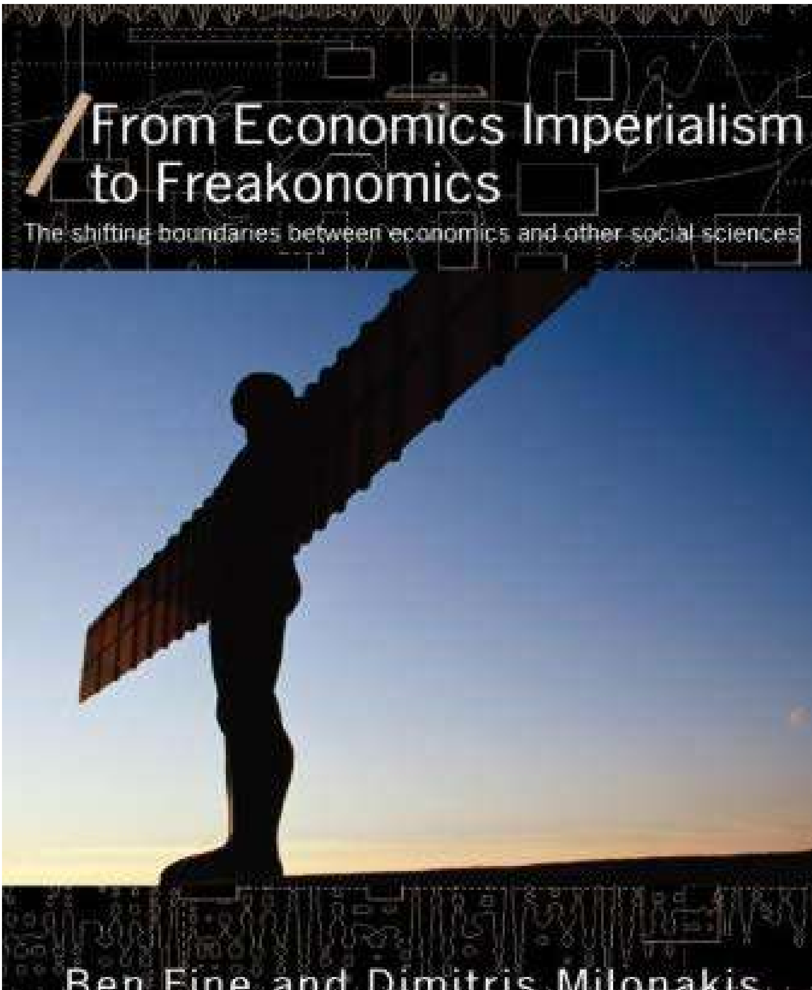
From Economics Imperialism to Freakonomics
The shifting boundaries between economics and other social sciences
Ben Fine and Dimitris Milonakis

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Is or has economics ever been the imperial social science? Could or should it ever be so? These are the central concerns of this book. It involves a critical reflection on the process of how economics became the way it is, characterised by a narrow and intolerant orthodoxy, that has, nonetheless, increasingly directed its attention to appropriating the subject matter of other social sciences through the process termed 'economics imperialism'. In short, the book addresses the shifting boundaries between economics and the other social sciences as seen from the confines of the dismal science, with some reflection on the responses to the economic imperialists by other disciplines.

Significantly, an old economics imperialism is identified of the 'as if' market style, most closely associated with Gary Becker, the public choice theory of James Buchanan and Gordon Tullock, and cliometrics. But this has given way to a more 'revolutionary' form of economics imperialism based on the information-theoretic economics of George Akerlof and Joseph Stiglitz, and the new institutional economics of Ronald Coase, Oliver Williamson and Douglass North. Embracing one 'new' field after another, economics imperialism reaches its most extreme version in the form of 'freakonomics', the economic theory of everything on the basis of the shallowest principles.

By way of contrast and as a guiding critical thread, a thorough review is offered of the appropriate principles underpinning political economy and its relationship to social science, and how these have been and continue to be deployed. The case is made for political economy with an interdisciplinary character, able to bridge the gap between economics and other social sciences, and draw upon and interrogate the nature of contemporary capitalism.

The book is intended for advanced undergraduate and postgraduate students of economics and other social sciences, researchers in political economy, scholars interested in interdisciplinarity and the history of economic thought, and other social scientists.

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Contents

Preface

As recounted in the preface to our earlier book, *From Political Economy to Economics: Method, the social and the historical in the evolution of economic theory*, that volume, together with this one and another in preparation, *Reinventing the Economic Past: Method and theory in the evolution of economic history*, are the fruits of a long and unanticipated gestation from an initial intention of authoring a single book of limited length. In the event, the process has gone far beyond a simple tripling or more in length. It has involved complexity and diversity of content, and the working, re-division and reworking of texts on numerous occasions, across both the passage of time and authors with other commitments, and with final versions of chapters not necessarily reflecting the sequence in which they were drafted, let alone published. It has proven necessary to revise this, and the earlier manuscript, continually in light of amendments to individual chapters, and to organise material between and within chapters (and books) across a number of competing and, at times, incompatible criteria. In addition, as our texts have evolved so has our own knowledge as both new topics and literatures have come to our attention and/or been incorporated. Inevitably, this has all meant some trade-off of criteria across the organisation of the text, and there is also some repetition across issues as we have sought to endow individual chapters with some degree of self-containment.

The book represents, then, an ambitious first attempt to cover an immense intellectual terrain that can be addressed in any number of ways, with differences in emphases and, equally important, intended audiences, so that our account is bound to be partial and incomplete. This, and the earlier volume, then, represent a staging post in what is a continuing programme of work in which we hope others can participate – not least the rediscovery of the political economy of the past in its social, historical and methodological richness, and the corresponding rejuvenation of the political economy of the future.

Given the long period of its gestation, the number of people who have helped us in a number of ways is large. Our gratitude to them is immense. We would especially like to thank our colleagues Nikos Theocharakis of Athens University and Michael Zouboulakis of the University of Thessaly who have read an earlier version of the entire manuscript and made extensive comments.

1 Introduction and overview

> So economics is an imperial science: it has been aggressive in addressing central problems in a considerable number of neighboring social disciplines, and without any invitations.
>
> George Stigler (1984, p. 311)

> Populating economic models with 'flesh-and-blood human beings' was never the objective of economists.
>
> Faruk Gul and Wolfgang Pesendorfer (2005, p. 43)

1 Preliminaries

Is or has economics ever been the imperial social science? Could it ever be one? And should it be so? These are just a few of the questions this book tries to answer. It involves a critical reflection on the literature of the process of what has been called 'economic imperialism' or 'economics imperialism', our preferred term.[1] By this is meant the colonisation of the subject matter of other social sciences by economics. Put in other words, the subject matter of the book at hand is the shifting boundaries between economics and social sciences as seen from the confines of the dismal science, with some reflection on the responses to the economic imperialists by other social sciences.

Economics imperialism as explicitly and consciously practised by economists is a relatively recent phenomenon. Although as an idea it essentially first emerges with the consolidation of mainstream economics, from the 1930s onwards, it only becomes a force to be reckoned with from the late 1950s. In order, however, to grasp this phenomenon fully and to trace its progress, it is necessary to go further back to the processes that led to the desocialisation and dehistoricisation of economics and the consolidation of the core principles of mainstream economics in the passage from classical political economy to neoclassical economics, through the marginalist revolution. We have covered these processes in detail in our earlier, companion volume, Milonakis and Fine (2009), *From Political Economy to Economics*. So here we will present the basic argument in a nutshell.

2 From reductionism …

Prior to the marginalist revolution, and with classical political economy, theory was concerned with explaining the capitalist economy, drawing upon whatever historical and social factors were considered to be relevant. From Adam Smith to John Stuart Mill and Karl Marx, the economy was treated as part of its wider social and historical milieu, with political economy as a sort of a unified social science to cover this wide terrain. To the extent that political economy did stake out a field of study, it was not one that was artificially separated from other disciplines or fields of study, which in any case were still to emerge. In such a setting, the question of economics imperialism(s) did not arise. More than that, it was irrelevant. Instead there is at most a dispute over what factors are relevant for economic analysis and what is the method by which they should be deployed. Thus, Smith uses both deductive and inductive types of reasoning, mixing history with theoretical analysis throughout, in developing his individualistic theory of economic development (based as it is around self-interest and natural human propensities), or his micro-theory of market exchange, or his more structuralist and collectivist theory of distribution. Marx's use of the dialectical method allowed him to use a complex combination of abstract, social, systemic and historically dynamic content. In this way he saw himself as both drawing upon and breaking with classical political economy.

The major exception within the latter to a mixed method was to be found in David Ricardo's deductivism, especially through use of his version of the labour theory of value for which a focus on the narrowly economic (prices, profits and so on) was central. Ricardo was heavily responsible for pioneering the deductive method, long before marginalism so fully embraced it. In doing so, the mixture and balance of deduction and induction to be found in Smith is, to a large extent, set aside in the period leading up to the marginalist revolution, with the major exception of the Marxian dialectical method. Even for Ricardo, however, although history played virtually no role, the social element was important not least in his reliance upon a class analysis of the capitalist economy, with emphasis upon the distribution of wages, profits and rents between classes and the impact of this upon the accumulation of capital.

This all changed with the marginalist revolution out of which economics was established as a discipline. In its wake, the dispute that started with the first skirmishes between Ricardo and Thomas Malthus over the relative merits of deduction versus induction, reached a climax in the *Methodenstreit*, the battle between the marginalist Carl Menger and the leader of the German historical school, Gustav Schmoller. This concerned the relative virtues of abstract, theoretical analysis *vis-à-vis* the historical method. Indeed, the whole period between the marginalist revolution and the Second World War was a period of pluralism in economic science and of intense debates between the various schools that were flourishing in different parts of the world at roughly the same time, be it in the form of marginalism in Great Britain and other parts of Europe, the Historical School in Germany, or American (or old) institutionalism on the other side of the Atlantic. To a large extent, the historicists and the marginalists had a common point of departure. Following the crisis of the Ricardian (and Millian) system of classical political economy, both historicists and the marginalists sought to transform political economy. But while the historicists objected to its deductive abstractions being motivated by the goal of social reform, the marginalists welcomed deductivism but sought to wed it to some form of Benthamite utilitarianism. There is no doubt that there was a total reconstruction of political economy, not least in terminology, as it became economics. But, whilst the marginalists may have won the day, it was a hard fought and revealing battle in many respects, with original intentions and reservations both discarded and forgotten.

Despite its pluralistic aspect, then, the period following the marginalist revolution witnessed the further consolidation of the neoclassical school based on marginalist principles, and the beginning of its domination of economic science. Alfred Marshall played a key role in this process. Despite taking sides with the abstract, theoretical side of the dispute, Marshall was more rounded and more conciliatory towards other methodological approaches, the historical method being a chief example. Despite Marshall's roundedness, however, the rise of neoclassical economics in the following years was accomplished in part by extracting the formal, axiomatic and deductive content from his 'old marginalism' and developing this prodigiously in its own right.

This involved a triple reductionism which, other than in token ways (but that can be important in allowing for economics imperialism), remains characteristic of orthodoxy to the present day. First is the reductionism to the individual as the key analytical building block and through which collective agents, not least classes, are replaced in extreme by representative individuals as the basic unit of analysis, that is if they are considered at all. And the economy becomes treated as if it is a simple consequence of the aggregation over its individual elements. Second, the economy is reduced in being treated as if it were confined to market supply and demand in the absence of consideration of other 'non-economic' or social factors, as if market relations could prevail independently of the broader social context. By the same token and third, economic analysis is based on principles that have no attachment to history other than in their application, not least with the idea of distinctly capitalistic categories, such as profits and wages, being merely the equivalent of factor rewards characteristic of any society. In other words, quite apart from collective agents and the social, historical specificity is lost and economic science becomes totally divorced from history. This huge transformation in economic science, as reflected in the move from political economy to economics, heralded the separation of the latter from other social sciences.

Two important features are crucial in the taking of the social out of the economy. First, the focus of analysis not only shifted to the individual but also to the particular form of optimising behaviour through utility maximisation, or psychological individualism. Profit maximisation by firms or entrepreneurs followed as a corollary as production, cost minimisation and sale all become intermediate steps, through monetary gain, in the path to consumer satisfaction. Second, the economy as market relations now constituted a distinct object of study, with the discipline of economics to undertake the task, by focusing on the economic aspects of behaviour in abstraction from any other social influences, and also within an equilibrium framework, with broader social and political relations fading into the exogenously given background. Space was thus created for the emergence of other social sciences, which would fill the gaps created by the desocialisation and the dehistoricisation of economics.

One example of this is provided by the foundation of economic history as a distinct field of study (see Milonakis and Fine (forthcoming) for a full account). Gradually, the historical economics of the Historical School gave way to economic history proper. This separation of economics from the other social sciences, and history in particular, had always been the common goal of the three founders of the marginalist revolution, Willam Stanley Jevons, Leon Walras and Carl Menger. Whilst each had different views on how economics should relate to history, the marginalist principles that they sought to promote were unacceptable to the goals of the more inductive historical economics, as much as the historical method was unacceptable to them. Despite Marshall's conciliatory mood, the total divorce proved the only way forward in practice. With the increasing influence of marginalism, especially in the UK, economic history survived in the interwar period by becoming more associated with history than with economics.

A similar story can be told around the relations between economics and the social, as then increasingly being represented in the fledgling discipline of sociology. It could, and did, increasingly occupy the social space vacated by the individualism of marginalism and its confinement to market relations. For Vilfredo Pareto, for example, the economic became synonymous with rationality, defining the social as the residually non-rational (his own terms are 'logical' and 'nonlogical'). In this way, sociology occupied the territory not only of the non-rational but also of the non-market, especially where the domain of rationality and pursuit of self-interest did not seem to apply, as in the marriage 'market', bureaucracy, the logic of organisations, and deviancy of whatever type. Significantly, once such separations took place between disciplines, their subject matter and their methods, attempts to retain some sort of unity across them seemed to doom to fail, no matter how prestigious those attempting the task. Figures as prominent as Max Weber and Joseph Schumpeter sought to retain a relationship between economics and other social sciences, even if as separate disciplines, through proposing a programme for social economics (*Sozialökonomik*). But they failed, as is neatly symbolised by the extreme extent to which one is remembered as sociologist and the other as economist, and the total neglect of the latter by mainstream economics other than in token ways. As a result, the interwar period witnessed the more or less complete separation between the disciplines of economics and sociology.

At the same time, developments within mainstream economics were taking place at a rapid pace. Following Robbins's (1935 [1932]) definition of economics as 'the science which studies human behaviour as a relationship between ends and scarce means which have alternative uses', economics was no longer to be identified with a specific subject matter, be it the economy, the market or what have you. Instead it was to concern itself with questions involving scarcity, hence becoming the science of choice. Grand concerns with distribution between classes, the pace of capital accumulation, the rise and fall of nations or 'plutology', as Hicks (1975, p. 323) would have it, gave way to 'catallactics', or focus upon the allocation of scarce resources, with corresponding attention to the individual, choice, efficiency and equilibrium. Paradoxically, though, this immediately gave economics a rationale for expanding into areas and fields which, following the separation of the social sciences, were initially considered as lying outside its scope. For should not the individual, choice, efficiency and even equilibrium, if acceptable and accepted at all, be of wider applicability than to the market alone? It is no accident that economic imperialism as a phrase was first coined by Ralph William Souter in 1933 immediately following and as a response to Robbins's book (see Chapter 2 in this volume). But economics imperialism had another quarter of a century or so to wait before becoming a more or less accepted practice by economists, with Gary Becker at the forefront.

This was because of the need for the technical apparatus associated with neoclassical economics to become both perfected and fully accepted within the discipline itself. The domination of neoclassical economics following the marginalist revolution took the form of an increasingly formalistic, axiomatic and deductive analytical framework. From the 1930s onwards this was accompanied by the revitalisation of the Walrasian general equilibrium system which had been neglected up to this point, being overshadowed by the total dominance of the Marshallian partial equilibrium model.

Long before Robbins wrote his treatise, following the marginalist revolution, economic rationality of a particular type had come to the fore, yielding the technical apparatus around utility and production functions, equilibrium, efficiency and so on. These continue to underpin the theory of supply and demand. Aggregating over such optimising individuals allowed for Walrasian general equilibrium theory, and for this to serve as a prototype for the economy as a whole, albeit derived from microeconomic principles. As chance would have it, the technical apparatus associated with the marginalist principles acquired a two-sided perfection more or less at the same time. The Hicks-Slutsky-Samuelson account of the consequences of individual optimisation was rapidly accompanied by the proof of the theorems associated with general equilibrium. This was done through a prodigious reductionism across a number of dimensions. The individual was reduced to a given set of preferences, acting upon them as a matter of a choice over given goods. The technical assumptions necessary for this exercise to be accomplished, together with aggregation over individuals for general equilibrium, were simply assumed to be – and have become taken for granted as – a conventional wisdom. Utility and production functions, with corresponding convexity assumptions, have stripped down production and consumption to simple equations.

3 ... To expansionism

As mentioned, these marginalist principles had not only to be advanced on their own terms, they also had to be accepted and adopted professionally within the discipline of economics itself. This needed to occur despite the extraordinary reductionism involved from the point of view of economic analysis, let alone that of a broader social science. Significantly, in the decade after the Second World War, such developments were attached to what has been dubbed a formalist revolution in economics (see, for example, Blaug 1999, 2001 and 2003).[2]

The result in the first instance of establishing this technical apparatus, prior to the formalist revolution, was to delimit both the scope and the methodological and theoretical content of the analysis. By the same token, it also had the effect of divorcing mainstream theory from any serious claims to realism, certainly relative to what had gone before and the Marshallian tradition of old marginalism (where marginalist principles are perceived as at most one part of economics), let alone classical political economy. At this time, then, such reductionism was accommodated by leaving the bigger questions either to the newly emerged Keynesian macroeconomics or to more longstanding but, from the perspective of orthodoxy, increasingly heterodox analyses, such as American institutionalism.

Yet, precisely because the core marginalist principles were so heavily reduced in content and application in the first instance – and granted the new definition of economics as the science of choice – this opened the way for them to be extended to new areas once they had been accepted in the wake of the formalist revolution and for them to be given content and not just mathematical form. Indeed, economics in the marginalist tradition had been so successively and successfully reduced that an outward expansion was almost inevitable. The old marginalists accepted a limited scope of application of core principles in deference to other forms of behaviour and other factors such as the role of institutions, and economics itself as a discipline was perceived to be the study of supply and demand for given markets. Economics became a *method* and a set of techniques rather than a subject matter. As Posner (1987, p. 2) claims:

> There is an open-ended set of concepts (such concepts as perfect competition, utility maximization, equilibrium, marginal cost, consumers' surplus, elasticity of demand, and opportunity cost), most of which are derived from a common set of assumptions about individual behavior and can be used to make predictions about *social* behavior; and that when used in sufficient density these concepts make a work of scholarship 'economic' regardless of its subject matter or its author's degree. When economics is 'defined' in this way, there is nothing that makes the study of marriage and divorce less suitable a priori for economics than the study of the automobile industry or the inflation rate [emphasis added].

So economic principles are open-ended and for some, with Becker for example to the fore as will be seen, this meant they should be equally ambitious of scope in practice.

Economics moreover was also claimed to be able to be a positive science without normative content. To emphasise the point, the marginalist principles and concepts are universal – just think of marginal utility or marginal product, applicable without reference to time, place, or even humans and the market. So even if marginalism was initially intended, and accepted as such, as only to describe part of human behaviour in particular circumstances, it came up with an analysis that was essentially unlimited in scope. Hence, Pareto's distinction between logical and non-logical action, or between rational and non-rational behaviour, became redundant. As such, marginalism is caught in a perpetual tension between the logical implication of being universally applicable and the practical implication of thereby being rendered unrealistic or vacuous from the perspective of other more rounded disciplines and methodologies. As Coase (1978, p. 207) has perceptively put it:

> There are, at present, two tendencies in operation in economics which seem to be inconsistent but which, in fact, are not. The first consists of the *enlargement* of the scope of economists' interests so far as subject matter is concerned. The second is a narrowing of professional interest to formal, technical, commonly mathematical, analysis. This more formal analysis tends to have greater generality. It may say less, or leave much unsaid, about the economic system, but, because of its generality, the analysis becomes applicable to all social systems. It is this generality of their analytical systems which, I believe, has facilitated the movement of economists into other social sciences, where they will presumably repeat the successes (and failures) which they have had within economics itself [emphasis added].

Certainly then the decade following the Second World War does represent a divide within mainstream economics in the extent of use of mathematical modelling. But it also represents much more than this. First is a change in direction from making assumptions to *establish* a core technical apparatus on the basis of marginalism to the *application* of that technical apparatus. Second is a shift from narrowing the scope of application to a part of economics to one of extending it across economic and non-economic issues, thus setting off the process of economics imperialism.

