finance would not occur unless it were efficient in mobilising and allocating resources and managing risk. This is stretching credibility when the rewards at a macro-level of managing finance are exceeding those of using it. And, with the emergence, however, over the last decade of financial crises, and the threat that these may become global, this logic is running incredibly thin, and the first port of call for intervention to rescue financial markets always comes from those markets themselves.

4 From Monetarist Counterrevolution to Zombieconomics

This all suggests that neo-liberalism is currently going through a second phase, distinct enough from the first that it can be perceived as a reaction against neo-liberalism itself as Third Wayism, the social market or whatever. For, whilst the first phase involved state promotion of interests through the market, especially liberating financial markets, the second phase is faced with both ameliorating the consequences of this shock therapy and of continuing to intervene to allow it to be sustained. The emphasis, in principle, is upon how to make markets work in general and socially acceptably however that might be defined in employment, distribution and welfare delivery. In practice, the markets given the greatest priority will be those of finance.

As is apparent, the New Classical Economics (and neo-liberal ideology more generally) is totally inadequate to this task other than as an unremitting pressure against collectivist forms of provision and interests. Exactly the opposite is the case for the new information-theoretic economics which emphasises the importance of market imperfections. For, crucial to the New Classical Economics is the assumption of perfectly working and instantaneously clearing markets, supply always equals demand. This reflected the monetarist world vision that markets work well if left to themselves as well as an analytical challenge to argue otherwise than, "interfere in markets and you prevent them from working well". The market imperfections approach offered an answer, especially in case of imperfect information. In such circumstances, it could be shown that markets might not be efficient, they might not clear (persistent imbalance between supply and demand), or that markets might fail to arise altogether. This is so even if prices were perfectly flexible in principle. Indeed, an employer, for example, might not reduce wages despite high levels of unemployment in order to maximise profit through attracting more productive, disciplined and loyal workforce on average.

In short, the new market (and information) imperfection approach displayed an ability to address macroeconomic problems despite being based on the aggregated optimising behaviour of individuals. In this way, the technical apparatus of utility and production functions could be used to extend microeconomics to incorporate macroeconomics, even that with a Keynesian flavour. Together with other developments within microeconomics, especially those related to the now acceptable

game theory, this allowed the use of the technical apparatus of consumer and producer theory to be extended almost universally across the discipline of economics. Areas that had previously been seen to be more applied, inductive and policy-oriented – from industrial through to development economics – increasingly came under the umbrella of the microeconomic principles that had only been established initially by accepting their limited scope of application.

Nor has this process of expansion of microeconomic principles been confined within the borders of economics. Previously, as indicated, economics imperialism had been based on the idea of treating the non-market as if it were the (perfectly working) market by other means. By contrast, with the market imperfections approach to the economy, the non-market could be understood as the induced response to those market imperfections, whether this be institutions, culture or customs. Whereas previously these had been seen as irrelevant or, at most, an irrational barrier to the (as if) perfectly working market, it was now possible to explain their existence and see them as a way of improving upon imperfectly working markets. The effect was to reinvigorate economics imperialism across a broader front and to render it more palatable to other social sciences despite its methodological and theoretical peculiarities from the perspective of other disciplines. Whilst methodological individualism of a special type (utility maximisation) persisted, it could be cloaked in less dismissive terms of the other social sciences. For it now accepted that institutions and history matter rather than being seen as at most temporary obstacles to the reach of the perfectly working market across all economic and social life.

Thus, economics imperialism has built upon old fields and created new ones in and around the borders of economics, the new growth theory, the new trade theory, the new economic sociology, the new institutional economics, the new welfare economics, the new political economy, the new economic geography, the new development economics, and so on. In a sense, it has done this in two different ways. First, it has brought back in what was previously left out in the reductionist process by which its technical apparatus was established. In general terms, the “social” becomes important where the social ranges over the non-market and the non-individualistic even though these still remain tied to optimising behaviour – individuals choose to be altruistic, for example, because it is a way of overcoming market imperfections or coordination problems.

Second, though, this often leads to what might be termed mixed or dirty models. Whether for theoretical or empirical expediency, the standard technical apparatus is supplemented by some other factor or set of factors appropriated from another social science or simply through speculative reasoning. This is to bridge the previous divide between rational and irrational. A good example is the recently prominent economics of happiness where populations do not seem to report themselves happier despite rising incomes over time. It is a simple matter to add in some other variable to utility theory to address this, the most convenient being reference to relative income position. Then we are able to explain why short-run increases in one person’s income improves feelings of well-being but not improvements in income for everybody over time as relative positions remain the same. This is the basis for freakonomics - with an inclination to rely upon self-interest, a willingness to incorporate other factors as necessary, and otherwise to provoke by appeal to statistical analysis and other damn lies.