But what exactly is economics imperialism? For those at all involved with it, as proponent or critic, it is self-evident. It is the extension of economic analysis to subject matter beyond its traditional borders. This definition of economics imperialism, deceptively simple, raises a number of complex questions or goes further in presuming a number of answers. The first is that economics has well-established borders that are going to be breached. How are those borders defined? Do they shift over time? Are such shifts, the redrawing of borders, a consequence of economics imperialism itself, as the new analytical terrain covered is incorporated into the discipline or do they reflect internal changes within economics itself? A moment's reflection reveals that there are both logical and historical aspects to these questions. How do we define the boundaries of economics in principle and how have those boundaries been determined in practice and over time?

As is already apparent, the notion of economics imperialism depends upon some sort of division or dualism between the economic and the non-economic, so that the one can appropriate the other. But this dualism can have a number of different interpretations. One might broadly be by subject matter. And another might broadly be by interdisciplinary boundaries. In other words, is the economic defined by the economy however that might be interpreted? Or is the economic defined by economics, however that might define itself in relation to other social sciences? These two different bases for analysing economics imperialism are closely related but they are not identical. Other social sciences often address the economic as in the sociology of labour markets and the organisation of firms, or the psychology of market demand. In other words, economics imperialism cuts across both subject matter and disciplinary divisions, and these do not necessarily coincide with one another.

Interestingly, such issues have rarely if ever been discussed in the context of economics imperialism. It is so focused on the market as the economic, and so focused on economic rationality, that its expansions into the non-economic and into the subject matter of other disciplines have tended to coincide and to be taken to be coincident. It is not difficult to see why all of this should be so, on the basis of the process that had gone on before as briefly discussed above. Essentially, the two types of dualism outlined in the previous paragraph, between subject matter and between disciplines, began to coincide, if imperfectly. As has been seen, other dualisms were also involved, especially around method and techniques. By the 1950s, if not before, economics became so distinctive in all of these respects that any expansion of its scope became blatant across multiple criteria of disciplinary divides, subject matter, method and conceptual content, etc. These multiple transgressions of analytical borders necessarily provoked critical commentary both within and against the discipline of economics at least until, however completely, they became familiar and accepted. This point recurs throughout the chapters ahead, just as it did in our earlier book, Milonakis and Fine (2009), concerned with developments in and around economics as marginalism attained internal dominance over the discipline.

4 General outline

In sum, then, the marginalist revolution led to two parallel and contradictory developments within economics. On the one hand, the scope of application was reduced to the economy considered simply as market relations, while, on the other hand, its basic conceptual principles such as equilibrium, rationality, scarcity and choice, became more and more universal in content and application. Given, however, the tension between the universal principles of this apparatus and its confined scope of application, it is hardly surprising that the boundaries of the discipline should be stretched beyond scrutiny of the market alone as soon as its principles gained general acceptance. Such is the historical logic of economics imperialism, examined in Chapter 2.

The marginalist revolution had taken the social and the historical out of the economy in a dual sense, by resorting to methodological individualism and by detaching the market/economy from society. Rational choice, or the economic approach as it was termed by its leading proponent, Becker, involved forging a link between the economic and the social, if only in the second sense. Even then, the link between the economic and the social meant for Becker the application of the neoclassical technical economic apparatus to the social sphere and treating other areas of the social cosmos as if they were markets, rather then bringing the social back into economic theorising on any other terms. His own work around human capital, the family, crime and so on is illustrative. But Becker is something of an exception in considering all behaviour as reducible to economic rationality. Even those, like Buchanan and Tullock, putting forward public choice theory remained cautious over the extent to which economics could be extended beyond the market, extended though it could be in part to political 'markets'.

The issue is to what extent the idea of the rational individual can be extrapolated from the market to other areas of application and to what extent the economic approach could incorporate or be applied to the traditionally non-economic in terms of the treatment of topics by other disciplines. How much could the social be reduced to the individual both in terms of behaviour and the non-market? Doubts persisted amongst economists themselves for some time. Accordingly, whilst what in Chapter 3 we term 'old economics imperialism' of the Becker-type did prosper, not least in the emergence of the new economic history or cliometrics (Milonakis and Fine, forthcoming), economists themselves remained sceptical of its scope and, at least to this extent, respectful of other disciplines, well into the late 1980s.

With the emergence of the new information-theoretic and new institutional economics, based on the notions of informational asymmetries, transaction costs and other market imperfections, a new and more effective form of economics imperialism took hold, which is the focus of Chapters 4, 5, 6 and 7. According to this new phase and form of economics imperialism, social entities emerge as a result of, and as a response to, the existence of market imperfections, especially informational ones. By this means economics has been enabled to address the social not as the extension of the perfectly working market but as the response to its imperfect working. Thus, economic and social structures, institutions, customs, habits, culture, and apparently non-rational behaviour, are explained as the rational, possibly collective, sometimes strategic, and often putatively path-dependent, responses to market imperfections. By this means, mainstream economics has readdressed the social, allowing itself to appear more attractive to other social sciences (we as economists now accept that institutions and history matter, for example, inspiring a whole range of 'new' fields straddling other disciplines such as new economic history, new institutional economics, new political economy, new economic geography and so on). By the same token, this new form of economics imperialism has enabled neoclassical economics to reintroduce the historical, albeit in the limited form of path dependence and/or choice between equilibria. This points to the necessity of carefully specifying what is meant by the historical (and social), especially in relation to its contributing to theoretical content. At one extreme, it is understood simply as informed narrative, but it ranges through different initial conditions and dynamics on the basis of given conceptualisations to the acceptance of the contextual as informing the meaning of concepts themselves. These issues are taken up throughout the book, sometimes implicitly, and explicitly in Milonakis and Fine (forthcoming), in discussing how economic history itself has responded over time. This discussion of the new phase of economics imperialism closes with a discussion of 'freakonomics', a catchy term for the most extreme form of economics imperialism (Levitt and Dubner 2006 and see Chapter 6 in this volume).

More broadly, Chapter 7 discusses the continuing intellectual and practical difficulties that economics imperialism confronts in extending its scope, addressing the cause and course of its shifting relations with other social sciences. But there is another question related to the narrowness of scope of economic reasoning: does this matter, and especially now? There are two reasons for believing so, one concerning the prospects for economics, the other concerning the prospects for the other social sciences. For economics itself, Chapter 8 reviews the how and why of the dominance of its orthodoxy as a prelude to addressing how it might be combated. Across the other social sciences, as suggested in Chapter 9, there has been a turn away from postmodernism and a commendable wish get to grips with the realities of contemporary capitalism. How the economy is understood is crucial to outcomes across topics and disciplines. There is much to learn in this respect from the political economy of the past and its explicit or instinctive incorporation of historical and social content. It is important to not only resist the incursions of economics across the social sciences but also to develop an alternative political economy. The potential for this to undermine the prognostications of the dismal science on its own turf is far from bright, although some argue that the mainstream is in the process of dissolution under the weight of its own fragilities. These issues are taken up in the final chapter.

Notes

1 Whilst 'economic imperialism' is more widely used, this term is more generally and appropriately deployed in the context of the real world of the economics of empire, as opposed to the world of ideas. 'Economic imperialism' has been especially favoured by the mainstream. This is despite, or because of, the orthodoxy's total neglect of the incidence of (economic) imperialism in reality. See Perelman (2000) who, with continuing relevance for contemporary economics, offers a striking critique of Adam Smith's failure to confront the economic, political and ideological realities attached to 'a relatively free market' in an era of colonisation. Note that Olson and Kähkönen (2000) reject the term imperialism on the grounds that no force is used in the cross-disciplinary expansion by economics. They prefer the equally revealing metaphor of economics as the metropolis, extending its influence to the suburban social sciences. In pursuit of interdisciplinarity, Ostrom (2007, p. 240) views relations between economics and politics as 'a potlatch, rather than one of imperialism' but her points of reference are all firmly attached to methodological individualism if not rational choice, despite this appeal to anthropological metaphor. For early use of the term, 'economics imperialism', see Mäki (1998).

2 Following Solow (1997), Backhouse (2006) distinguishes in principle between formalism as such, as in Debreu's general equilibrium without regard to application and interpretation, and the greater use of mathematical and empirical techniques of investigation. In practice, though, economists have tended to substitute the first for the second, if not absolutely, and by vague appeals to rigour and testing.

2 The historical logic of economics imperialism

> The first principle of Economics is that every agent is actuated only by self interest.
>
> Francis Edgeworth, cited in Pearson (2004, p. 42)

> In so far as economic agents were in reality motivated by 'sympathy with each other's interests', [Edgeworth] held that they were emphatically *not* 'economic' agents.
>
> Heath Pearson[1]

1 Introduction

As noted in Chapter 1, the notion, but not the full practice, of economics imperialism emerged in the 1930s, once marginalism had been established as a core part of the discipline (discussed more fully in Section 2 below). Once accepted, though, on the basis of reservations and compromises over content, marginalist principles could be extended beyond the market as these preconditions were set aside and forgotten. Thus the passage from the old, Marshallian type of marginalism to general equilibrium both extended the core content of microeconomics within economics as a discipline, and the potential for its application to the non-economic and other disciplines.

In practice, however, a rather different and more troubled story emerges. For, from the 1930s onwards until relatively recently, economics imperialism has always been claimed to be prospective, just around the corner. A pattern repeats itself of false starts, of economics laying claim to be a general social science whose potential is about to be fulfilled. Why should such hopes and expectations have been continually frustrated? The answer lies in the obstacles that economics imperialism has to overcome, not only from within its own logic, but in terms of its acceptability to others, either relative to the subject matter at hand or to the sensibilities of colonised disciplines. As indicated in the previous chapter, this reflects dichotomies over and above disciplines and subject matter. On each occasion in the past, economics imperialism disappoints in part because of the inability of marginalism to address the 'social' in a satisfactory way. Ultimately, as discussed in Section 3 below, the marginalist revolution had the effect of taking the social (and historical) out of economics both by focusing on the (asocial) individual and by limiting itself to the science of the market. On a broader canvas, this was part and parcel of the way in which the different disciplines across the social sciences initially carved out the boundaries between themselves. Economics concerned the rational (economic) behaviour of individuals going about the business of supply and demand. The rest, non-rational behaviour and non-market activity, could be left to the other disciplines. But should it be?

To establish itself in practice as the science of the market, economics had to compromise on the universal character of its principles. For otherwise, individuals suffer from split personalities, behaving rationally in relation to the market but abandoning such a characteristic in other areas of life. How far can this be so? Should the principle of rationality not be extended beyond the market, even to all human activity? In other words, another compromise is involved over where rational and non-rational behaviour begins and ends. Why should economics be confined to the (market) economy? Why not extend rationality to cover all aspects of economic and social life and, thereby, shift the boundaries between economics and the other social sciences? As Medema (1998, p. 123) puts it, reflecting how economics had reduced the individual to a matter of making choices:

> The logic of this extension is a simple one: economics is the study of choice, and all of life involves making choices; should not economics, then, apply to all manner of human decisions and thus all areas of human life?

The historical logic of economics imperialism is one in which the initial settlement of boundaries between economics and the other disciplines is always open. But moving those boundaries will involve compromising over a range of issues in ways that have to prove acceptable, within and between disciplines and as the latter are themselves determined and evolving.

In short, the historical logic of economics imperialism is that it is caught on the tension between its universally applicable method and its historically delimited subject matter. How that tension is resolved or, more exactly, accommodated, is addressed in the following chapters, running from an old style, especially associated with Gary Becker and his backers through to the new style attached to George Akerlof and his acolytes. One extends the economic approach to the non-economic by treating the social as if it were or could be akin to perfectly working markets. It prevailed from the 1930s to the 1980s but has since given way to the other approach in which the non-economic, and previously neglected aspects of the economic, are addressed as the response to market imperfections. The latter has given rise to a more successful economics imperialism by breadth of subject matter and influence, and encroachment upon other disciplines.

2 Questions raised by economics imperialism

For the past few decades, and increasingly in recent years, the other social sciences have been subject to what both sides across the disciplinary divide (or divides) have dubbed economics imperialism. But economics imperialism has a longer – if far from long – history. Leading economic sociologist Richard Swedberg (1990, p. 14) reports the term as having been introduced in the 1930s by Ralph William Souter, who suggested that:[2]

> The salvation of Economic Science in the twentieth century lies in an enlightened and democratic 'economic imperialism' which invades the territories of its neighbors, not to enslave them or swallow them up but to aid and enrich them and promote their autonomous growth in the very process of aiding and enriching itself.

Upon reflection, this short passage, possibly inadvertently, raises a number of interesting questions. First, why does economics imperialism not have a longer history? Why is it prospective only by the 1930s, an idea yet to be realised? More specifically, how did economics and social science come to be separated in the first place and why were they not previously brought back together? We have dealt with the former question at length in Milonakis and Fine (2009). Significantly, though, 70 years after Souter, Lazear (2000) looks ahead for the prospects of economics into the new millennium. He foresees the triumph of economics imperialism as the other social sciences succumb to its science and rigour, embodied in its preoccupation with rationality, equilibrium and efficiency (see Chapter 7 in this volume). As Fine (2002a) observes, if Lazear is right, this leaves unexplained the failure of the other social sciences to have succumbed to the superior analytics of the dismal science already. Thus, the timing of economics imperialism is a pertinent issue, not least because, apart from being so recent in the history of economic thought, it has so often been judged, paradoxically, to be prospective and at the same time gazed upon in retrospect – for similar judgements to Lazear's in the present day of the imminence of economics imperialism have been made by others during the passage from Souter in the 1930s. For example, in the closing chapter to *Theory of Public Choice*, edited by Buchanan and Tollison (1972, p. 317), Gordon Tullock begins:[3]

> If we define "economics" as "what economists do," then a vast expansion of that field is one of the more interesting intellectual developments of this generation.

But, he continues, 'we are not finished' (p. 318), for, 'the fact [remains] that only a minority of economists are interested in these forays of economists outside their traditional field' (p. 319). Nonetheless he concludes that 'with time, this will probably change' (p. 321).

A little over a decade later, Stigler (1984, p. 311) had occasion to observe that economics had become an imperial science by aggressively addressing the subject matter of other social disciplines (see opening quote to Chapter 1 in this volume).[4] For him, 'the more interesting question, however, is the long run impact of the economists upon neighbouring fields'. And he continues, 'I have already indicated that I believe that economic history, sociology and political science *will* permanently change' (p. 312, emphasis added). At much the same time, Hirshleifer (1985, p. 53) suggested:[5]

> *There is only one social science*. What gives economics its imperialistic invasive power is that our analytical categories – scarcity, cost, preferences, opportunities, etc – are truly universal in application. Even more important is our structured organization of these concepts into the distinct yet intertwined processes of optimization on the individual decision level. Thus economics does really constitute the universal grammar of social science.

After a few more years, Buckley and Casson (1993, p. 1051) offered an even more dramatic prognosis:

> The long-run ideal of a unified social science may therefore be closer than most people think. For it is usually assumed that the unification of social science will be effected using some set of general principles that has not yet been discovered. It is possible, however, that some of the relevant principles are already available, and are simply waiting to be used in a more imaginative way. These are the core principles of rationality and equilibrium found in conventional economics. By extending the field over which these principles are applied, economic imperialism may serve to unify social science within the foreseeable future – it may be misguided to wait for a still-undisclosed set of principles to materialize for this purpose.

With this highly optimistic scenario for the future prospects of economics imperialism, the long journey in search of a unified social science built around the economic that started with classical political economy would be completed – but in a highly and peculiarly inverted way. The efforts of Adam Smith, Karl Marx and the German Historical School for a unified social science based on the mutual intermingling of the social and the historical with the economic in a multidimensional political economy (Milonakis and Fine 2009), gives way to a unified social science based on the colonisation of the social, the historical and the political by the economic. This colonisation takes place on the basis of a dehydrated set of (economic) principles following the ultimately desocialising and dehistoricisation effects of the marginalist revolution. In short, unification though mutual cooperation of the social, the historical and the economic gives way to unification through the colonisation of the former two by the latter.

Swedberg (1990, p. 5 and see also Chapter 5 in this volume) judges that a major shift is taking place across the boundaries between the two disciplines of economics and sociology:

> What is happening *today* is very significant: the border between two of the major social sciences *is* being redrawn, thereby providing new perspectives on a whole range of very important problems both in the economy and in society at large [emphasis added].

In short, once again, we have evidence that economics imperialism presents itself as having an as yet unfulfilled history. For economists and other social scientists, the immanence of economics imperialism seems to have been mistaken for its imminence!

That immanence, however, has lasted long enough for its goals and real or prospective achievements to have undergone significant changes. And, in view of its long history as such, it would be a mistake to see either the goals or achievements of economics imperialism as unchanging in substance and influence. Swedberg, for example, is referring in part to a market and institutional imperfection approach to economics. Despite being later, the contribution of Buckley and Casson makes no reference to this, and pretty much the same is true of Lazear (2000). This market imperfection approach to economics follows upon, but departs from, the sort of economics and economics imperialism previously practised by Becker over the preceding decades. Indeed, Lazear takes Becker as the guru of economics imperialism.[6] And, as the master himself puts it, '"Economic imperialism" is probably a good description of what I do' (Becker 1990, p. 39). Yet, within this contribution, he at least implicitly confesses to have already been doing economics imperialism for over 30 years, something that is surely uncontroversial to the economics profession and beyond! In the account of his 'essence', sanctioned by Becker on the occasion of his sixty-fifth birthday, Febrero and Schwartz (1995, pp. xx–xxi), suggest:[7]

> Many activities thought to be noneconomic in nature … are actually economic problems. Economic theory can thus help explain phenomena traditionally located outside the scope of economics, in the areas of law, sociology, biology, political science, and anthropology … The development of this *economic imperialism* … is another significant contribution that Becker has made to modern economics.

Further, the following is claimed for Becker's obsessive reductionism to his 'economic approach', which includes the assumptions of maximising behaviour, market equilibrium and stable preferences (p. xvii):

> By using Occam's razor to cut away ancillary assumptions, he reduces his axioms to one: that all actors in the social game are *homines economici* – economic persons, rational agents who maximize their advantages … Inductivists would not believe it, but, by placing his models on this minimalist fulcrum, he shifts huge problems that other social scientists found immovable.

The contrast in analytical ethos and ambition to that of the 'old marginalism', associated with Alfred Marshall (Milonakis and Fine 2009, ch. 7), could not be more marked. Far from recognising limitations on the scope of economic principles for the economy itself, the latter are projected across the social sciences as a whole. But the previous discussion indicates not only the immanence of such economics imperialism but some variability across its origins and thrust, between old and new forms that are to be presented in following chapters.

Given, then, the unrealised and recurring expectations for economics imperialism, what have been the outcomes of its partially thwarted incursions? With economics imperialism's continuing failure to materialise to the depth and extent expected, those other social sciences do seem to have enjoyed a charmed life in escaping from its colonising designs. As quoted above, Souter anticipates two possible fates or paths for them. One is of enslavement and incorporation under economics. The other, and explicitly preferred option both by preference and as revealed in choice of language, is of enrichment and the salvation of economics itself. This involves the idea that the other social sciences will positively influence economics rather than being simply subordinated to it. Souter's hopes even point to the possibility of a reverse imperialism – of the other social sciences colonising economics. Why should this not be so rather than vice-versa? Does economics colonise the other social sciences or do they 'civilise' economics, or make it more socially and historically rounded, by adding their own insights and approaches?

Resolution of this conundrum depends in part on the perspective adopted from which to judge developments across the social sciences. When mixing two colours, does one or the other predominate, or a new colour altogether emerge? Economics imperialists themselves reflect these tensions. Becker, for example, tends to dismiss the theory of other social sciences as arbitrary in not conforming to his economic approach, and can only draw upon other social sciences through that prism. Others such as Akerlof see themselves as indebted to other disciplines. From within economics, with the shift from old to new economics imperialism, the view of itself is increasingly one of being more civilised and more rounded by incorporating previously absent material. This continues, however, to be tempered by the older view that non-economists have unduly neglected the insights of economists and might learn more from economists than vice-versa.[8] The view from outside, or above, is undoubtedly different – and surely the more appropriate position from which to interpret the incursions of economics upon its neighbours. It is that a base within economics precludes appropriate relations with the vast bulk of other disciplines. At most, economics can asset strip other social sciences for its own purposes. This issue will be taken up in later chapters.

What, though, is the exact nature and content of economics imperialism?[9] Is it the subject matter as the non-economic becomes the target for economic analysis? This then raises the question of whether a broader application of the economic to the non-economic is involved, or the redefinition of the economic itself to incorporate the scope of what was previously designated as non-economic.[10] In the latter case, it is liable to be more a matter of the extension of the methodology of economics to the non-economic. If so, what is the content of that extension? Is it by way of method, theory, techniques or some combination of all three?

Somewhat misleadingly, Hirshleifer (2002, p. ix) points in the foreword to his book on the expansion of economics to the distinction between its 'expansion' and its 'reorientation' that 'more modestly suggests … that economics has much to learn from, as well as much to teach, the other social disciples'. Such modesty runs to accepting that 'even the most aggressive of economic imperialists would not maintain that people always behave in accordance with the postulates that characterize economic man'.

This points to the discussion so far having primarily taken the imperial perspective – what economics will do to the other social sciences. But are the latter merely to be passive, albeit enriched and/or enriching, victims? What is to happen to their own distinctive methodologies, methods, theories and techniques? Are they to be set aside or to be absorbed? Will their subject matter and categories of analysis survive in substance or merely terminologically as they become transformed into something more economics-like? And will the borders between economics and the other social sciences be shifted, overlapping or dissolved?

For all of these questions, we have the advantage over Souter of being able to look backwards as well as forwards, at least to the extent that his musings mark the beginnings of economics imperialism. Two issues have been central to the incidence and content of economics imperialism. Each is a dualism reflecting the relations between economics and the other social sciences, the dichotomies between the individual and the social and between the rational and the non-rational. They are addressed in Section 3 before concluding remarks are made in Section 4.

3 Bringing back in the 'social'?

It is generally taken for granted, especially by those adopting a critical stance and who are therefore aware of the issue, that the marginalist revolution ultimately had the effect of taking the 'social' out of economics (Milonakis and Fine 2009, ch. 5, sec. 4). Thus, Potts (2000, p. 17), for example, sees this in terms of excised *structures* although the same could be said of relations, institutions, tendencies, the contextual and the historical:

> There is no interaction, knowledge or structure in the neowalrasian microtheory because the nature of economic space is assumed to be integral … That is, the microtheory harbours no provisions for the existence of cognitive structure … heuristic structure … organizational structure … spatial or temporal structure … market structure … nor social structure.

He then lists a far from radical set of thinkers who have emphasised these omissions.

Yet, as indicated, so much has been taken out of economics in a way that has come to be taken for granted that its omission is now scarcely recognised by the orthodoxy. This suggests that the meaning of the social in the context of (mainstream) economics needs to be carefully addressed. It comprises at least two distinct elements, quite apart from the 'macro', as opposed to 'micro' or the in-between 'meso', however the macro might itself be understood. On the one hand, the social is understood as the non-market, those activities lying outside the domain of supply and demand in the form of monetary exchange. There is the structuring of the economy in financial or labour markets, for example, the divisions between the market and the non-market (and the structuring of both), the formation of institutions and collective agencies more generally, not least the state. On the other hand, the social is acknowledged in the form of what appears to be non-rational behaviour from the perspective of utility-maximising individuals. This applies, for example, to customary behaviour or habit (although these are often thought of as informal institutions) whether brought to the market or the non-market. In other words, the individual is socialised with the presumption that the social should be taken as an analytical starting point in order to situate the individual (rather than vice-versa). In short, when we address the social, it comprises two distinct elements – the antithesis of the individual and the antithesis of the economic.

David Ricardo focused upon the economy as asocial (and ahistorical even), as something that could be examined in isolation from broader social relations, other than class relations. Tullock's (1972, p. 322) essay on 'Economic Imperialism' sharply puts his position:

> It is probably the influence of David Ricardo which led to the reduction of the scope of the area studied with the methods of Smith and Hume to what we now call economics. Brilliant though Ricardo undoubtedly was, however, there seems no inherent reason why his tastes in the fields he wished to study should mold the present day structure of the disciplines.

Tullock goes on to argue, or more or less to assume as self-evident, that economics has been about rationality, and individuals and choices, but that these have traditionally been allowed too limited a scope. So Ricardo's too narrow scope of political economy is viewed as a rationale for economics imperialism. Fortunately, though, for Tullock, 'What has happened in recent years is that the economists have begun to study *choices* and their interaction with the *choice* of other *individuals* in areas which are not traditionally economics' (p. 322, emphasis added). But Ricardo's approach had nothing to do with individuals and choices. His interest focused on classes and the distribution between them in the form of wages, profits and rents, leading him to adopt the labour theory of value as an analytical tool for explaining prices. As a result, his taking the social out of the economy is confined to the first meaning outlined above; with respect to the second meaning, his analysis continued to rely upon class (for distributional purposes). Further, Ricardo's exclusive reliance upon abstract reasoning and the deductive method called forth considerable opposition from his contemporaries, not least the French Liberal School of political economy headed by Jean-Baptiste Say, which led Ingrao and Israel (1990, p. 60) to conclude that 'Say's methodological views were long to weigh upon French culture as an impediment to any further attempt to use mathematical models in economics'.[11]

The displacement of class as social analysis, and the movement from political economy to economics, needed to wait upon the marginalist revolution of the 1870s that established the vast majority of the principles of mainstream economics as we know them today. With this shift from political economy to economics, the broadly social gives way to the narrowly economic, with a correspondence between these and the non-market and the market, respectively. Hence, with the social as non-market absent, there has been a longstanding recognition from outside economics or on its margins that this leaves much of the *economic* itself unexamined. This is so, for example, of the existence of firms, hierarchies and other institutions, such as those around labour and financial markets, quite apart from the economic role of the state and civil society. On the other hand, the notion of society gives way to that of a collection of optimising individuals. The Robinson Crusoe analogy reigns supreme. In extreme, in Margaret Thatcher's infamous words, 'There is no such thing as society'. Consequently, in contrast to the vast majority of social theory, there is no notion of the social as independent of individuals, whether it be as structure (e.g. stratification), agency (human action, informal institutions), processes (modernisation), or systemic functions (legitimisation). At most, these are taken as exogenously given and pushed into the analytical, equally exogenously given, hinterland.

The focus on the individual within mainstream economics has been of enduring significance so that it is worth dwelling briefly upon and to list at least the general, if not universal, features in its application. For these display critical aspects of mainstream economics that constrain its ability to reintroduce the social and/or colonise other disciplines in ways that are acceptable to their own scholars and pundits.

First, with utility maximisation, motivation is one-dimensional, geared exclusively to choice. Even within an individualistic method, there are many other goals for, or prompts to, thought, knowledge and action. The presumption is that humans are little short, even far short, of savages in the single-minded pursuit of their own, utility-maximising self-interest, and, yet, it should be added, highly sophisticated in calculating the relationship between means and ends.

Second, the utility function or preferences which determine individuals' choices are themselves left unexplained; they are taken as given, exogenous, and unexamined in terms of their origins as opposed to their consequences. Where preferences come from is not questioned and, by the same token, there is no consideration of what factors might lead to a change of preferences, not least the feedback effects of having exercised them in the past. Yet, recent experimental evidence has shown that 'preferences over economic choices are not exogenous as the canonical model would have it, but rather are shaped by the economic and social interactions of everyday life', in all 15 small-scale societies examined in one study (Henrich, *et al.* 2001, p. 77).[12]

Third, behaviour other than maximising utility is recognised only in the negative sense of being set aside as unsystematic and not subject to economic analysis. Indeed, utility-maximising economic behaviour is prioritised by being designated as the rational as opposed to the irrational, with the latter's pejorative connotations in comprising other motives and sources of action, leading us to deploy the more neutral term 'non-rational' instead.

Fourth, as is already apparent, the idea of rational economic agents is not so much unconcerned as unaware of the problem of the meaning associated with individual behaviour. This has two elements. On the one hand, the identity and subjectivity, or sense of self, of the individual is reduced to the utility-maximising calculus. There is no space for culture or ethical values to be involved in the nature of rationality unless it be as an element in the utility function. On the other hand, the same conceptual emptiness applies to the objects or variables that enter into the fulfilment of utility through consumption. These are simply stripped of their cultural meanings and reduced to quantities of goods that are so anonymous or characterless in their content (like the individuals that use or consume them) that they can be, and generally are, represented in a purely formal manner. At the most elementary level of economic analysis, supply and demand curves can be drawn with prices against quantities without any reference to what goods are being considered. More technically, but with the same nature and outcome in this respect, utility functions are set down mathematically, with the goods demarcated purely in formal terms without regard to their nature in physical, let alone social or cultural, terms, e.g. $u(x_1, x_2, \ldots x_n)$, and the same is true of production and cost functions. In short, there is a lack of social content in utility functions, both for individuals in the formation of their preferences and for the meaning of the goods over which those preferences are exercised. Such rationality also reduces economic behaviour to a question of individual *choice* over goods with little or no regard to the processes and experiences attached to such choices.

In his outstanding critical account of the individual in economics, Davis (2003) highlights the two main lines of assault on this idea of rationality. One, the social science critique, recognises that the individual cannot be purely inner driven (by utility function, preferences or whatever), not least because of (external) language being a medium for forming beliefs and actions. Hence the individual is other-directed, externally by the social. On the other hand, the postmodern critique does not accept the idea of (the rational) self other than as a fiction. This is not so much because it is directed socially or externally, as dissolved by internally driven redefinition of self-identity that shifts as soon as an attempt is made to pin it down.[13] He also argues that the narrow notion of economic rationality arises out of the substitution of choice as such for the broader notion of subjectivity, thereby excising broader psychological aspects of the individual. The loss of subjectivity, and its displacement by choice, is further reinforced by the substitution of the axiomatics of preferences for the broader and, potentially, more informal notion of utility. Thus, in taking the social out of political economy in the context of emphasising the determining role of individual choice, economics generated dualities over and above those along the lines of the social/individual and economic/non-economic. In addition, it establishes distinctions between the rational and the non-rational, and between the exogenous and the endogenous.

In this fashion, the individual of mainstream economics becomes extraordinarily pared down to the point of nothingness, excepting the possession of automaton-like choice. As Waller (2004, p. 1112) puts it in review of Davis (2003), 'But if choices are the only characteristics of atomistic individuals, the theory of the individual becomes so reductionist that it ceases to be about human beings'. Such reductionism is essential to the neoclassical enterprise, however. Waller continues (p. 1114):

> if mainstream economists thought this hard about the theory of the individual they wouldn't be mainstream economists. And for neoclassical economists, as Davis points out, this is all irrelevant. They don't care. Davis might as well be writing about the individuation and reidentification of chess pieces, because the abstract, atomistic individual isn't as complex or related to the real world as the identity and motivation of checker pieces.

More recently Davis (2007b, p. 203) has argued that 'if the basis of the atomistic individual was its inner life, and that inner life is now black-boxed into non-existence, then it follows that this neoclassical individual also ceases to exist'.

The duality between exogeneity and endogeneity – what is taken for given and what is explained – bears some comment because it is, once again, second nature to the method of mainstream economics. As the marginalist revolution began to establish the discipline as an axiomatic, deterministic approach – one deducing conclusions from assumptions within mathematical models – its style of explanation or understanding of causation divided into two sorts. There is the causation *within* the model, internal or intrinsic explanation, drawn out of the endogenous variables. There is also *external* or extrinsic causation, derived from the variables or assumptions, such as preferences, technologies and factor endowments, which are taken as given. Gustafsson (1991, p. 10) cites Samuelson's (1965, p. 9) particularly naïve methodological grounding in posing a division between exogenous and endogenous by claiming that to do otherwise would necessitate including everything:

> Which variables will be taken as data, and which as unknowns to be analyzed, will depend in each case upon the purpose at hand and upon a diagnosis of the particular interrelations present. Often the economist takes as data certain traditionally noneconomic variables such as technology, tastes, social and institutional conditions, etc; although to the students of other disciplines these are processes to be explained and analyzed, and are not merely history.

Even on this basis, it is not clear why a division between economic and non-economic variables is justified quite apart from what constitutes a presumed rigid distinction between the two. Inescapably, though, the ultimate source of outcomes rests with external factors since these set the terms within which the endogenous are mutually determined. Thus, Arrow (1994) is drawn to the rejection of methodological individualism within economics on the grounds that it cannot be realised in practice, practitioners' prejudices to the contrary. This is because of the need to take something social as given – the price system, the rules of the game (theory), or externalities in access to the pool of knowledge, for example. As Arrow closes:

> I have no easy summary. But I do conclude that social variables, not attached to particular individuals, are essential in studying the economy or any other social system and that, in particular, knowledge and technical information have an irremovably social component, of increasing importance over time.

To put the same point differently, external causal content within neoclassical economics is a consequence of the social content that is taken as given for the purposes of individual optimisation (see also Fine 1980).[14] In this light, it is significant that Friedman's (1953) defence of instrumentalism within economics should depend upon no attention to the realism of assumptions as opposed to the accuracy of their predictions. This is despite these assumptions incorporating exogenously given causation.

To the dualisms discussed in the previous paragraph must be added the distinction between the economic and the non-economic, corresponding to market and non-market (price and non-price) with the marginalist revolution. Crucially for the future incidence of economics imperialism, whilst closely related to one another, and overlapping to a considerable extent, these dualisms are distinct from one another, subject to changing meaning and content and, thereby, do not necessarily coincide with one another. However, while sowing confusion or lack of clarity over the issue, the marginalist revolution did primarily have the effect of increasingly bringing these dualisms into line with one another – individual rationality as market/economic behaviour, with prices and quantities attached to supply and demand as the only endogenous variables. Recognising this allows us to address some of the questions raised in the previous section, especially the shifting division between economics and the other social sciences.

For, shortly after the marginalist revolution established economics as the distinct discipline concerned with the science of the market economy, the other social sciences were demarcating their own territories, equally across a number of dimensions. Although it is important to recognise that these took up from, and developed, intellectual traditions of their own, their scope and content can be interpreted in terms of carving out the overlapping territories not occupied by economics. Thus, when Lionel Robbins (1935) defined economics as the allocation of scarce resources between competing ends during the world's worst depression, for most economists the implicit assumption was that the market would be doing the allocating and individuals would be doing the competing. Yet Robbins himself and the old marginalists were searching for universal economic principles, whatever they might be and however they might be understood and situated (see Milonakis and Fine 2009, ch. 12). But narrower concerns in practice represented a stance that was imperative in establishing economics as a distinct discipline – both as the science of the (market) economy and as a method based on optimising individuals.[15]

By contrast, in the case of sociology, for example, Velthuis (1999) has shown how it was distinguished from economics in the eyes of Talcott Parsons, the leading functionalist of the discipline, by its method rather than by its subject matter – dealing in the social as opposed to the individual. Hodgson (2001, p. 28) offers a slightly different interpretation of the territorial division between economics and sociology offered by Robbins and Parsons, in which 'economics would be devoted to "choice" and sociology to "action" '. Hodgson later adds (p. 120):

> Weber's demarcation between 'rational' and non-rational' action in humans helped to establish barriers between economics, sociology and history. Economics, following Menger, would consider the rational behaviour of the individual, with given ends in given circumstances. Sociology would consider the manner in which culture may mould these ends. History, in turn, would consider the spirit of the age and the manner in which the given circumstances had evolved.

Here Weber is seen to have followed Vilfredo Pareto's lead with his distinction between logical and non-logical action (Milonakis and Fine 2009, ch. 12). Even though economics and sociology might overlap in terms of subject matter, on which see below, their differences were marked by method, one focusing on the individual and the other on the social. In rough and ready contrast, the discipline of psychology has sought to investigate determinants of behaviour that derive other than from self-interest alone, drawing upon, discovering and investigating the individual's natural and social attributes. Political science has taken the institution of the state as socially determined, as primarily non-economic, whereas economics has traditionally reduced the state as if it were equivalent to an individual, one who optimises with special benevolent motives and through its special powers. Finally, anthropology has examined society in ethnographic terms, seeking to tease out the meanings of economic and social activity that are taken for granted by economics as self-evident. All this was taking place at the beginning of the twentieth century with these separate disciplines having established themselves to a greater or lesser extent by the Second World War.

In one important respect, however, anthropology differs from the other disciplines in terms of the primary focus of its subject matter – the developing as opposed to the developed world or, more germane at that time, the colonised (or primitive) as opposed to the colonising (or civilised). In recent times, anthropology has, to some extent, turned its gaze back upon the developed world from which it originated, just as politics, sociology and economics have careered in the opposite direction, creating sub-disciplines concerned with 'development'. Moreover, development studies and development economics only recognisably emerged as a separate discipline and sub-discipline, respectively, after the Second World War, with both decolonisation and the threat of communist alternatives to capitalism. Development, neatly linking itself to the historical, most notably exemplified in Rostow's (1960) *The Stages of Economic Growth: A Non-Communist Manifesto*, inevitably became a distinct field of study, although equally able to draw upon treatment across its constituent disciplines across the social sciences.

Significantly, these had themselves been previously established by taking development out of social theory. As Connell (1997) has shown, the initial impetus to sociology was given by confrontation with those other worlds revealed in practice by imperialist expansion, raising the issue of what characterised the modernity of the colonising powers by way of contrast to the colonised or primitive. Only after such concerns had been safely set aside, not least with the horrors of civilisation associated with interwar fascism, could the enduring classics of sociology – Marx, Weber, Durkheim, etc. – be sanitised and canonised as dealing with the social relations, structures and even the powers and conflicts of modernity. Meanwhile, anthropology emerged as a separate discipline to address, primarily ethnographically, the intellectually initiating world that had been abandoned by sociology. Subsequently, different disciplines have revisited their pasts and the reasons for them, reflecting critically upon the contributions of their home-grown classics and their continuing relevance for the current state of the discipline. But, in this, economics has been a major exception, displaying little or no interest in where it came from and why. By the same token, it could address the social without regard to its earlier loss or the lessons to be derived from it.

Thus, certainly by the 1930s, as outlined in the most rough and ready fashion, the different social sciences can be seen to have created distinct, if not rigidly fixed, subject matters for themselves. As a result, they also incorporated different methods, theories, dynamics and future paths. These, to some extent, have been determined by their own inner logic, the pressure of external events, the impact of particular institutions and contributors, and their attachment to broader practices. The same applies to developments within economics and its relations with the other social sciences.

The starting point, however, was the marginalist revolution and at the core of the old marginalism is methodological individualism of a special type and its confinement to the market. Despite the taking out of the social with the individualism of marginalism, its principles are universally applicable in principle. This compromise across principles, subject matter and disciplines is not fixed, especially as economics was at the outset as confined as it could be. It was limited to supply, demand, the market, partial equilibrium, and not much else was included that might reasonably be considered to be economic, such as institutions (even the firm), forms of property, corresponding economic and social relations in historical context, and money. Necessarily, though, widening the scope of economics involved bringing back in the social, however minimally, as illustrated within the discipline in the interwar period by the emergence of Keynesianism and the popularity of American, now considered old-style, institutionalism in the US.

US institutionalism is of particular significance, given what happened after the Second World War, because it both strengthened and reached its zenith during the interwar period (Yonay 1998, p. 57).[16] Yonay emphasises that the pure theory of hedonistic individualism had lesser, if not no, support in 'the professional discourse in economics' (p. 106) and institutionalists 'capitalised' on this black box to promote their own view (p. 113). In this light, it is a mistake to see US institutionalism as simply fading away, 'as a strange and exceptional outgrowth, whose demise seems understandable, natural and desirable' (p. 48), in light of an evolving neoclassical orthodoxy that, for its proponents, was simply superior. For him, by contrast (pp. 184–5):

> Institutionalism did *not* lose the war … It was defeated, along with its longtime rival 'old-fashioned' neoclassical economics, by a new approach, which first appeared as a major force in the 1930s and sky-rocketed soon after the Second World War. This new winner was mathematical economics … this approach did *not* evolve out of an existing approach.

If only for a short time, at least in the US, 'old' institutionalism prospered and prevailed because the new microeconomics was not professionally strong enough to stand on its own feet, and Keynesianism was equally insufficiently influential and wide-ranging to compensate for its deficiencies.

By contrast, in the UK in the 1930s, the most prominent unease around the division between, and content of, micro and macro took the form of Chamberlin's (1933) 'monopolistic competition' and Robinson's (1933) 'imperfect competition'. They were both limited in influence and critical departure from the mainstream. And Kalecki's (1971) alternative approach to Keynesianism, emphasising distribution between capital and labour on the demand-side and degree of monopoly on the supply-side, was equally neglected until picked up by later, marginalised, post-Keynesian scholars.[17] Significantly, each of these approaches, and others, would only be acknowledged and picked up by the mainstream much later, when they could be incorporated within an imperfect market, micro-foundations approach, as suggested in later chapters of this volume.

Neither Keynesianism nor institutionalism essentially involved marginalism at all, although they were not implacably opposed either, if it knew its place. This is, then, indicative of the deep recognition at the time of the extent to which the core principles of marginalism proscribed its bringing back in the social even where it concerned the economy itself. Interestingly, Abbott (2000) has explicitly addressed the issue of the 'bringing the something-or-other back in' in the context of the relations between disciplines. He sees it in major part as rediscovery, although 'to see here the simple harmonic motion of a pendulum is to miss the importance of the history that does occur' (p. 17). He concludes that, 'the heart of the disciplinary system is stable social structure between disciplines and mutable cultural structures within them' (p. 148). Whatever the validity of this – and it has problems explaining the extent of change within disciplines and the emergence of new ones – his analysis does not comfortably house economics. He does, for example, pose a contrast between quantitative and qualitative methodologies, comprising respectively positivism, analysis, realism, social structure, individual level, and transcendent knowledge as opposed to interpretation, narrative, constructionism, culture, emergent level, and situated knowledge. Clearly, mainstream economics would have to be assigned to the quantitative team but it lacks both realism and social structure. Further, the swings of the pendulum are extraordinarily infrequent. with the bringing of the social back in not being the result of some rediscovery but its systemic exclusion across a swathe of dimensions by a profession determined both to discard its own past and present dissent. Thus, bringing the social back in to economics might be better interpreted as reflecting immutable cultural structures of deductivism, methodological individualism and so on, as well as assaults upon interdisciplinary structures.