But freakonomics is just the most popular form taken by zombieconomics, itself the form of economics imperialism in the age of neo-liberalism. This approach is dead in that it is based upon an unquestioned methodological individualism and technical apparatus of the narrowest type, it is totally ignorant of its own history, of its methodology and of alternatives, and it fails to engage with them except to dismiss them as unscientific and lacking in rigour (whereas it is its own intellectual fragilities in these respects that are most marked, Fine (2007b). It has no concept of the systemic, such as globalisation, nor of power and conflict, and it has no understanding of the meaning of categories of analysis in terms of historical and social specificity other than in defining path dependence, initial conditions or choice between models or equilibria. And it is undead in blundering around looking for applications out of the incidence of market imperfections, whether in the dimly incorporated real world, or through appropriation and degradation of the material of other social sciences. In the realm of policy, it seeks interventions to correct market imperfections on a piecemeal basis and, even though recognising that such imperfections arise in financial systems themselves, fails to address how the power of such systems are to be curbed. When Joe Stiglitz (2002) draws the conclusion in his Globalization and Its Discontents (a contribution with little or no discussion of globalisation itself) that the reason for poor policy is the vested interest and ideology of finance, this comes on top of a life-time or work in which neither vested interests nor ideology are even recognised other than in the realms of the imperfectly informed optimiser.

5 Conclusion

I am acutely conscious that zombie movies rarely end happily, with best case scenario being survival to live another day. Within the discipline of economics itself, there is much to confirm, and regret, in adopting this perspective. This view is not universally accepted, for there are those who believe that the signs of life in zombieconomics, not least the innovations upon its frontiers in technique and subject matter, will lead it to be transformed into something else, Colander et al (2004) and Davis (2006) for example. This cannot be ruled out in principle but a zombie is a zombie and the prospects of its becoming different and better are not bright.

What is more encouraging are the prospects for the renewal of political economy across the social sciences despite the designs of, and in contest with, economics imperialism. I see this as the consequence of the current dual retreat from the extremes of both postmodernism and neo-liberalism, not least as the past decade or so has witnessed a revival of interest in understanding contemporary capitalism, systemically and simultaneously as both material and cultural system. In this light, the current directions to be taken by social theory are remarkably open and are liable to be diverse across disciplines and topics. It may not be possible to take the zombie out of the economics but we can restore political economy to social science.

Footnotes

[1] “Banking was conceived in iniquity and was born in sin. The bankers own the earth. Take it away from them, but leave them the power to create money, and with the flick of the pen they will create enough deposits to buy it back again. However, take it

away from them, and all the great fortunes like mine will disappear and they ought to disappear, for this would be a happier and better world to live in. But, if you wish to remain the slaves of bankers and pay the cost of your own slavery, let them continue to create money", Josiah Stamp, formerly a director of the Bank of England, and reputedly the second richest man in England

[2] For a survey of "neuroeconomics", see Camerer et al (2005) although they take the more rounded view that the optimising individual needs to be allowed other prompts to action so that, "in the long run a more 'radical' departure from current theory will become necessary, in the sense that the basic building blocks will not just consist of preferences, constrained optimization and (market or game-theoretic) equilibrium", p. 55. For an excellent critique, see Cavallero et al (2007), for whom neuroeconomics is reductionist to the processes of the brain and hence, "mired in underdetermination issues that its search for theoretical parsimony and predictive power combined with its relegation of the social domain exacerbates".

[3] This section draws very heavily on Fine and Milonakis (2008).

[4] This is the title of Colander and Landreth (eds) (1996), with subtitle, Conversations with the Founders of Keynesian Economics.

[5] Note that this piece by Galbraith was originally published in 1971. The later interview in Colander and Landreth (1996) is much more measured and serious in tone.

[6] See also Colander and Landreth (1996, pp. 12 and 142).

[7] See also Backhouse and Medema (2007a) and especially Lee (2009).

[8] See Lee (2009) for a detailed account of the politics and ideology influencing the evolution of mainstream (American) economics in the post-war period.

[9] Monopoly Capital by Baran and Sweezy (1966) is the classic text, but Sweezy's (1946) first major text of Marxist political economy had already appeared twenty years earlier. See Fine (2007) for an account of Sweezy's puzzling conversion to Marxism, and reference to wider discussion.

[10] Subsequently famous as a meeting place, not least in its association with the satirical magazine, Private Eye.

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