4 Concluding remarks

The goal in this chapter has been to establish the *logic* of economics imperialism, one that extends the principles of marginalism as far as possible within and beyond the dull intersection of supply and demand with which its *history* begins. Where that logic takes the discipline and its relation to others is not pre-determined, for the logic of economics imperialism means that a number of borders have to be broached, or breached, for it to prevail. These are borders of discipline, method, subject matter, rationality, and so on. The differences within other disciplines from economics, in substance and dynamic, offer them some natural defences against economics imperialism. No doubt, these have provided some protection from marauding imperialist invaders in practice but it has proven, not surprisingly, far from absolute. It only takes an economics to declare its method superior, on the most spurious grounds, for it to sweep in its own mind's eye across the other social sciences in view of their lack of deductive logic – without regard to its own lack of other logics. Such is the stance adopted by economics imperialism in its first phase, as discussed in the next chapter, alongside its technical counterpart, the refinement and extension of the notion of rationality itself.

Notes

1 Note that Pearson (2004, p. 41) observes that, 'Edgeworth's influential tract *Mathematical Psychics* … has been held up as a seminal contribution to the economics of altruism, but I am more inclined to see it as the beginning of the end'.
2 See also Hodgson (2001, pp. 198–9 and 210).
3 The idea that 'Economics is what economists do' is attributed to Jacob Viner. See Hansen (1991, p. 1054), and also Coase (1978, p. 202) who refers to a textbook of Boulding. See also Buchanan and Tullock's *Calculus of Consent* (1962).
4 But see also Posner (1987) who suggests there had already been 30 years of economics imperialism.
5 Quoted in Heilbroner and Milberg (1995, p. 110) from his article 'The Expanding Domain of Economics' which is reproduced in a 2001 collection entitled *The Dark Side of the Force: economic foundations of conflict theory*. Much the same text is to be found in Hirshleifer (2002, p. xi).
6 See also Demsetz (1997, p. 1) who, in the context of economics imperialism, describes Becker as having 'earned Commander-in-chief ranking in the EEF (Economics Expeditionary Forces)'.
7 See also Tomassi and Ierulli (eds) (1995), and Frey (1999), who attracts praise from Nobel Laureates Becker, Stigler and Buchanan.
8 See Glaeser (2003) for the idea that economics has nothing to learn from social psychology, rather than vice-versa, since it is necessary to explain how the social derives from the aggregation over individuals that is the forte of economics.

9 See Mäki (2002) for abstract discussion of the nature of economics imperialism.

10 Note that Radin (1996) argues that the real effect of treating issues as if they were economic tends to contribute to their becoming so through commodification. This is so for her implicit attack on economics imperialism in the context of law, especially when economics treats rape as an unrewarded 'cost' imposed on the victim. Interestingly, Arrow (1997) in review of Radin sees this as an open empirical question. Does commodification in theory have a corresponding impact in practice? For a critical exposition of the relationship between economics imperialism and law, see Mercuro and Medema (1997), Medema (ed) (1997) and Medema (1998), for example, and for a critique of Posner in particular (leading proponent of Becker applied to law), see Shapiro (2005).

11 Cited in Lawson (2003, p. 268). See also Milonakis and Fine (2009, ch. 7) and, for a different view, the suggestion of Schabas (1995, p. 184) that, 'By the early nineteenth century, however, political economy had acquired a distinctively axiomatic, deductive cast, particularly in the work of Jean-Baptiste Say, David Ricardo, and Nassau Senior'. This false reading of Say may reflect one taken through the later neoclassical prism for which his Law of Markets has an unimpeachable axiomatic formulation.

12 The response of economics to such psychological and behavioural conundrums is interesting for being both contradictory and shifting over time, as well as reflecting the incidence of economics imperialism in its various forms. On the one hand, there is the view that economics puts forward deductive propositions that have validity and scope of application irrespective of the attentions of psychology and behaviour in practice, as suggested by Gul and Pesendorfer (2005) in their unwittingly self-deprecating 'mindless economics', see also opening quote to Chapter 1 in this volume. In addition, they assert that this is what economics has always been without any apparent knowledge of the history of economic thought other than as invention. On the other hand, as in one branch of neuro-economics for example, there is an appeal to dirty models in which it is accepted that the rationality model has to be supplemented by other motives or prompts to action in light of the neurological evidence (see in this regard Camerer, *et al.* 2005). Even so, it can be claimed that such constraints on being rational, the workings of the brain getting in the way as it were, can be factored in as constraints as part and parcel of the individual project of being rational, thereby, once more, retrieving part of the 'irrational' for rationality rather than allowing it as a separate and supplementary factor (Glimcher, *et al.* 2005, see also the brief further discussion in Chapter 10 in this volume). Thus, the non-rational becomes as if an external constraint on the individual's rationality!

13 Interestingly, it is now well-established in speech therapy and language development that a concept of an object distinct from the object itself is necessary as a pre-condition for speech. This means that the individual must have the capacity for independent imaginative thought even to be able to find expression for ideas, or pursuit of preferences, that are already formed. So preferences are neither internally given (because of speculative thought) nor internally generated (because of language-dependence).

14 This in contrast to the supposedly neutral internal causal content derived from within formal models – as emphasised by Dobb (1973) – suggesting that such equations are not analytically neutral for what they leave out, as well as for the way in which they structure what is brought in. See also Lawson (1997) for the notions of intrinsic and extrinsic closure.

15 See Souter (1933a and 1933b) and Parsons (1934) for contemporary criticism of Robbins of relevance to the themes developed here.

16 See Chapter 6 in this volume and also de Rouvray (2004, pp. 230–1) for discussion of attempts by 'old' US economic history to hold back the prospect 'that mathematical, technical economists would take over the discipline [of economics]. They worried about multiple features of this bad economics, but the one they singled out as theirs to fight

was a lack of "perspective", an incapacity to set current problems in their historical context'. We do, however, dispute the suggested lasting effects of such endeavours on economic history in Milonakis and Fine (2009), for de Rouvray does accept that, 'though the architects of economic history did not succeed in checking the tide of tool-based economics, they did manage to create a quasi-independent "home" for economic history' (p. 238).

17 See Fine and Murfin (1984) for a critical account of this approach.

3 The economic approach

Marginalism extended

> They will get it straight one day at the Sorbonne.
> We shall return at twilight from the lecture
> Pleased that the irrational is rational.
>
> Wallace Stevens, *Notes towards a Supreme Fiction*, X, 11, ll. 16–18, cited in Toulmin (2001, p. xi)

1 Introduction

The journey from the old marginalism of Alfred Marshall to the general equilibrium theory of Kenneth Arrow and Gerard Debreu involved the negotiation and renegotiation of what might diplomatically be termed a number of compromises. First, in a reaction against utilitarianism, especially in the formal terms of maximising utility, the pursuit of self- or economic interest is perceived to be confined to a limited range of activities and to comprise only a limited part of human motivation. Second, a corresponding core of universal economic laws, derived deductively from basic propositions, has to be set against the moderating influence of other factors and specific historical circumstances to be established inductively. Third, the passage from partial to general equilibrium, and from micro to macro, leaves unaddressed a major part of systemic functioning of the economy, for which political economy, old institutionalism and/or Keynesianism offer an antidote. Fourth, this is all part and parcel of a perceived lack of realism concerning the applicability of marginalism beyond a certain point (Milonakis and Fine 2009, ch. 14).

In the previous chapter it has been demonstrated that, like economics itself, economics imperialism has needed to negotiate its own historical logic across a number of dichotomies. Not surprisingly, it does so with some lag on the developments within economics, as change first occurs within the discipline before it is extended outside. Demsetz (1997, p. 11) captures a bit of the history, if not quite the logic, involved:

> The investment of much effort in the interdisciplinary work would have been difficult to justify on grounds of marginal equalities before the decentralization

> problem had been solved, and, in fact, not much such investment took place then. The decentralization inquiry was in its essence completed by World War II, and it was not until the decade of the 1960s that work by economists began to extend seriously into other disciplines. The extension has continued at a more significant pace to the present.

This is to set aside the solution previously offered almost a century earlier by Leon Walras. And it is far from clear why addressing the fundamental theorems of general equilibrium welfare economics should warrant extension of marginalist economic principles to the other social sciences other than, paradoxically, by raising their status within the discipline at the expense of more rounded approaches to macro and non-market factors.

These quibbles aside in explaining the reasons for, and timing of, economics imperialism, the latter is most readily accomplished in the first instance by the simple expedient of treating anything, or everything, as if it is economic and subject to the 'economic approach', the term associated with Gary Becker and especially with utility maximisation as the basis of all social science (see below). It involves turning a blind eye to the tensions associated with economics imperialism, ignoring criticism and deploying the newly-established techniques of economic science without regard to the subject matter other than as object of study. It gives rise to the old-style economics imperialism, most closely associated with Becker (1976 and 1996).

But Becker is extreme, especially by the standards of the economists of his own time (see Chapter 7 in this volume). He is renowned for the breadth of the application of his economic approach, across human capital, the family, crime, addiction, etc. Our concern here is not so much to deal with these in substance, nor in terms of their underlying principles, not least as the latter have already been addressed in the previous chapter.[1] Rather, the point of Section 2 below is to establish that the economic approach adopted by Becker to all social science had long been anticipated and legitimately rejected before its use, as well as during and after. Section 3 reveals this through a specific case study, that of public choice. The antipathy to the unrestricted expansion of the economic approach is evident from within the public choice literature itself, one of the first examples of economics imperialism not pioneered by Becker himself (despite an early but initially rejected contribution on his part), and for which there was some discussion of, and conflict over, exactly what could or could not be addressed in applying economic principles to politics, eventually including explicit critical commentary on Becker's universalism by one of the original and subsequently marginalised founders of public choice theory, Richard McKenzie.

In retrospect, though, a dual process of promoting economics imperialism did accrue. On the one hand, Becker could batter and bruise his way forward creating, on the other hand, a territory for those to exploit with more refined sensitivities to individual motivation and behaviour (and the social, however conceived). Corresponding reservations, in turn, could be laid down, only to be ignored with the forward march of economics imperialism experiencing, as is revealed in subsequent chapters, a lagged emergence with striking parallels and correspondence with the evolution of the economics on which it has depended. Just as old marginalism gave way to the new, so the latter gave birth to a corresponding economics imperialism.

Marginalism is not only committed to methodological individualism but also to methodological individualism of a special type, that associated with utility maximisation or, in the parlance of other social sciences, rational choice. This indicates that economics imperialism is more likely to be fertile within other disciplines and across other subject matter, where rational choice is already established. Section 4 of this chapter discusses how flawed attempts have been made to make rational choice acceptable across the social sciences more generally than within economics, where it tends to be taken for granted. Sometimes the answer is technical, by reference to game theory, multiple equilibria, path dependence and the like. Otherwise, there is an acceptance that rationality does not fill out a complete analysis but has a counterpart in non-rationality. The issue then becomes both one of taking the non-rational as exogenous and not open to explanation and of seeking to explain as much of the previously presumed non-rational/exogenous as potentially open to explanation in terms of rationality.

Thus, if the principles of economics are truly universal, then there is no need for them to be extended from economics. Rather, whilst the emergence of marginalism within economics has had a profound influence in creating a dualism between rationality and irrationality (or non-rationality), this dualism divides other disciplines as well, if in different proportions. Indeed, the rise of rational choice immediately after the Second World War, especially in the US, had relatively little influence on, and contribution from, economics that had yet to go for it in as big a way as it was going to in the near future. Rational choice approaches, then, can be home-grown within other disciplines. This tends to lead to rather different questions being asked and different concepts being used, those that derive from the parent discipline rather than from economics. Despite a number of different ways of proceeding, the result is, however, to reveal once more how much must be compromised in order to allow a surrogate 'economic approach' to prosper. And, as suggested in the concluding remarks to this chapter, perhaps the biggest compromise of all is to pick and choose from the best of both worlds – go as far as we can with rationality, and then supplement it with non-rationality as a residual explanatory factor or even do this so smoothly and implicitly that the mixture of methods is not even noticed. After all, each of us is a little bit rational and self-interested and, equally, a bit more or less of everything else. Surely no harm is done in leaving these boundaries ill-defined even though some may wish to push them to one extreme (methodological individualism and rational choice in particular) or the other through a holistic or systemic approach of whatever sort.

2 Becker and the pure, if rough, road to economics imperialism

The previous chapter guided us to a position from which we can gaze down upon the shifting incidence of economics imperialism from the initial demarcation of the disciplines established in the wake of the marginalist revolution. Our gaze can now focus on the shifting divisions between rational and non-rational, exogenous and endogenous, and so on. For, initially, the realm of economic rationality was deemed to be limited to the market. Yet, in principle, the analytical principles of neoclassical economics established by the marginalist revolution are universal; they know no bounds in terms of time, place and activity. Rationality itself, for example, and the pursuit of self-interest are not specifically economic or market-based. And it is only with the economics of the twentieth century that rationality is confined to utility maximisation. Significantly, in his history of the rise of the notion of rationality in scientific thought, Toulmin (2001, p. 58) reports that most of William Stanley Jevons's work on political economy was only published after he died, with his major work of 1874, *The Principles of Science*, scarcely mentioning economics at all, because '[E]xcursions into mathematical economics were, for him, one more way of making wider methodological points'. Toulmin continues by citing Schumpeter's *History of Economic Analysis* to the effect that (p. 59):

> The truth that economic theory is nothing but an engine of analysis was little understood all along, and the theorists themselves, then as now, obscured it by dilettante excursions into the realm of practical questions. But it was emphasized by Marshall who, in his inaugural lecture at Cambridge, coined the famous phrase that economic theory is not universal truth, but 'machinery of universal application in the discovery of a certain class of truths'.

Only convention and, it must be suspected, a certain cautious deference to reality has traditionally confined economics as a discipline to the economy as market.

Indeed, such reservations around the scope of the economic approach were deeply entrenched not only in the opponents of the economic approach, but also by its proponents, as will be detailed in the next section's discussion of the emergence of public choice theory. To a large extent, though, we are necessarily revisiting the disputes that arose around the marginalist revolution itself.

Thus, mainstream neoclassical economics has proceeded on the basis of a science of the economy in which the latter fills out a definite terrain which, negatively, defines the non-economic. Initially, the economic is synonymous with market relations. On this basis, more or less complex models of equilibrium are constructed, ranging from supply and demand in a single market to general equilibrium which incorporates all markets including those spreading out into the indefinite future. Such models have two important analytical properties. First, they provide a standard against which the real world can be judged. As Carrier (1997a, p. 16) argues, such models are surrounded by a *cordon sanitaire*, since any empirical and theoretical anomalies can be rationalised in terms of market imperfections, or the non-correspondence of the economy to the economic model. Second, it is only in initial practice and not in principle, that the analytical content of mainstream economics is not specific to market relations. The well-worn technical devices – organised around optimisation, production and utility functions, and inputs and outputs – are ahistorical and asocial. Consequently, it is not inevitable that the domain of economics be restricted to the market, where prices prevail.

Accordingly, the most open and inviting route to be taken by economics imperialism is that which extends rationality to the non-economic sphere, or redefines the economic to embrace non-market relations. In this respect, the most extreme representative has been Becker, the Chicago economist, whose Nobel Prize was in part awarded for economics imperialism, an explicit criterion for the award (Lindbeck 2000). Becker is the leading contributor to what we term the old form of economics imperialism. It positions itself at the opposite extreme to the notion of the economy perceived as synonymous with the market. Becker construes all systematic behaviour as rational and economic in his economic approach to all human behaviour. The latter includes the assumptions of maximising behaviour, market equilibrium and stable preferences (see Lazear 2000 for an explicit account on Becker's behalf). As Becker (1976, p. 3) himself puts it, 'what most distinguishes economics from other disciplines in the social sciences is not its subject matter but its approach'. What he does is to treat non-market phenomena as if they were governed by a market and, thereby, imposes economic rationality upon them in the form of atomised and optimising individuals. As Gray (1987, p. 35) observes:

> The extension of the rationality principles underlying the orthodox theory of the market to other areas of social interaction involves using a second distinct [apart from utility maximisation] element in the economic approach, namely, that of *the implicit market*.

Consequently, as Carrier (1997b, pp. 152–3) reveals by referencing the critical commentary of others, Becker essentially obliterates the distinction between the economic and the non-economic except as the consequence of (economic) choices made by optimising agents. Indeed, as much of non-economic life as possible is explained by the economic approach. Whatever falls outside is deemed to be non-economic by virtue of being non-rational and unsystematic.

The extreme posture adopted by Becker in this respect cannot be exaggerated. Ultimately, as freely admitted by Becker himself and critically examined at length in Fine (1998b), he is forced to rely upon exogenously given, biologically determined preferences that are at most subject to amendment in light of optimally chosen experiences. Crime, for example, is simply the consequence of individual cost-benefit analysis of risky rewards and punishment (Becker 1968). Drug addiction is seen as an optimal choice in weighing more highly valued utility in the present against the discounted costs of pain to be borne in the future (Becker and Murphy 1988). The application and extension of the principles of marginalism take precedence over even the simplest intrusion of reality in general, and in the specific nature of the object of study. Thus, despite the wide application of his economic approach by subject matter, Becker has never incorporated the simple fact that economic exchange takes place through the intervention of money, let alone that there is a financial system that governs economic and non-economic relations. In a sense, this is appropriate precisely because his economic principles are universal and so apply whether money or finance are present or not. So we might as well assume them away. Much the same is true of unemployment, an aspect of capitalist economies that also never figures in Becker's work. Once again, if his economic approach is to be universally applicable, it is hardly surprising that irreducible features of the specifically capitalist economy should be ignored, or perceived as reducible to the 'economic approach' of utility maximisation on the basis of initially biologically given, if potentially evolving, preferences and all this entails. In this respect, there is an affinity between David Ricardo and Becker, although it should not be pressed too far, in their mutually obsessive commitment to axiomatic deduction from one initial principle. For Ricardo, it was the labour theory of value, whereas for Becker everything is reducible to the economic approach (and without refinement in response to anomalies as occurred for Ricardo – see Milonakis and Fine 2009, chs 2 and 4).

In this light, Udéhn (1992, pp. 242–3) appropriately perceives the presence of excessive ad hocery in Becker:

> in order to make the model fit the facts and enhance its *prima facie* explanatory power … In addition to more familiar things, such as human capital and information and transaction costs, there are even more elusive entities, such as 'shadow prices', 'psychic costs', and time as a 'scarce resource'. There are such things as a 'taste for discrimination', children as 'durable consumer goods', the 'preference for risk' among offenders and 'utility of separation'[2]… The result is models flexible enough to 'explain' every fact and finding only because they lack empirical content.

For Udéhn this gives rise to 'the principle of the inverse variation of extension and intension', i.e. the more general and universal the model, the less its explanatory power (p. 244). Udéhn concludes that, 'Economic imperialists may believe that they will emerge victorious. I don't think so, but if they do, theirs will be a Pyrrhic victory, won at the price of an almost complete loss of substance' (p. 245).

Thus, even as Hirshleifer (1985), a most ardent economics imperialist of the Becker-type, has recognised, redefining all behaviour as rational or setting aside as non-rational all that cannot be explained, is to have no explanation at all. Despite such potential inadequacies in Becker's approach, glaring to those willing to adopt at least some element of critical stance, Becker and others in his mould have achieved considerable success. Most important has been the universal acceptance of the notion of human capital. Becker has played the major role in leading an invading force, applying neoclassical economics to a range of non-economic problems. Hobsbawm (1997, pp. 106–7), without justification as such, dates the imperialism of economics from the 1970s, and its analysis of 'crime, marriage, education, suicide, the environment or whatnot, merely indicates that economics is now regarded as a universal service-discipline'.[3] Yet, for human capital in particular, Becker (1993, p. xix) observes, 'a dozen years ago, this terminology would have been inconceivable'. The obstacle to acceptability of the approach centred on an aversion to the notion of education as comparable to an accumulated physical asset with productive potential. This seems to have dissipated. Similar concerns arose with the new household economics ('When I gave my first paper on population, I said I was treating children as "durable consumer goods". There was laughter in the audience … as much from the economists as from sociologists and the demographers' (Becker 1990, p. 33)).

When Becker suggested in the late 1970s in the sociology department at Chicago that there should be a course on microeconomics for sociologists, he records that 'the audience booed me' (1990, p. 34). Such disapproval is, in part, courted. For, although this is exactly what he does analytically and not primarily to shock, Febrero and Schwartz (1995, p. xix) claim that 'He modeled the family as a multi-person production function, as a "factory", he says, to shock sociologists'.

Although claiming to be neither conservative nor radical, Becker can hardly be described as progressive. This is revealed by Becker and Becker (1996), a collection of *Business Week* articles, not only in his mode of argument but also in his conclusions. These include stances against affirmative action, no-fault divorce, minimum wages, government expenditure and industrial policy, and stances in favour of vouchers for (third world) schooling and higher penalties for crime.

Whilst, in a number of areas, Becker might be considered to have laughed last, longest and loudest, his and others' assaults upon the other social sciences have been limited. They have proven most successful where rational choice theory had gained hold or where, as for human capital theory, such notions could be adopted, adapted and used with little or careless regard for their roots within mainstream economics and even contradicting its conceptual framework. In this respect, the march of human capital across the social sciences is instructive, for it illustrates a process by which the initially unacceptable becomes accepted – both by loss of awareness of the implications of its origins within economics and by incorporation and transformation of ideas into more traditional ways of thinking in other disciplines. Thus, the sociology of education uses human capital as a means to describe and to explain social stratification despite its own status as a category within an *individualistic* methodology – quite apart from the treatment of the sources of education and skills and their results (in terms of employment and wages), as if they were attached to a more or less perfectly working market (see Fine 1998a for a critique). Yet it is precisely such conundrums around the social/individual divide that have imposed limits on the acceptable scope of Becker's 'as if' economics imperialism. Not everything could be reduced to a world as if based on market/economic rationality. As Zafirovski (2000) has perceptively documented in detail, all purveyors of rational choice rely upon a division between the rational and the non-rational, between what they explain and what they find inexplicable (generally to be dismissed or explained as non-rational).[4] Becker is an extreme example since he claims all behaviour is accommodated within his economic approach. As outlined in the previous chapter, more generally, others suggest rational choice resides somewhere between this extreme and limits set by pursuit of self-interest through the market. This gives rise to the idea of weak and strong (economic) rationality (Hylton 2005), in case of the economics of law, for example. By setting the strong rationality as an extreme, Becker allows the less extreme to appear to be more reasonable.

3 Politics as public choice: Buchanan and Tullock

Old, or the first, economics imperialism aggressively sought to extend the scope of application of marginalist principles. Because of this, it has been relatively easy to overlook how much, Becker and his most faithful followers aside, it accepted the divisions between the economic and non-economic, the rational and the non-rational, and so on, whilst seeking to shift the boundaries between them. This is indicative of a pattern of unease over reductionism to the economic or rationality that repeats itself, even amongst those seeking to extend the scope of economics. It is most notable in the emergence of public choice theory, the idea that politics can be reduced as Udéhn (1996, p. 1) puts it, to its 'three constitutive elements: the core assumptions of (1) *self interest*, (2) *exchange* and (3) *individualism*'. For public choice theorists are seen and see themselves as economic imperialists par excellence, and as pioneers. Buchanan (1984, p. 14) posits the case for, or nature of, public choice theory particularly bluntly:[5]

> We commence with individuals as utility maximizers … We do not need to specify just what arguments are contained in a person's utility function. We can, at this stage, allow for saints as well as sinners. In one sense, we can simply define a person in terms of his set of preferences, his utility function. This function defines or describes a set of possible trade-offs among alternatives for potential choice, whether the latter be those between apples and oranges at the fruit stand or between peace and war for the nation.

Whilst, as Buchanan makes clear, the circumstances in which these choices are made are different – market as opposed to non-market – the analytical principles are extended seamlessly from one arena to the next.[6] But, as both Udéhn (1992, p. 254) and Nicolaides (1988) observe, both Buchanan and the early public choice literature commit themselves to something over and above rational choice in motivating and explaining individual behaviour. It is perceived as being incapable of explaining everything. For Buchanan (1972, p. 18), 'even in the strictly defined market process, there are surely important unexplained residues that may be examined against alternative behavioral hypotheses'.[7]

It warrants examining in some detail why, and how, such relatively early economic imperialists should have subjected themselves to a degree of modesty in ambition and through self-regulation. In the case of Buchanan, for example, reservations over the scope of the economic model of human behaviour arise out of the distinction between descriptive and prescriptive analysis, with the model confined to the former and most, if not exclusively, appropriate to the analysis of the market. But ethical considerations govern non-market behaviour, especially bureaucrats engaging in public choice. For this are needed 'Noneconomic Models of Behavior' (Buchanan 1972, p. 18), ones that transform prescriptive norms into hypotheses about behaviour, not least in the context of the altruistic values associated with Christianity – 'the traditional prescriptive norms *for* personal behavior would have to be converted into predictive hypotheses *about* personal behavior'.[8]

Of course, this whole argument rests on a rigid (and invalid) distinction between positive and normative analysis. But, once made, and the distinction drawn between positive and normative systems (of preferences and behaviour or, more exactly, choices), it is a simple step to posit the significance of the normative for the positive, as drawn out by Boulding's (1969) 'Economics as a Moral Science', his American Economic Association Presidential Address. At the time, this was not a tangential issue.

It is precisely the problematic nature of treating Buchanan's choice between apples and pears as if between war and peace that induces those committed to public choice theory to express their reservations. For, in a standard text on public choice theory, McKenzie and Tullock (1978, p. 3) recognise that it constitutes a branch of economics imperialism:

> Economics is a constantly changing discipline … the boundaries of economics as a discipline are rapidly expanding outward, encroaching on areas of enquiry that have historically been the exclusive domain of other social sciences. The change in direction and scope of the discipline has been so dramatic that the economists who have been involved in bringing about the change are no longer inclined to debate the issue of what is or is not economic in nature. They merely ask 'What can economics contribute to our understanding of this or that problem?'

But they also acknowledge its silence over questions of ethical values, for 'The approach of the economist is *amoral*. Economics is not so much concerned with what *should be* … as it is with understanding why people behave the way they do' (p. 7). Consequently, under a section entitled 'The Limits of Economic Analysis', we learn that (pp. 24–5):

> Economics, unfortunately, has very little to say about what people value or why they value what they do … it has its limitations. It can explain only a part of human experience whether that experience involves crime, politics, sex, the family, or education … [For the other part] we must look to the other social sciences.

As is apparent from their discussion elsewhere, especially Chapter 23, the influence of Frank Knight, who was pessimistic about the prospects for a resolution through social science as science, on such issues is important. According to Knight (1947a, p. 344):

> More remote and general ends, individual and social, are the provenance of aesthetics and morals, which are admittedly in a sadly 'unscientific' state. Of course it is an absurd and romantic idea that their treatment should or could be made scientific, or that the mental activity of thinking, deliberating and judging, could be planned in advance.

Consequently, in the absence of McKenzie, Tullock's (1972, p. 324) 'Economic Imperialism' is drawn to conclude:

> As the reader will no doubt already have deduced, my proposal for the future organization of social sciences is that they be divided into two grand domains, the sciences of choice and the sciences of preferences. The sciences of choice would essentially be an out-growth of economics and would be devoted to determining the likely outcome of the interaction of individuals attempting to maximize their preference functions ... It would no longer be confined to what is traditionally known as economics, but could deal with any institution ... On the other hand, there would be the sciences of preferences, tastes or passions. They would be devoted to attempting to determine what the preferences of various people are, to examining individual preferences, to trying to find out how the preferences in society can be summarized conveniently, and, what is perhaps most important of all these things, the factors which mold preferences.

Thus, the limits to economics correspond to the limits of economic rationality. In the absence of Tullock, though, McKenzie (1979, p. 145) is much stronger and considered in his strictures:[9]

> The purpose of this article is not to extol the virtue of economic analysis but rather to reflect on its limitations. In these times, given much talk of the expanding domain of economic science and an inclination on the part of economists to claim that there are no boundaries to economic analysis, my purpose may seem unusual.

He continues in a footnote:

> It may seem especially unusual for me to examine the limitation of economic analysis since I have, in much of my writing in the last few years, attempted to see how far the boundaries of economics can be stretched [referencing successive editions of McKenzie and Tullock (1978)]. My purpose here, however, is not to propose that economists discard that which they have accomplished. I remain confident of the *limited* usefulness of economic analysis in many unconventional areas, such as crime, marriage and the family.

In this respect, McKenzie engages in a critical assault on Becker, the most ardent of early economics imperialists. For McKenzie, public choice can only be appropriately addressed by economics by recognising its limitations. In this light, it is interesting to note how Becker remains out on an analytical limb in two respects from the perspective of the then public choice theory. First, Becker (1996, pp. 16–18) explicitly comes to reject the idea that there is a distinction between ethical and personal preferences on the grounds that the one is reducible to the other. Consequently, it is hardly surprising that McKenzie should reject the approach of Stigler and Becker (1977) for its machine-like notion of individuals whom McKenzie (1979, p. 148) deems as not making choices as such since no free will is involved, merely the following of the dictates of the model of consumer behaviour:

> Tastes, in other words are given; so are the constraints. Neither is a matter of subjective determination. The subject in the analysis does not 'choose' to operate at the point of tangency between his highest attainable indifference curve and the transformation curve. He is at the point of tangency by specification of the model.

Second, and more generally, Becker is seen to allow no space for a complementary theory of preference formation, ultimately relying later upon an 'extended' utility function, applicable to all individuals. These are biologically determined and give rise over and at any point in time to actual utility functions according to experiences of consumption, work or whatever, optimally chosen but subject to random influences.[10] By contrast, McKenzie (1979) is fully aware that specific use values are not specified in such indifference curve analysis, and that the costs and benefits for Stigler and Becker in attaining utility merely parallel B. F. Skinner's positive and negative re-enforcers in behavioural psychology (p. 149), an approach that seems to deny the human characteristics of contemplation and free will.[11] In contrast to animals, McKenzie insists that individuals are also '*internally* directed as opposed to *externally* directed as in Becker and Stigler behavorialism' (p. 152), with experience as an important stimulus to discover what we want (p. 154), a point taken up below.

Becker's position also gives rise or points to methodological reservations on the part of those, amongst others, who pioneered public choice theory. For, as has long been recognised, taken to its limits, the economic approach effectively becomes tautological. Thus, for Slater and Tonkiss (2001, p. 61):

> Models of rational choice – especially as these have been extended to increasing domains of economic and social action – do not themselves subscribe to a methodology of falsification. If all action is assumed to be maximizing, then the assumption of maximization is itself non-falsifiable. The hypothesis falls into the trap of *si omnia nullia* – as a theory of everything, it ends up accounting for very little. It becomes difficult to think of an example of social action that *could not* be read as maximizing.

Put another way, it cannot be disproved whatever the actual or hypothesised outcomes; these can always be 'explained' by a suitable modification of preferences, how they are amended through time, or shifts in exogenous conditions. Whatever is done must have been wanted to have been done. As McKenzie (1978, p. 635) puts it:[12]

> At one level, there is an optimizing problem; however, the analysis cannot be extended very far without confronting an infinite regress that forms another methodological limit to analysis.

The only way out of this conundrum is to 'dispute Becker's claim that the economic approach is applicable to *all* human behavior' (p. 634). In other words, Becker avoids a conflict, for him an inconsistency, between the incidence of rational (economic) and non-rational (non-economic) behaviour by denying the distinction between the two. The cost is to have descended into tautology in principle – if not in practice since the analysis always sets its own bounds by what is taken to be exogenous. In contrast, McKenzie and others are at least able to pose the issue of where economic behaviour ends and non-economic begins, what they are and how they interact and mutually determine one another.

Further, having engaged such methodological issues, McKenzie draws the distinction between three methods – the logic of choice (roughly formalism), abstract science (in part conceptual interrogation), and predictive science (at best, empiricism, at worst positivism). On this basis, he reasonably places Becker and the Chicago school of economics entirely within the last camp, critically rejecting its limitations by reference to the other elements. He does so by identifying the logic of choice with Wicksteed who, paradoxically, appears in substance to have anticipated Becker's economic approach, having slavishly followed the marginalist principles of Jevons. For, as McKenzie (1978, p. 629) describes it in citing and dwelling at length on Wicksteed's (1910) *The Common Sense of Political Economy*:

> It follows that the general principles which regulate our conduct in business are identical with those which regulate our deliberations, our selections between alternatives, and our decisions, in all branches of life … To Wicksteed, the equimarginal rule provided … the basis for a logic of how people behave with regard to those things which they value, whether they are embodied in conventional or nonconventional "goods" … The heterogeneous indulgences which Wicksteed cites at various points in his book include virtue, wisdom, sagacity, prudence, honor, success, literature, sex, art, education, and spiritual enjoyment.

Despite the astonishing parallels with the Becker approach – McKenzie tartly observes that 'All of this "new" research seems to be a straightforward logical extension of Wicksteedian economics' (1978, p. 630) – it is different in its perceived methodological status. For the 'Wicksteedian formulation of choice behavior is fully explanatory of all *purposeful* behavior … which is another way of saying that it is empty of predictive content (p. 631). Thus, Becker is flawed not only for being tautological but also for perpetrating a pretence of being predictive.

This leads McKenzie to appeal to the abstract science of Knight and Friedrich von Hayek on two grounds. First is to point to Knight's famous distinction between risk and uncertainty, the probabilities attached to knowable outcomes as opposed to the unknowable or as yet undiscovered, respectively. The capacity for invention is what distinguishes humans from animals, a problem for Becker raised earlier in the context of preference formation. For McKenzie (1978, p. 639):[13]

> There is denial, at least in part, of the creative consciousness of individuals; this is simply because predictive theories in the Becker tradition require that goods be objectively specified, which leaves little room for raw emotions. Indeed, once the good which people are assumed to maximize is specified and the nature of the demand curve and cost functions are defined, the theory becomes totally deterministic: The curves then become the theoretical equivalent of the walls of the rat maze through which the individual must run.

The economic approach strips humans of inventiveness both in changing and interpreting the material world.

McKenzie's second critique of exclusive reliance upon predictive science points to its failure to recognise that the knowledge or reception of objects, goods in the utility function for example, differ from one individual to another. As McKenzie (1978, p. 635) argues choosing to focus upon fruits (noting from above that, Buchanan would treat such choices as if they were equivalent to those between war and peace):

> When we put something in an individual's utility function, we usually identify its physical properties, such as those of apples. However, when people make choices, they do not choose some good like apples with homogeneous properties; rather, they choose 'images' of apples, which vary from person to person.

Such Magritte-like sensitivities – for people surely do choose the apples themselves as well as their image of them – are equally targeted at less mundane objects, with Becker's understanding of children, in what has become the new household economics, inescapably in mind (pp. 631–2):

> All such predictions require that a 'good' such as 'child services', be specified objectively in order that the prediction has been confirmed or refuted by experience; but there can be no objective statement of what a 'good' is at the logic of choice level of abstraction … 'Child services', for example, means different things to different people.

Overall, McKenzie (1978, p. 641) concludes that economics is necessarily a complex and shifting combination of the three methods:

> The methodological boundaries of economic analysis are not firmly fixed features on a single intellectual plane. The discipline operates on several planes, which we have discussed as the logic of choice, the abstract science of behavior and the predictive science of behavior.

Yet, whilst McKenzie takes both Becker and Stigler as point of departure in expressing limits to economics imperialism, Stigler (1984, p. 309) himself also remains sceptical about the universal applicability of the economic approach:

> There remains a large class of social phenomena to which it is not apparent that presently available economic analysis can contribute significantly. The origin and content and strength of nationalism or religious piety are important examples of forces we cannot presently illuminate. It is not clear whether we shall have much to contribute to the study of language or the changes in ethical values, such as the revulsion against slavery in England in the eighteenth and early nineteenth centuries. In short, economics will become a widely used tool of sociologists. It is an open question whether our apparatus will help in understanding so-called macro-sociological phenomena.

Within a decade or so, these no-go areas had been addressed by economics imperialism even presuming that they had not already been so.

4 From the rational to the non-rational

The previous chapter has highlighted the obstacles to economics imperialism in terms of its attempted reduction of the social to the 'economic approach'. Individuals are more rounded in varieties of ways and the 'non-economic' or social is prior to, and conditions, the individual in equally diverse ways. Faced with these conundrums, economics imperialism has adopted two strategies. One is to ignore the problems – what is the nature of preferences, for example, and how are they formed. As it were, what we cannot explain or even address cannot be important. And what is not important can be forgotten. Whilst intellectually scurrilous, this is great for getting on with economics imperialism. A second strategy is to accept the presence of the social (or non-rational) but take it as at least in part to be exogenous and, at most, incorporated as such in a dirty or mixed model (see the concluding remarks to this chapter). This is more satisfactory in terms of appeal to empirical and analytical realism but is distasteful to those wedded to methodological and theoretical consistency.

But there is a potential let-out clause from these two options alone for would-be economics imperialists if the social could be reduced to the individual. In other words, how and to what extent can rational individuals be used to construct the otherwise, apparently non-rational, social? Vilfredo Pareto was the first to address this problem in his *Sociology* (see Milonakis and Fine 2009, ch. 12). The legitimacy of doing so is more difficult for non-economists, other than psychologists, since the intellectual milieu in which they are situated relies upon methodologies and theories that are usually concerned with the social directly and as starting point, sociological or otherwise. Nonetheless, rational choice rushes in wherever it can, and provides a conduit for economics imperialism even where it does not originate within economics itself.

Consider, for example, the attempt by Coleman (1986) to lay out the appropriate domain of social theory. He begins by suggesting that it must focus on society as a whole and individuals (with intermediate categories). As a result, there are four possible types of theory depending on how society and individuals are related to one another causally: society-society, society-individual, individual-society and individual-individual. He concludes that, 'the central theoretical problem in sociology is the transition from the level of the individual to a macro level – the problem that economists call … 'aggregation', although the term is a misleading one' (1986, p. 347). As is already apparent, the economist's mode of theory is perceived to be attractive. Coleman continues:

> Despite the misnomer, 'aggregation', that economists have given to the problem of moving from individual to macro level, economists may have made the most progress in addressing it. Their principal tool is the conception of rational action carried out in a competitive market.

Economists are only seen as deficient for not having shown that aggregate outcomes in terms of the social are then consistent with individual optimisation. It is necessary to explain how the social that derives from the aggregation over individuals, which is the forte of economics, is itself consistent with individual optimisation. This is explained by Coleman in the following terms: 'because it is insufficient to aggregate; it is also necessary to show how aggregation is consistent with reproduction of social structures in which individuals act' (1986, p. 360). Note how the model of the atomistic, economic individual is miraculously transformed into one attached to the social and the structured.

Of course, conceptually, from the perspective of mainstream economics, this is simply partial equilibrium extended (aggregated) to general equilibrium and equilibrium extended from the market to the non-market. These are all entirely consistent with economics imperialism and hardly seem to warrant a criticism or enrichment of economics or the economic approach. Further, for Coleman (1986, p. 363), all non-individual behaviour must be reconstructed from individuals:

> Satisfactory social theory must attempt to describe behavior of social units, not merely that of individuals … it must nevertheless be grounded in the behavior of individuals … the central theoretical challenge is to show how individual actions combine to produce a social outcome … [Indeed] social norms … give a sense of the problem … the correspondence between social reality and the existing or potential social theory. What is necessary for reality is to have social institutions … which translate individual tastes and endowments into a set of prices and a distribution of goods or into a collective decision. What is necessary for social theory is to have conceptual devices to describe that translation.

Finally, Coleman makes it explicit that his divorce from economics could readily become a marriage of convenience, for 'the appropriate paradigm for sociology … is derivative from Walrasian general equilibrium theory, though one which deviates from that theory … in part because of social structure, which a Walrasian system ignores' (p. 364). The only other point that Coleman mentions as deficient within the Walrasian system is the absence of market imperfections. In other words, the new micro-foundations, in using market imperfections to explain the social on the basis of methodological individualism, can be seen to have attained Coleman's goal for social theory.

In short, for all rational choice theory, a reduction of the social to the aggregate of individuals is involved (as well as a memory loss over the qualifications that those such as Walras offered in terms of the potential scope of their theory in dealing with the social (see Milonakis and Fine 2009, ch. 6). At least, though, the social is recognised – but at most as the simultaneously determined product of the individual. As Heilbroner and Milberg (1995, p. 87) suggest from a non-individualistic perspective:

> 'Micro' and 'macro' merge, in that microbehavior cannot be understood without taking cognizance of its social origins, and social forces remain empty abstractions unless they enter into the motivational concreteness of one or more individuals.

But how can the (rational) individual construct the social? The answer is that it cannot, even for those who are deeply committed to it. For Abell (1996, p. 266), for example, in a survey of rational choice in sociology:

> rational choice theory may claim explanatory privilege … not on the grounds of its exclusivity but, rather, in terms of its claims to be our first choice of framework for theory construction and thereby, by its own canons, generating the need for auxiliary theories when it has done its best. Currently these auxiliary theories appear to be a complex mixture of network theory, learning theory, mimetic theory, and evolutionary theory.

On this basis, it is more or less simply asserted that rational choice takes priority. Indeed, as suggested elsewhere, to do otherwise, 'would be to contravene the proposition that people often do the best for themselves in a situation, as they understand it' (Abell 2003, p. 9). As a result, rational choice poses what is left to be explained: 'In this sense rational choice possesses some paradigmatic privilege' (p. 12), with a residual role for anything else if necessary. This is now a little 'if' for, according to Abell, all that remains to be specified are the parametric or exogenous (externalities and norms) or the strategic (game theory).

Of course, not all social scientists are as extreme as Abell, even those committed to methodological individualism. And Abell's promotion of rational choice does not even begin to address the criticisms of it that can be found within (heterodox) economics. Much of this heralds from neo-Austrians who emphasise the dynamic nature of society as a result of the inventiveness of individuals – the rich, sophisticated, humane and diverse preferred by McKenzie as opposed to the blunt instrument of economic rationality wielded by Becker (see Chapter 7 in this volume). Or, as Knight (1969, p. 341) puts it and as cited by McKenzie (1979, p. 157), in closing:

> That 'man is a rational animal' is one of those interesting statements which do not have to be proved, since the subject admits of it. In fact he says so himself; and the objective value of the statement is to be appraised in the light of that fact. It must also be viewed in the light of other statements 'man' makes about himself. By the same authority, he is also a groping ignoramus, a fool, and a miserable sinner, quite unworthy of redemption. The list of opposite characteristics could be indefinitely extended, and all the statements would be true, in varying degree and numerous interpretations. But by the same token each is false or, taken singly and alone, is an exaggeration and over-simplification.

The influence of Hayek, as opposed to Knight, is at most a leitmotif in McKenzie's account of the limitations of economics imperialism. But the resonance between the two are powerful, not least because of the unremitting hostility to mainstream economics from the (neo-)Austrian School in light of its views on uncertainty, inventiveness and knowledge (Milonakis and Fine 2009, ch. 13).[14] Significantly, this hostility reaches its height when, in an exemplary illustration of economics imperialism over the history of economic thought, Stiglitz's (2001a, p. 154) information-theoretic approach appropriates the school in its own image. For he argues that, 'many of the intuitions and informal arguments of the Austrian School find their precise formulation in the new information economics'! As Chang (2001, p. 9) more diplomatically puts it in introducing his edited collection, Stiglitz

> is trying to re-interpret some of the insights of the Schumpeterian and the Austrian Schools with the tools of 'information economics'. Although his reformulation of these heterodox traditions cannot fully capture all their nuances, it throws up some interesting new possibilities for intellectual fusion.

Hodgson (2001, p. 83) has this to say about the founder of the Austrian School:

> Significantly, Menger (1985, p. 84) admitted the possibility of other motives, including 'public spirit' and 'love of one's fellow man'. But he simply consigned the study and incorporation of these other motives to other social sciences.

Across each of these positions, the issue is one of where does rationality begin and end, for end it seems, it must. And, significantly, the issue of 'irrationality' is returned to the other social sciences with interest.

What about the role of game theory? Does it provide a solution? Does it offer grounds for expanding the realm of what can be incorporated within the rational?

Initially, it seemed to answer the problem of the relationship between markets and non-markets, for as Gibbons (1997, p. 127) observes in his survey:

> Game theory is rampant in economics ... game-theoretic models allow economists to study the implications of rationality, self-interest and equilibrium, both in market interactions ... and in nonmarket interactions.

Yet the promise is illusory, although many have been, and have been willing to be, deceived. For game theory still depends upon the rules of the game, or the external environment in which it is played. As Arrow (1994, p. 5) puts it:

> The *rules of the game* are *social*. The theory of games gets its name and much of its force from an analogy with social games. But these have definite rules which are constructed, indeed, by a partly social process. Who sets rules for real-life games? More generally, individual behavior is always mediated by social relations. These are as much a part of the description of reality as is individual behavior.

Not surprisingly, he argues that, 'I have emphasized the desirability of an individual perspective. I now want to argue that economic theories require social elements as well even under the strictest acceptance of standard economic assumptions' (p. 4). Arrow adds, in closing, 'I do conclude that social variables, not attached to particular individuals, are essential in studying the economy or any other social system' (p. 4). Game theory cannot flesh out a fully socialised individual despite its incorporation of the social, institutions, etc., as (collective) strategies (Davis 2003).

Further, as Ordeshook (1990, p. 29) suggests, game theory does not solve the problems of existence and uniqueness (and stability) that arise as for general equilibrium theory:

> The desire to model all interactive decision making using noncooperative game theory, the rekindling of interest in the economics of institutional structure, and dissatisfaction with the classical treatment of cooperative games have, nevertheless, revealed the paradigm's inadequacy in a new form ... in nearly all complex situations, a plethora of non-equivalent, noninterchangeable equilibria exists ... we do not yet possess the tools for identifying which equilibria are most likely to prevail or how players choose one equilibrium strategy over another.

And rationality itself becomes problematical when players simultaneously choose the rules of the game and their strategies within it. 'Stated differently', Ordeshook continues, 'contemporary research shows us that the notion of rationality itself is ill defined.' (p. 29). Consequently, 'confronted with this dilemma, game theorists, economists, and political scientists now reach to other disciplines for ideas, such as to genetics and learning theory' (1990, p. 30). He concludes that the study of politics will not become a victim of economics imperialism because economics has itself not yet resolved these issues and developed the theories by which to impose on other disciplines: 'we can readily envision essays seventy-five years from now discussing the "new imperialism of economics", and the belated reintegration of disciplines' (p. 30).

How wrong he has been proven to be within a decade – not because his seventy-five year gestation period has been shortened but because it has been brushed aside. Instead of relying upon models of genetics and learning, although these do figure, the new phase of economics imperialism, based on the market imperfections approach, has promoted itself through use of heavily disguised Becker-type individuals negotiating risk, possibly strategically, through time (see the following chapters in this volume). On these issues, fitting words of advice have been left by Knight (1935, p. 147) in closing his own essay on 'The Limitations of Scientific Method in Economics':

> The real sociology and economics must be branches of literature as much as of science. In fact they need to be both, and commonly succeed in being neither … The first step toward getting out of this slough, we suggest, is to recognize that man's relations with his fellow man are on a totally different footing from his relations with the objects of physical nature and to give up, except within recognized and rather narrow limits, the naïve project of carrying over a technique which has been successful in the one set of problems and using it to solve another set of a categorically different kind.

But the advice has not been heeded as the attempt has been made to extend rational choice beyond narrow limits. Levi, *et al.* (2002, p. 8) explicitly address the limits of rationality:

> We argue for a theory of rational choice that includes the context of decisions as well as the decisions themselves. In particular, while acknowledging cognitive limitations, we wish to focus on the norms and institutions that constrain behaviour. Currently there are three identifiable directions for significant theoretical development. The first is a more sophisticated elaboration of utility theory that would enable it to account for previously unexplained behavioural variation. The second is a fuller recognition of the cognitive limitations on individual decision-makers … The third is a more explicit recognition and modelling of the social context of choice, including normative and institutional components.

This represents an ill-disguised attempt to extend rationality to the non-rational itself.[15] The third direction, for example, (the social context of choice) has been seen as a way of promoting analytical Marxism, possibly the highest form of economics imperialism, as the irreducibly *social* science of class society becomes an exercise in rationality. Elster (1979, p. vii), for example, begins with the idea that '*human* rationality is characterized by the capacity to relate to the future … The notion of *binding oneself*, as did Ulysses before setting out towards the Sirens, is the crucial concept … with a view to evaluating the power of this theory compared to the norm-oriented or structuralist approaches'. He eventually arrives at 'constraint theory', which explores 'why individuals may want to restrict their freedom of choice and how they achieve this end. Broadly speaking, they may want to protect themselves against passion, preference change, and … time-inconsistency' (Elster 2000, p. 1). Similar conclusions are more explicitly and mathematically drawn by the rational choice approach to institutions. Knight and Sened (1995, p. 7) describe the work of Randall Calvert, a leading rational choice theorist of institutions, in the following terms:

> Employing a game-theoretic approach, he challenges those rational-choice studies of institutions that portray institutions as constraints imposed upon actors as 'rules of the game'. He suggests rather that institutions are themselves agglomerations of behavior and expectations, unless we posit that they are exogenously enforced, in which case there must always be a higher institution that remains to be explored. On his account, a coherent general analysis of institutions and their effects must treat the choice of individual actions and the structure of institutions as parts of the same individual-choice process … all of these institutional features, both formal and informal, consist of equilibrium expectations and behavior.

As already indicated, this approach moves out the boundary of the endogenous but it raises the question of what determines the exogenous, a bit like what preceded the big bang prior to the creation of the universe. And it leaves change itself unexplained except in the formal sense of the passage of time (and random or shock elements). Calvert (1995, p. 82) himself concludes, emphasis added:

> Viewing institutions as *equilibria* in some underlying, unalterable game makes it possible for the first time to examine under a single model both behavior within institutions and *change* of institutions.

But how is it possible that change can be explained by equilibria? The answer is simple. Within the bounds set by initial conditions, stochastic variation, etc. the game determines the future of the world at the outset. And the *problem* of multiple equilibria is ingeniously turned into a *solution* in explaining historical variability.[16] History is variable because it provides the choice between different equilibria. This is all brought out marvellously by Aoki (2007, p. 1), in endogenising institutions in view of 'A consensus … among economists … that "institutions matter"'. He confesses to have 'borrowed the essence of the game-theoretic apparatus and modified it somewhat liberally' in order 'to propose a unified, analytical, and conceptual framework for understanding the roles of social, political, economic, and organizational factors, as well as the nature of their interdependencies in the process of institutional change' (p. 26). Yet, the deeper confession is in positing the relationship between equilibrium and change (p. 18):

> Even if the nature of the over-all [sic] institutional arrangements can be understood in equilibrium terms, it does not mean that institutions will not change. Change will occur when there is a substantial equilibrium shift.

But if there is a substantial equilibrium shift, it cannot have been an endogenised equilibrium, otherwise it could not have changed.

Apart from explaining the social or institutions on the basis of rational choice, or even bounded rationality as Aoki does, other writers have been more explicit around the first two directions suggested by Levi, *et al.* (2002) – how to explain changing preferences and how to incorporate limited cognition. Buckley and Casson (1993, p. 1051) base their economics imperialism on the core assumption of optimisation for given preferences whilst allowing for (other social sciences through) interdependency of preferences: 'economics can actually help to derive hypotheses about how such preferences and beliefs are formed, and thereby contribute to social science research as a whole'. This is to endogenise preferences in a way that would be entirely acceptable to Becker (1996). In his contribution to *Economic Imperialism*, Gray (1987) acknowledges the crude understanding of the meaning of objects in the rationality approach. Nonetheless, he is confident that this (pp. 45–6):

> should not be taken as a reason against fashioning better theories of belief-formation which deploy the Becker scheme. In fact, the application of the economic approach to questions of cognitive psychology would seem to be one of its most promising research prospects.

As will be seen in Milonakis and Fine (forthcoming) in discussing the economic history of Douglass North, such optimism is ill-founded and, with whatever validity, focuses on belief-*formation* (as 'rational' response to incentives) at the expense of *belief*-formation (the interpretative and inventive content of beliefs that cannot be taken as given).

Thus, as far as the *logic* of economics imperialism is concerned, the position is tersely summed up by Thaler (1987, p. 99):

> I will end my remarks with the following two false statements.
>
> 1 Rational models are useless.
> 2 All behavior is rational.

For the *history* of this logic in practice, there is a need to renegotiate the boundaries between disciplines, their different methodologies, and the theoretical compatibility of the rational with the non-rational in light of these. Interestingly, in the vast majority of the reservations so far covered over the scope of economics imperialism, there is no explicit breach with the principles of methodological individualism. Rather, it is the exclusive pre-occupation with individuals as maximising utility, as only concerned with self-interest, that is found to be irksome, not least in view of the psychological and other reasons for violating such a principle and the empirical anomalies to which it gives rise – why do people vote, exhibit altruism, hold to inconsistent preferences, and so on. In a widely cited edited collection on the relationship between psychology and economics (Hogarth and Reder (eds) 1987),[17] Einhorn and Hogarth (1987) argue that choices are framed for which, 'framing is controlled by the manner in which the choice problem is presented as well as by norms, habits, and expectancies of the decision maker' (p. 73).[18]

Thus, with the exception of those such as Becker, Coleman and Abell, for whom rational, economic and human behaviour all more or less coincide with one another, the less extreme postwar pioneers in the old form of economics imperialism were far more cautious in their commitment to rationality as a universal explanatory instrument.[19] The old marginalists were aware of their potential to perpetrate sins in this respect and accepted the checks upon them. Long after the event, Donham (1990) captures their stance for himself in finding that neoclassical theory's claims to universality are incorrect with validity only within given exogenous conditions. Thus, whilst its analysis is useful in pointing to the relevance of these given conditions, it is powerless to incorporate them, especially 'historical transformations, political domination, and ideological beliefs' (p. 47). Donham adds that, 'one could say that neoclassical theory trains a bright light on a very small area. It is possible both to appreciate the brightness and to regret the smallness' (p. 50). Similarly, an interdisciplinary balance between rationality and non-rationality, and more, is sought by Etzioni (2003) in moving 'Toward a New Socio-Economic Paradigm'. He suggests core principles in which people have 'divided selves' being 'part pleasure-driven and part morally committed', with 'limited intellectual capabilities', within a social system with the market as a sub-system, and a social structure with unequal powers (p. 115). Piore (2003, p. 120) appropriately comments that this represents a manifesto for neoclassical economics plus something else: 'the thrust of [Etzioni's] approach is to preserve the core of the neoclassical paradigm and to add on to it, or to modify it, at several key points'. In a sense, this is to concede to economics imperialisms' own version of itself as it first began to evolve in the postwar period. In short, it is a return to the old marginalist project, but without deploying the benefit of the hindsight of how little that project has contributed to the understanding of the economy, and how readily qualifications to it come to be discarded.

Thus, from the marginalist revolution onwards, there has been a tendency to privilege rationality within economics and, by extension, the other social sciences – to see how much rational choice can explain before drawing upon other factors that might be conceived of as reflecting non-rationality or the exogenous (but which might be rendered endogenous and reducible to rationality by more refined theory). Udéhn (2003, p. 159) concludes, for example, with a classic compromise over the rational/irrational duality:

> In most cases, the situation in which individuals act includes social institutions and social structures, not reducible to the choices of individuals. In these cases, rational choice analysis is not enough, but has to be supplemented

> with institutionalism and structuralism in order to be fruitful. In these cases, also, rational choice is no longer a manifestation of strict methodological individualism, but of methodological hybrids, like institutional and structural individualism.

This is a matter of wishing to retain rational choice by recognising its limitations (Udéhn 1992, pp. 272–3).

Concessions to the other social sciences and to non-economic factors have traditionally been made in the form of no-go areas and a significant role for the disciplines that were otherwise being colonised. As Nicolaides (1988, p. 327) summed up the situation at his time of writing:

> The limit to the expansion of the neoclassical approach to the study of social phenomena cannot be determined by some theoretically established criterion. Rather, experience, prudence and empirical success (or failure) are more likely to indicate when it might be appropriate to assume an exception to the general rule of *homo economicus*.

It is, however, far from clear that experience, prudence and empirical verification have been at all important in determining the limits of economics imperialism. Rather, developments within economics itself, the receptivity of other disciplines for whatever reason, and the external environment have been far more influential. During the passage from marginalism to general equilibrium theory, economics imperialism could hardly command its own discipline, let alone others, needing as it did to rely upon an independently established macroeconomics if not heterodox alternatives such as American institutionalism. Even after general economic equilibrium theory had been established, as revealed in this chapter, economics imperialism was hedged with reservations and general disdain from other disciplines. Only in the most recent period, with the market imperfection approach, has economics imperialism blossomed as will be revealed in the following chapters. For the first time, its prospectus has begun to be realised.

5 Concluding remarks

Economics imperialism's prospectus is beginning to be realised because of the particular directions taken by economics over a much longer period, details for which are to be found in our earlier volume (Milonakis and Fine 2009). In the passage from classical political economy to the current phase of economics imperialism, it is now possible to identify a number of staging posts. It all begins with Ricardo's deductivism that was perceived to allow for the possibility of universal economic laws. Such deductivism was heavily criticised by the Historical School, with a compromise being reached that some balance between induction and deduction is necessary.

But, with marginalism, the balance swung not only in favour of deduction but also in the form of the special type associated with its principles of economic rationality as captured by Marshall. Nonetheless, his old marginalism remained sensitive to the concerns of the Historical School, with a corresponding commitment to realism in the development and application of those principles. This is so much so that they remained in the policy shadows during the interwar period, incapable of addressing the major *economic* issues of the day, let alone those of concern to the other social sciences.

As a result, into the postwar period, Keynesianism provided a protective intellectual belt around the esoteric microeconomics as it evolved towards its ultimate form as general equilibrium theory. But its achievements were hollow, unable to account for unemployment and money, productivity increase and dynamics, let alone existence, uniqueness, efficiency and stability of equilibrium itself. Yet, with the collapse of Keynesianism and the rise of neoliberalism, the virtual world of microeconomics came to the fore within economics. This undoubtedly promoted the extension of Becker's economic approach to the other social sciences, but these and economists themselves remained dubious over the reduction of all economic and social behaviour to utility maximisation without due consideration of social and historical considerations.

More recently, the need for these reservations has in part been strengthened since, for more or less all forms of economics imperialism, there is a studied disregard for the insights to be offered by postmodernism, and the need to recognise that categories of analysis themselves have socially constructed origins. The significance of context and meaning are rarely acknowledged at all by mainstream economics, and much heterodoxy also, and at most in a token way reducible to path dependence, multiple equilibria or the like. Paradoxically, then, because they are otherwise incompatible with one another, postmodernism, empiricism (or realism) and rational choice have comfortably co-existed in the current period, presumably because they do not overlap and, hence, do not challenge one another. As observed by Hodgson (2001, p. 36):

> Ironically, within sociology, the post-modernists have joined rational theorists and the empiricists in a tacit alliance against conceptually oriented and non-formal social theory.

More particularly, the rational individual maximising given utility over given outcomes lies side-by-side with the endlessly inventive persona constructing multiple identities in response to a world that is not open to be specified.

Equally, however, as demonstrated here, rationality can also be taken further by accepting the rational/non-rational divide explicitly and joining the two sides together as in economics and psychology. Thaler (1991), for example, was led to follow a research programme and publish a book in *Quasi-Rational Economics*. It focuses on the impact of attitudes towards the fairness of exchanges in dulling single-mindedness in the pursuit of the maximisation of utility, a theme explored within economics by Akerlof (1984). But, in principle, any number of human motivations could be appended with a greater or lesser extent of social content. In short, the logic of economics imperialism does not require all behaviour to be rational although this is at its core. It is a matter of defining the limits of rationality and, possibly, appending the non-rational as complement.

Where the rational/non-rational divide falls depends upon, but is not synonymous with, that between the exogenous and the endogenous, whether the 'social context of choice' is modelled or not. In this respect, Abell (1996 and 2003), as sociologist, is already well out of date at time of publication, at least as far as economists are concerned. His rational choice is one without apparent awareness of the new (information-theoretic) imperfect market approach. As will be argued, it has the capacity to internalise or endogenise what Abell takes to be exogenous. But, as is apparent, forging a balance between the rational and non-rational has a longer tradition. There are those within other disciplines or on the borders of economics who have challenged the scope of explanation reducible to rational choice. This is true, for example, of the transaction costs theory associated with Ronald Coase, the organisational theory associated with Oliver Williamson, the bounded rationality of Herbert Simon, the embedded economic sociology of Mark Granovetter, the economic history of North and so on.

To a large extent, these different strands have themselves both become more prominent and have been weaved together, not least under the umbrella of the new institutional economics, for example, as a result of the latest phase of economics imperialism. The latter has extended the scope of colonisation of the other social sciences by economics. This is so both in pure form and also as rational/non-rational hybrids in which the rational has greater purchase than in its earlier 'as if' market form. As will be seen in the following chapters, outcomes across disciplines and topics are mixed because of the variety of factors at play, from intellectual traditions through external and policy environment to the nature of the subject matter itself. As Peck (2005) observes of the new economic sociology, it has become attached to dirty as opposed to clean models – a bit of methodological individualism, a bit of social analysis, a bit of economics, a bit of something else.[20]

As will be seen in the next chapter, some but not all of this rationality/non-rationality dirt can be cleaned up and some doubts have been allayed by the emergence within economics of the information-theoretic approach in which optimising behaviour by individuals is taken as universal but in the context of imperfectly working markets. In this way, the social is rendered endogenous in ways that are more palatable to economists and non-economists, with the potential to extend the explanatory power of rationality both in its pure form and in conjunction with other factors. Whilst the latest phase of economics imperialism is explicit about bringing the social, and historical, back in as something distinct from the economic, it only does so through failing to acknowledge the illegitimate processes by which they were taken out. What has been the outcome?

Notes

1 For extensive treatment of Becker's principles and their applications in practice, see Fine (1998b, 2001 and 2002a).

2 The freaky affinity with the later freakonomics is striking; see Chapter 6 in this volume.

3 But Hobsbawm (1997, p. 99) does identify the separation of history and economics with the marginalist revolution, which was so sharp that 'the arguments and even the existence of the defeated side have largely been forgotten'. This is especially so of Marx who has, in the wake of rational choice and analytical Marxism, 'survived … insofar as the arguments … could be conducted in the analytic mode of neo-classicism'.

4 See also Zafirovski (2001 and 2002).

5 See also Buchanan (1972, p. 16 fwd) for 'The Economic Model of Human Behavior'. And, as cited in Amadae (2003, pp. 151–2), for Buchanan, 'The simple exchange of apples and oranges between two traders – this institutional model is the starting point for all I have done'.

6 For an overview of politics treated as economics, see Udéhn (1996), and also Udéhn (1992) for its implications for economics imperialism.

7 Significant as background to what follows is that Buchanan had been a pupil of Frank Knight (Udéhn 1992, p. 254).

8 Note that to confine itself to rationality alone as the source of human behaviour would have been to limit the scope of the neoliberal project to which Buchanan was attached, not least by failing to be able to address let alone promote the non-rational in the form of conservative values. See the discussion of social capital in Chapter 6 in this volume.

9 Udéhn (1992, p. 273), with a meticulous eye for detail, suggests that 'McKenzie eventually lost faith in the omnipotence of economics … As a consequence, McKenzie did not participate in the fourth edition of Tullock and McKenzie (1985)'.

10 See Fine (1998b and 2002c, ch. 3) for a critical exposition of Becker's notion of extended utility function. Note, because of its universal and fixed view of human nature, it involves, 'the attempts of the economists to dress up aboriginal man in the banker's waistcoat' (Gregory 2000, p. 1001), in context of debate over the perceived differences between modern *homo economicus* and primitive *homo erroneous* in the evolving relationship between anthropology and economics.

11 See Rutherford (2007) on Skinner, citing Smith (1996, p. 56):

> One of the conspicuous features of B. F. Skinner's life and work is the contrast between the cautious experimental research that brought him recognition as a laboratory scientist and the expansive social philosophy that later brought him wider renown. Indeed, Skinner's call for the redesign of culture on the basis of experiments with lower organisms in contrived environments has struck many of his critics as presumptuous or even bizarre.

Such grand redesigns within economics have not even benefited, at least until relatively recently with the emergence of experimental economics and neuro-economics, from the laboratory!

12 See Boland (1997) for the idea that the maximising assumption is non-falsifiable, although this is contested in Chapter 10 in this volume. Boland provides a fascinating account of how his earlier work in this vein was casually referenced by the mainstream to justify the assumption as it could not be demonstrated to be wrong! See also Hutchison (1938, p. 162) for a longer pedigree of the emptiness of the universal:

> It is hardly surprising, therefore, that every prominent economic theory has at some time or other by a sound authority been shown to be 'circular', 'tautological', or to 'beg the question'.

For an even more wide-ranging critique, one that is hardly redressed, as suggested, by recourse to *bounded* rationality, see Laville (2000).

13 Note that the wish to explain society in terms of Skinner's behavioural theory of animal psychology is associated with George Homans (1961). It led to the idea of social exchange that, ultimately, on failing to explain society on the basis of individuals,

became resurrected by one of its participants, James Coleman, into social capital. See Fine (2001, ch. 5) for a full account.

14 Gray (1987, p. 35) discusses the divergence between the rationality of neoclassical economics and of the Austrian School, for which:

> economizing on means to ends is … only one aspect of action itself … it is a fiction to suppose that the agent has anything resembling a complete ordering of his preferences, or a complete knowledge of the options available to him. Indeed, von Mises goes so far as to argue against transitivity (consistency) of preferences being made a necessary element of rational choice.

15 See further discussion in Chapter 7 in this volume in context of whether economics is colonising or being colonised.

16 See Rizvi (2007) for some assessment of the limitations of game theory in light of the 2005 Nobel Prize in Economics being awarded to Aumann and Schelling. See also Varoufakis (2008) for a more general discussion of the limitations of evolutionary game theory as a way of addressing the social and historical. See also Field (2007, p. 270) who asks, 'What have we learned from applying game theory over the past quarter century to issues of institutional origin, change, and stability that is not obvious or that we did not know already?'. However, he then suggests a search for 'universal features of institutions and culture [that] have their roots in species typical behavioural and cognitive predispositions with genetic/biological substrates' (p. 287), an apparent leap into some form of neuroeconomics (see Chapter 10 of this volume).

17 Much of the research on the relationship between psychology and economics at this time, and its relationship to game theory and strategy, seems to have been funded by the US military for whom, it can be presumably deduced, that the economic approach to human behaviour proves sorely inadequate for its purposes.

18 This 'framing' has limited connection with that associated with Goffman (1974), for which the formation of the nature and meaning of the choices is central, as for postmodernism.

19 See Chapter 7 of this volume for some account of the opposition to Becker by his fellow economists.

20 See also Ankarloo (2006) for the new institutional economics as mixed models, the rational and non-rational, and Dobbin (2004) for the idea of sociological explanation of the economy in terms of institutions, networks, power and cognition – to which individual rationality can also be appended.

4 New economics imperialism

The revolution portrayed

> I do think it is a besetting vice of economists to overplay their hands, to claim more for their subject than they should … I have on occasion fallen into the vice myself.
>
> John Hicks (1983, p. 364), cited in Hutchison (2000, p. 366)

1 Introduction

With microeconomics having established itself as a core component of the discipline of economics – with general equilibrium as its pinnacle – the methodological and other travails of the old marginalism had been forgotten, and the shiny new principles paraded for wider application beyond the dull intersection of supply and demand. At an analytical level, if on its own terms, there is much to commend such ambitions. For the principles of (old) marginalism have always been claimed to be universal, as is indicated by the terminology itself of utility, scarcity, production, and so on, that knows of no inductive content nor historical and contextual specificity. As a result, from a very early stage, there has been the prospect of extending the principles of economic rationality to non-economic arenas. This necessarily raises the question of the relationship between the rational and the non-rational and the relationship between disciplines according to whether these two dualisms do or do not correspond to one another. In other words, how far can we extend the idea of (economic) rationality beyond the market, and what are the implications for the relationship between economics and the other social sciences?

Even early and ardent proponents of economics imperialism, as with public choice theory, remained concerned with the limits in extending rationality beyond the market place. The reasons for this reflected a lingering respect for the concerns of the old marginalism – in attention to more rounded individuals in a world subject to change. As a result, the old form of economics imperialism, associated most notably with Gary Becker and his economic approach to the social sciences, has had some impact but it is far-reaching in certain areas rather than widespread across them. It is insufficiently attractive to his fellow-economists, let alone other social scientists, other than those wedded to rational choice. There is considerable antipathy to reducing the social to (rational) individuals functioning in an 'as if' market environment.

Such boundaries on the scope and acceptability of economics imperialism in its first phase are thrown into sharp relief by the discussion in Section 2 of this chapter of the later phase, or what might be termed the new or revolutionary form of economics imperialism. It has come to the fore in the last two decades or so. It is based upon what Stiglitz has termed the information-theoretic approach to economics or new information economics and involves the latter's extension to as much of social science as it can accommodate. In contrast to the old phase, the present and more virulent form of economics imperialism is based on the idea of market imperfections. These, as such, are far from new to 'traditional' neoclassical economics (with implicit rationale for state intervention) since they have long been recognised in the form of monopoly and externalities. This is especially but not exclusively so within partial equilibrium, alongside transactions cost, say, as an influence on the organisation of firms and other institutions. Arthur Cecil Pigou, Alfred Marshall's successor at Cambridge, was instrumental in bringing this problem to the fore during the interwar period in his *The Economics of Welfare*, which furnished the premises of what came to be known as welfare economics. Pigou identified the presence of external economies or diseconomies, what Samuelson later called externalities, as the main cause of market failure. An externality is usually defined as 'the effect of one person's decision on someone who is not party to that decision' (Coase 1988, p. 24), the standard example being pollution. This, in conjunction with *public goods*, those like national defence or public security, whose consumption by one means that everybody can consume it, form what has been termed *old market failures* (Stiglitz 1994, pp. 42–3). Old market failures provide a justification for government intervention either in the form of 'Pigouvian taxes' to take externalities into account, or in order to supply public goods.

Kenneth Arrow and Gerard Debreu's mathematical proof of the conditions for the existence of equilibrium in a perfectly competitive market led to what Bates (1995, pp. 28–9) calls 'a crisis arising out of triumph'. As Stiglitz (1991, p. 136) puts it:

> The economists of the twentieth century, by pushing the neoclassical model to its logical conclusions, and thereby illuminating the absurdities of the world they have created, have made an invaluable contribution to the economics of the coming century.

With the proof of the existence of an equilibrium and of its welfare properties, general equilibrium economics was no longer of abiding interest at the forefront of economic theory, although it did not die – continuing in the form of ever esoteric proofs of its fundamental theorems. This, in conjunction with the dissatisfaction with the strident conditions attached to the Walrasian model, diverted attention to situations in which these conditions are not satisfied. It gave rise to the literature on *new market failures* 'based on imperfect and costly information and incomplete markets' (Stiglitz 1994, p. 42).

What is more fundamentally innovative within the new microeconomics of informational asymmetry is its ability to examine social structure, institutions and customs, albeit on the continuing basis of the peculiar form taken by methodological individualism within mainstream economics. Utility maximisation is the ultimate rationale for both economic (and market) and non-economic (and non-market) behaviour, with equilibrium, reproduction or evolution of the social on the basis of aggregate individual behaviour. Relative to the old, the new approach adds market imperfections especially in the form of informational asymmetries but, on this basis alone, it also extends the scope of the analysis more or less indefinitely across the social sciences. And it does so in a way that is more palatable to them. For the new phase of economics imperialism prides itself on not treating the non-economic as if it were a market but positively promotes itself by declaring that institutions, customs, habits and history matter.

Section 3 below and the next chapter offer selective illustrative overviews of the new economics imperialism. For the next two chapters are reserved three applications of the new economics imperialism that are extremely broad in scope, the new institutional economics, the new(er) economic history, and social capital. Section 3 offers some commentary on the more specific, if still wide-ranging, topics of newer economics of education, finance, geography and development. Each, in its own idiosyncratic way, was addressed by the old economics imperialism. Each, equally, has been enriched in its own way by the new. In our concluding remarks, we revisit the rational/non-rational divide in light of the transition from old to new economics imperialism.

2 The information-theoretic approach: from Akerlof to Stiglitz

Over the past two or three decades, the most significant analytical shift in emphasis within economics has been to incorporate issues concerned with 'information'.[1] Initially, information was understood in terms of expectations, specifically those around macroeconomic variables, especially inflation. Such interest was prompted by the breakdown of Keynesianism at the end of the 1960s and the emergence of stagflation, or the co-existence of stagnation and inflation. According to Keynesianism, this could not be possible since stagnation is indicative of insufficient demand, reducing capacity to sell and incentive to produce, whilst inflation suggests the presence of excessive demand fuelling price increases.

Quite apart from undermining what had been the Keynesian hold over mainstream macroeconomics in the postwar period, and paving the way for the resurgence of Friedmanite monetarism and birth of its progeny, new classical economics, stagflation posed a theoretical problem that was resolved by the introduction of expectations. Previously, the dispute between monetarism and Keynesianism had centred on the extent to which increases in effective demand (or nominal income) would feed into increases in prices as opposed to output and employment, respectively, with a corresponding division of opinion on whether the market did or did not tend automatically to generate full and efficient employment.

With the introduction of (price) expectations, instead of the economy balancing output against price increases, it becomes possible to explain any outcome, including stagflation, by allowing expectations about inflation to be self-sustaining to a greater or lesser extent, whatever the level of output.

As a result, whilst the hold of the Keynesianism stance was weakened by stagflation, it was not eliminated. Indeed, Friedman's version of monetarism itself came under assault from the even more extreme version of the new classical economics for being too Keynesian in character! For Friedman argued that Keynesian reflationary policies could increase levels of employment (above the 'natural' or equilibrium level) only in the short run and even then at the expense of ever-accelerating inflation. The long-run vertical Phillips curve implied that in the long run expansionary fiscal policy will be totally ineffective, resulting simply in accelerating inflation without any effect on the employment level. The new classical economics, deploying the notion of rational expectations, rejected Friedman's account (based on adaptive expectations). Instead, recognising that the increase in employment allowed for by Friedman is the result of persistent under-prediction of the price level (leading economic agents to thinking themselves to be better off than they are), the new classical economics argues that expectations formation will be amended from adaptive to rational. Agents will use their own economic model and available information to make correct predictions on average. Consequently, governments will not be able to raise the level of employment even in the short run, even with accelerating inflation, since economic agents will neutralise reflationary policies by anticipating and adjusting in light of the inflationary impact of policy.

The technical details of the foregoing paragraph need not detain us. For the emergence of the current phase of economics imperialism out of developments *within* economics, however, five issues are of importance. First, by introducing expectations about the price level, an analytical process was set in motion, ultimately leading to a focus more generally upon information availability to economic agents across all variables. Not surprisingly, expectations about other macroeconomic variables came to the fore, not least interest and exchange rates since these became increasingly volatile from the 1970s onwards. Eventually, however, the shift from *expectations* about *macro*-variables became complemented by a focus upon *micro*-information available to individual agents in undertaking transactions with one another.

Second, one reason for this was the realisation that the government-ineffectivity result of the new classical economics depends less upon rational expectations as such and more upon the assumption also made of perfectly working markets across the entire economy. By this is meant that markets clear instantaneously or that prices adjust so rapidly that supply and demand are always and everywhere in balance. Put this assumption aside and government effectiveness in macroeconomic policy is restored. But, as a consequence, a different issue is raised. Why should markets work imperfectly or fail to clear sufficiently fast to nullify the assumption that they clear instantaneously? Why do some markets clear faster or more fully than others across time and place? The answer, as discussed below, was found in the asymmetry of information between buyers and sellers in individual markets. Note at this stage, however, that the notion of homogeneously perfect markets is being replaced by one of heterogeneously imperfect markets, allowing for differences across and between economies – and so a place for social and historical factors to reflect these differences.

Third, as is already apparent but worthy of repetition, the introduction of expectations into macroeconomics prompted a focus upon information in microeconomics. Indeed, far from the new information-theoretic economics serving as a break, as it sees itself, with the new classical economics with its reliance upon perfectly working markets, the rational expectations hypothesis can be seen as an important stepping stone between the two approaches. As Davis (1997, p. 299) remarks of the new classicals:

> Their sudden repopulation of the world with a new type of economic agent simultaneously made extinct an older type of being: the naïve victim of money illusion, whose expectations adapted but gradually to changing circumstances.

This is particularly germane to the new approach given that market imperfections are far from new to mainstream economics. In posing as opposition to the new classicals, though, the new approach has to endogenise market imperfections. It proved appropriate to do so on the basis of perfection in calculation in face of imperfection in information. Surreptitiously, it also consolidated the shift in meaning of expectations to a statistical sense of knowable stochastic information, effectively data. In this way, the distinction between risk and uncertainty was dissolved. As Yoshimi (2006, p. 271) has put it appropriately, if more generally:

> Thus, information is an inherently qualitative entity implying the capacity for meaning creation. Nevertheless, in the historical development of the concept, there has been a consistent emphasis on quantitative, rather than qualitative, aspects. 'Information' clearly has a place among related concepts, such as 'symbol', 'language', 'knowledge' and 'wisdom'. However, there is a tendency to see 'information' as the most superficial and ephemeral of all of these concepts. Information is generally denied any profundity of meaning.

In conformity with this, information and knowledge (the two being used interchangeably) for mainstream economics has become something that agents have or do not have and play no part in creating other than through their actions or signals to others.

Fourth, all this, alongside the corresponding developments within macroeconomics, strengthened the technical nature of economics as a discipline in terms of its use of mathematical modelling. Game theory, for example, became considerably more prominent as did more sophisticated statistical techniques (not least in light of widespread availability of large data sets and heavy-duty computer power).

Fifth, taken together, these developments within mainstream economics were heavily associated with the consolidation of its hold over the discipline as a whole.

For a variety of reasons, radical political economy had prospered in the 1960s, and it might have been expected to have benefited both from the stagflation of the 1970s and the poverty of the analytical response of the mainstream to it, not least in the form of the new classical economics. But, exactly the opposite occurred, with increasing intolerance of the mainstream to alternatives, inevitably perceived as heterodoxy, of any type. Here, there is a contrast with the interwar period where microeconomics and the increasingly deductive approach could only survive by being complemented by a more realistic macro analysis, whether Keynesian or institutionalist. However much this reflects a shift in political climate, it certainly symbolises the professionalisation of economics in terms of its core method, theory, axioms and techniques.

In sum, until the end of the postwar boom, mainstream economics had been dominated by what might be termed a complacent Keynesianism. It was presumed to underpin the macroeconomic policy that would guarantee full employment, whilst microeconomics provided a rationale for government intervention in detail to correct market imperfections. The (inconsistent) Keynesian accommodation between macro and micro, between theory and policy, and between all of these and the evidence of the postwar boom itself, was rudely shattered both by the stagflation of the 1970s and the associated intellectual and ideological assaults launched by neoliberalism. Friedman's monetarism ultimately gave way to the new classical economics, and rational expectations, which argued that systematic macro policy would be rendered ineffective by the anticipation of its effects through optimal use of information by calculating economic agents. With the rise of neoliberalism,[2] government expenditure was perceived to be excessive and government intervention as inducing inefficiency. Far from perfect competition and general equilibrium being the ideal, from which deviations in the form of market imperfections justified state intervention, the ideal of attaining the free market and minimal state gave rise to what Carrier and Miller (1998) refer to as the new economic 'virtualism' – the imperative to remould the world to conform to an imagined ideal, that of perfectly competitive equilibrium.

Neoliberalism had the advantage of forging a link between micro and macro, if only in the vacuous sense of emphasising the leaving of the micro 'supply-side' to the market, with the macro 'demand-side' also looking after itself, apart from targeting the money supply. Neoliberalism further undermined confidence in the state by questioning its efficiency and motivation in view of rent-seeking and corruption. In short, in the face of neoliberalism, alternatives within mainstream economic theory confronted two challenges. On the one hand, why are market imperfections so important? On the other hand, why would an improvement be guaranteed by intervention, given that government may be worse than market failure?

The new microfoundations have provided a framework for addressing these issues by suggesting microeconomic markets work imperfectly with macroeconomics effects. Thus, as Gertler (1986, p. 56) reports in his early survey of 'Financial Structure and Aggregate Economic Activity':

> A common theme in this new work is that informational asymmetries may

> introduce inefficiencies in financial markets which may have quantitatively significant effects. A number of basic conclusions arise relevant to aggregate behavior.

Whether through financial markets or otherwise, this is (new) microfoundations of macroeconomics, as its own proponents term it, with the representative optimising individual as the central economic agent.

In this way, a rationale can be provided for Keynesianism and other forms of state economic intervention. But it does so in a particular intellectual and ideological context marked by the reaction against neoliberalism. Consequently, quite apart from continuing and reinforcing the traditional unworldliness and technicism of economics as a discipline, neoliberalism (and the new classical economics as its academic orthodox counterpart) had the effect of prompting an alternative analytical agenda. It served by way of a reaction against neoliberalism in terms of asking why individuals might not appear to behave rationally, why markets might not work, and why non-market relations exist and might even be desirable beyond minimal provision of secure property rights, defence, etc. In addition, neoliberalism by its own efforts had done much to undermine the presence of an alternative to the mainstream in the form of radical political economy.

These developments, apart from defining the analytical agenda as its alter ego, paved the way for the information-theoretic approach to prosper within economics, the term deriving from one of its leading practitioners, Joseph Stiglitz. This new approach arose out of a frontal attack on two of the most basic assumptions of the Walrasian framework: the perfect information assumption and the assumption of the existence of a full set of markets. In the presence of asymmetric and costly information and in the absence of a full set of markets, the market will not lead to (Pareto) efficient outcomes, bringing about (new types of) market failures. A text, universally recognised as classic, is George Akerlof's 1970 article 'Market for Lemons'. Here, a lemon is US slang for (a commodity of) poor quality, a second-hand car for example, known as such to the seller but not to a potential buyer. In other words, there is an asymmetry of information across the market for lemons. At any given price for a standard item, only those of worth to the seller below that price will be brought to the market. This means that the average worth of the cars on the market will be depressed by the lemons. Buyers are aware of this but do not know the incidence of particular lemons. This discourages them, lowering the price of the cars that can be sold, thereby leading sellers to withdraw cars of higher quality from the market. There are three possible outcomes. First, the price will lead to equilibrium between supply and demand – the market clears – but it will not be an efficient market. There are potentially willing sellers and buyers of higher quality cars who will not transact with one another at the prevailing price that reflects cars of average lower quality.[3] Second, every time the price is reduced in the attempt to clear the market, better quality cars are driven out from being available for sale. All sellers might decide not to reduce their prices, not out of collusion, but out of an optimising decision to get a higher price out of those who are prepared to buy. But this will mean more cars on the market than can be sold, and the market does not clear. Third, if the price is driven in a downward spiral with average quality, the market might simply be undermined and be absent altogether. At whatever price the cars are sold, the decreasing level of average quality is insufficient to induce a buyer.

Another example is the labour market in which all workers appear identical to employers but they differ in terms of their skills, alternative job opportunities and motivation. In order to attract more skilled, less mobile and more committed workers, a wage might be offered that is higher than the going rate. Such an 'efficiency-wage', as it is termed, more than pays back the extra cost incurred through higher productivity and reduced turnover. The result, though, is the establishment of a non-market clearing wage, which might lead to excess supply in the labour markets, another market-inefficient outcome.

Another cause of (new) market failure is the absence of a full set of markets. One of the conditions of the Arrow/Debreu model is that there are markets for *all* commodities in *all* future markets. There are many theoretical reasons why this assumption may be violated for present markets, let alone future ones. A prime example is *insurance* (e.g. health insurance). *Moral hazard* and *adverse selection*, both associated with informational asymmetries, are two reasons invoked to explain why insurance markets may be lacking. The former refers to the danger that once the customer is insured s/he might try less hard to protect him or herself against the possibility of the event s/he has been insured against occurring, thus increasing the likelihood of its actual occurrence. This will increase the costs of the insurance company perhaps to the point of making it unprofitable to offer such insurance. Adverse selection, on the other hand, refers to the situation in which at any premium price only those most at risk will buy the insurance, with similar consequences for the company. In both cases the result might be the absence of an insurance market calling for government intervention to address the problem. The adverse selection problem, for example, can be solved by the government making such insurance compulsory (Stiglitz 1994, chs 2 and 3 and Roemer 1995, pp. 116–18). Another example is *capital markets*. In the presence of uncertainty, investors, by investing their money, put themselves at risk. Being, however, unable to foresee all possible contingencies, they cannot possibly be insured against all such contingencies, or it is prohibitively expensive to do so. In the absence of a full set of futures and risk markets, capital markets will necessarily be (Pareto) inefficient leading to credit rationing (Stiglitz 1985 and Bates 1995, pp. 34–5).

The questioning of the assumptions of informational efficiency and of a full set of markets notwithstanding, it still remains true that in all other respects the new information school remains strongly attached to the neoclassical paradigm. All essential features of the neoclassical world, including methodological individualism, instrumental rationality, equilibrium price theory, marginalism and stable preferences remain intact.

Whilst motivated by the example of lemons, the analysis of informational asymmetry is general and can apply, in principle, to any market and to any circumstance in which there are differences in information between buyers and sellers, either before, after or during the course of the transaction. For Akerlof (2002, p. 412), 'the informational problems that exist in the used car market were potentially present to some degree in all markets'. Thus, insurance raises problems of dishonesty in claims after the sale of premiums; and labour markets depend upon the effort expended at work. Any market can be imperfect in being inefficient, failing to clear, or absent altogether. In short, *within* economics, the information-theoretic approach, and appeal to market imperfections more generally, establishes an important understanding of the ways in which markets do or do not work perfectly, especially by way of departure from the model of perfectly working markets. This is brought out by Riley's (2001) silver, twenty-five year, survey of the signalling literature, with endless examples of one application after another of the approach. Further, the approach proves able to explain the presence of economic *structures*. In mundane terms, *individual* agents have incentives to offer alternatives to separate out from one another those agents with different characteristics, thereby potentially consolidating those differences with knock-on effects. The division between those who do or do not work, for example, may be due to informational asymmetries. This is so in the theory of efficiency-wages for which, as mentioned above, firms are deemed to pay higher wages than they need to in order to attract a skilled and motivated workforce of higher quality (and of higher quantity than they are prepared to take on, thereby creating unemployment). Thus is created a division between the employed and unemployed which bears no relation to individual characteristics. Similarly, access to finance may be structured without reference to the characteristics of borrowers (unable to gain loans at higher rates of interest for fear by lenders of attracting disproportionately higher levels of borrowers liable to default).

In this way, the information-theoretic approach is able to explain the creation of (structural) differences where they do not exist at the outset – between employed and unemployed, those who get loans and those that do not, and so on. But it is also able to explain how those individual differences that do exist might be accentuated in order to signal or serve as proxy for those undetectable individual differences. Thus, minor differences in ability may be reinforced by the pursuit of qualifications, as in credentialism, irrespective of their contribution to productivity as such. At the most abstract level, then, asymmetric information offers explanation for homogenisation across differences that cannot be detected and reinforced differentiation across those that can. As a result, it is capable of explaining any outcome in socio-economic structures.

In this vein, Stiglitz (1994, p. 5) feels able to claim that a new approach to economics has been established, one that diverges from the old mainstream, enhances the understanding of how markets work, and is applicable across a wide range of subject matter:[4]

> During the past fifteen years, a new *paradigm*, sometimes referred to as the information-theoretic approach to economics … has developed … This paradigm has already provided us with insights into development economics and macroeconomics. It has provided us with a new welfare economics, a

> new theory of the firm, and a new understanding of the role and functioning of financial markets [emphasis added].

Within economics itself, then, the new approach is able to explain structures or corresponding macro-outcomes despite continuing to be based on the optimising behaviour of individual agents in response to asymmetric information.

The paradigm is remarkable for its success in endogenising *economic* structure where previously such structures had to be taken as exogenously given constraints (or assumed away by the new classical economics), and due to rigidities, institutions, or whatever, possibly to be accounted for by the other social sciences. But more dramatic, and of crucial significance for corresponding implications for economics imperialism, are the results for non-economic or, more exactly, non-market behaviour and outcomes. The reason for this is deceptively simple. For, in the presence of market imperfections, it becomes rational for individuals to establish or, at least to conform with once established, the non-market mechanisms for addressing these imperfections. In case of the market for lemons, for example, traders might decide to run a warranty scheme. This would be an elementary form of institution for handling the informational imperfections that accompany transactions. Consequently, institutions in general can be understood as the non-market response to market imperfections. Interestingly, this idea is far from new within economics. As Stiglitz (2002a, p. 472) neatly summarises in his Nobel Prize Lecture:[5]

> Information Economics represents a fundamental change in the prevailing paradigm within economics. Problems of information are central to understanding not only *market* economics but also *political economy* … [enabling me to] explore some of the implications of information imperfections for political processes.

Previously, though, Coase (1937) is famous for having explained the existence of the institution of the firm as the efficient response to the presence of transaction costs – better to undertake trade informally within the institution of the firm when it is costlier to trade outside in the market. In part, the new information-theoretic approach can be seen both to generalise the sorts of institutions that are explained by market imperfections and to generalise around the sorts of costs that plague transactions. Not surprisingly, Coase has been rediscovered and celebrated with the emergence of the information-theoretic approach, where before he was more perceived as an intellectual curiosum (see chapters 5 and 6).

But the new approach does not confine its scope to formal institutions in the narrow sense. It is also able to extend its compass to consider other non-market factors, such as informal institutions, not least those relating to apparently non-economic behaviour. Culture, customs, norms, habits, and trust, for example, are no longer taken to be exogenous or non-rational.[6] Rather, such behaviour can be explained as the rational or optimising response to market imperfections. Once formed, for example, trusting and trustworthy behaviour can be self-sustaining.

Again, such perspectives are not original. Herbert Simon's notion of bounded rationality recognises that the demands on individuals of rational calculation may be so great that they lead to customary or satisficing modes of decision-making. But economists have always tended to interpret this as a rational rather than a customary approach to the costs of deciphering and calculating around available information. As before, the information-theoretic approach generalises over the types of behaviour and the reasons for it.[7]

At this stage, it is possible to make explicit what has so far been implicit, as far as the current phase of economics imperialism is concerned. With the incorporation of institutions, customs culture, norms, trust and so on into economics, so are the traditional concerns of the other social sciences from the perspective of market and informational imperfections addressed. The result has been the creation or renewal of a range of 'new' fields within and around economics, with a corresponding extension of economics to previously neglected topics – the new institutional economics, the new political economy, the new growth theory, the new labour economics, the new economic geography, the new financial economics, the new development economics, and so on.[8]

In other words, in shifting from a world of market perfection to a world of market imperfections, the new information-theoretic approach retains the claim to universal applicability. But it also extends the appeal of its scope of applicability by both accepting the reality of non-market and apparently non-rational behaviour and by explaining them as a consequence of market imperfections. Further, the new approach opens the way for the reintroduction of the historical through appeal to its lingering effects as the consequences of the imperfectly working market as opposed to the (possibly thwarted) perfectly working market, and the institutions, customs, structures and so on that these engender.

3 Human capital, finance, development and space

Economics imperialism in general is marked by the common property of attempting to reduce as much as possible of the non-economic or the social to the optimising behaviour of individuals. In this respect, the new economics imperialism, based on non-market responses to market imperfections, offers a powerful engine for turning the non-rational into the rational, or at least of redrawing the boundaries between the two in the latter's favour. As will be seen in following chapters, the result is to generate applications of the new (or even what might be dubbed the newer) economics imperialism that cover the entirety of economic, social and historical analysis – through the new(er) institutional economics, the new(er) economic history and social capital, ultimately leading to freakonomics as the spearhead of the economics of everything (see Chapters 5 and 6). With these, but also with other more focused assaults by economics imperialism, outcomes reflect the nature of the subject matter and the substance and dynamic of treatments derived from disciplines other than economics.

So it is important not to generalise over the outcomes of economics imperialism, although it is all too tempting to use the 'newer' formula to denote other, if not all, recently renewed ventures, or novel applications, across economics imperialism. Difference in results can be illustrated by two examples taken from success under the old economics imperialism. One of the most prominent has been human capital theory, despite initial opposition, as mentioned in the previous chapter. The obstacle to acceptability of the approach centred on aversion to the notion of education as comparable to an accumulated physical asset with productive potential. This objection has not so much been dissipated as overlooked. For, despite continuing to flourish within economics on the same basis, human capital is used in entirely different and heterogeneous ways across the other social sciences, thereby reflecting their concerns and traditions. As a result, human capital has not primarily brought the subject matter of other disciplines under its wings. Rather, it has spread its influence across disciplinary boundaries. When, in sociology, human capital has been used as an element in social stratification, its application in identifying the origin, nature and reproduction of social classes is inconsistent with its origins in the methodological individualism of mainstream economics, and the notion of education, etc. as an input or output in some or other production function.[9]

A totally different outcome is represented by the case of finance. This is now more or less taken for granted to be a sub-discipline of economics, especially as far as high level theory and empirical work are concerned. As Harrison (1997, pp. 174–5) remarks:

> For a long time, the study of financial markets was not done by economists … That economists did not do research on financial markets … is not completely to say that no research was done on them. Nonacademic 'how-to' books of investing, written by practitioners, were plentiful. Academic insights were sparser.

This is exemplified by the fate of Harry Markowitz, who received a Nobel Prize in economics in 1990 for his work on finance, but who completed his first work in the form of his University of Chicago (successful) doctoral dissertation in 1955. As reported by Harrison (1997, p. 176), citing Bernstein (1992), Friedman's comment on Markowitz's work was as follows:

> Harry, I don't see anything wrong with the math here, but I have a problem. This isn't a dissertation in economics, and we can't give you a Ph.D. in economics for a dissertation that's not economics. It's not math, it's not economics, it's not even business administration.

Harrison (1997, p. 176) provides an account of how, from these shaky beginnings, finance became incorporated within economics through reliance upon arbitrage and perfectly working markets, parodying the process itself as one of intellectual arbitrage:[10]

> From the standpoint of an academic economist, financial markets had been converted from the most tangled underbrush to the pristine ideal of textbooks.

> Here were perfect markets – a market where the power of arbitrage was supreme; where thousands of individuals with millions of dollars in incentives were pursuing information and pouncing on arbitrage opportunities. The traded good was almost as generic as a widget; there was plethora of publicly available information, there was easy entry and exit; and trading was relatively costless and free from other frictions. The theoretical implication of such perfectly functioning markets was that they were efficient. The invisible hand would enforce not only the 'right' price but also the 'right' allocation of resources. The casino could be trusted. What more inviting place for economists to venture?

Further, from a position of lying outside economics, finance as a sub-discipline of economics has not only been transformed but has leapfrogged into the vanguard. Harrison again (pp. 182–3):

> Regardless of whether economics was profoundly changed, finance certainly was ... In fact, finance has become the 'proving ground' for new price theory and econometric technique. This puts the field at the forefront of the technical envelope, as measured by the use of mathematics and computers. Because of the availability of large quantities of data, because of the desirable properties of stock prices, and because of the monetary rewards to a 'successful' innovation, it is still the most ideal 'real world' market. But this has created some kind of a feedback effect, where innovations in finance have found their way back to the 'rest' of economics. In particular, this is true for statistical and computer techniques.

Strangely, although Harrison remarks that the new financial economics has been put to practical use, not least in the Black-Scholes formula, he does not raise the issue of whether the disproportionate growth and change of financial markets themselves has had an effect on attaching finance to economics. It is, after all, an academic discipline that has generally promoted free (financial) markets in the recent period.

Now it would be worthwhile investigating in greater depth how and why finance has become incorporated into economics but applications of human capital have not. This is not the intention here, although we would point to the weakness in attention to economic factors in the study of education that rendered it vulnerable to assault by human capital. Rather it is to highlight two factors that these illustrations share in common, despite their different outcomes. First, by choice, they are both examples of the old economics imperialism, having established themselves in the Becker-type, more generally Chicago-like, mould of an 'as if' world of perfect markets. Yet, each has also moved on effortlessly from that old to the new world of market, especially informational, imperfections. In the case of human capital, it now prospers despite, even because of, acknowledgement of such imperfections in the provision (in schools) and use (in labour markets) of human capital. Paradoxically, one of the leading proponents of the economics of education, Mark

Blaug, turned renegade and was converted away from being a 'True Believer' in view of his acknowledging the significance of market imperfections, especially labour market screening (the use and abuse of proxies for skill levels leading to excessive credentialism, for example) (Blaug 1987). Nonetheless, human capital has steamed ahead with market imperfections being used, as argued by Fine and Rose (2001), as a way of bringing back in on a selective basis some of what has been left out – the specificity of education itself and of the labour markets with which it interacts.

For the economics of finance, the impact of the new information-theoretic economics has been even more dramatic. Whilst the incorporation of finance into economics might have originated with, and been founded upon, the implications of perfectly working markets, the forefront of the sub-discipline is now entirely concerned with the implications of imperfectly working markets. These extend to the non-market, thereby providing a theory of financial systems, archetypically Anglo-American or market-based and German-Japanese or bank-based, according to the extent of non-market relations between borrowers and lenders in dealing with market (informational and contractual) imperfections.[11]

A second general feature shared by human capital and the economics of finance is that they have marched forward only by displacing existing analyses – initially by cutting insights out altogether and, then, by reincorporating them on a selective basis within the framework of market imperfections. As already emphasised, both are established through an 'as if' perfect market as a starting point. For education, as argued by Fine and Rose (2001) amongst others, this leads to the closing of two black boxes. One is the provision of education itself – it is merely reduced to a stream of costs and benefits. The other is the workings of the labour market – it becomes like any other, apart from serving both as a factor input and a direct source of (dis)utility (Fine 1998a). What is notably absent is any idea of education and the labour market as *systems*, as emphasised for example in traditional educational and industrial relations literature. Nonetheless, systemic features are reintroduced as (consequences of endogenous) market imperfections.

Much the same is true of finance, not least in the progress from 'as if' perfect to 'as if' imperfect markets, to which systemic differences have been explicitly reduced. As a consequence, long-standing literature on the nature of financial systems, and their contribution to growth and development, has been studiously ignored. It is as if the debate over Perry Anderson's hypothesis of the peculiarity of the English simply did not exist.[12] Such literature – in dealing with the economic, political and ideological power of a financial fraction of capital – is not readily amenable to interpretation as market imperfections! However, the difference between financial systems has become a major thrust within the information-theoretic approach to economics, with Stiglitz in the forefront. Nonetheless, he has himself been forced to recognise its limitations in light of his own experience in being forced to resign from the World Bank. In his own account, he more or less abandons his life's work for which he received the Nobel Prize, and falls back for causal factors upon the *vested interests* of financiers and their irrational neoliberal *ideology*![13]

Whilst human capital and finance were captured early and readily by economics imperialism, economic geography reveals a different story and is marked by a distinctive rhythm and content. In particular, the influence of postmodernism led to an intensive focus upon the social construction and meaning of space itself. By the same token, further incursions of mainstream economics – with a longer-standing presence than for history – were stoutly resisted with an ill-concealed and general contempt. As a result, political economy established a powerful presence within the discipline, giving rise to a cultural turn but not always or predominantly at the expense of the economic.[14]

What implications does this have for the arrival of the new information-theoretic economics upon the scene? First, there has been the emergence of an associated new economic geography, especially associated with Paul Krugman.[15] It has been sufficiently successful to warrant a contribution to the *Journal of Economic Surveys* (Schmutzler 1999). This is, unwittingly, a telling testimony to the themes of this chapter. In this light, it is worth reproducing Schmutzler's conclusions at length (p. 373):

> First, history matters in the development of agglomerations. Cumulative processes generated by positive externalities can lead to the development of core-periphery structures even when no region has natural advantages. Second, transportation costs, the strength of scale economies and the importance of footloose industries are important factors determining whether such industrial concentration is likely to develop. Third, continuous changes in such parameters can lead to a discontinuous change in economic structure. Fourth, there are possible implications for trade: if positive externalities play a role, increasing economic integration affects both the distribution of manufacturing and the geographical distribution within the manufacturing sector. Fifth, there are interactions between the trade policy and the regional structure of an economy: increasing integration may lead to decreasing concentration within the economy. Sixth, models with transportation costs are helpful ways to understand the causes and consequences of multinationals.

Further, Schmutzler confesses that 'no single one of these aspects is new to spatial economics' (p. 357).

Significantly, none of this has anything to do with geography other than in the limited adoption of some of the vernacular, occasionally of a radical disposition as in reference to core-periphery and the spatial. As a result, the new economic geography can only contribute in a negative sense to the discipline, as sharply elaborated by Martin (1999) in his devastating critique.[16] He points to what is the stripped down restoration of what has been legitimately rejected and the omission of what is essential (p. 77). In terms of the incorporation of history, for example (p. 76):

> The 'history' referred to is not real history: there is no sense of the real and context-specific periods of time over which actual spatial agglomerations have evolved (and, in many cases, dissolved) … Thus, while the claim that 'history matters' is certainly correct, the treatment of history in the new economic

geography is more metaphorical than real and, despite the importance assigned to path dependence, this notion remains a conceptual and explanatory black box.

In addition, Martin highlights Krugman's view that geography had lost five traditions that the latter intends to restore – location theory, gravity and potential models, cumulative causation, land use and land rent models, and local external economies. Here is an economist delving into the history of thought, and getting it wrong. For, as Martin (p. 81) argues, these traditions were not lost but rejected:

> They were deliberately abandoned on philosophical and epistemological grounds, as part of the large-scale movement away from logical positivism that occurred in geography at that time. The location-theoretic, regional science models were cast aside not because the mathematics of maximization-and-equilibrium had (temporally) reached their limits, nor because geographers were unable intellectually to elaborate those mathematical tools, but precisely because of the realisation that formal mathematical models impose severe limits on our understanding. Geographers became more interested in real economic landscapes, with all their complex histories, local contexts and particularities, and less entranced by abstract models of hypothetical space economies.

Thus, Martin concludes, the new economic geography is 'neither that new, nor is it geography. Instead, it is a reworking (or re-invention) – using recent developments in formal (mathematical) mainstream economics – of traditional location theory and regional science' (p. 65).[17]

As such, Martin is concerned that the new economic geography is both flourishing and capable of being turned to policy issues.[18] Significantly, though, in terms of interdisciplinary boundaries and intradisciplinary content, the impact of economics imperialism in this case is potentially indirect, not involving economics directly but the relations between economic geography and regional science. This is illustrated by an astonishing collection in *Regional Science*, vol. 83, no. 1 (2004), which marks the fiftieth anniversary of the Regional Science Assocation International and reflects on past achievements and prospects ahead. The centre-piece is an interview with Fujita and Krugman (2004) entitled, 'The New Economic Geography: Past, Present and the Future'. They had just been awarded the first Alonso prize for developments in economic geography and in the interview they make it clear that they wish to explain global economic patterns by reference to a '*general-equilibrium* story', although, somewhat strangely, they state (p. 141):

> general equilibrium … should allow us to talk simultaneously about the *centripetal forces* that pull economic activity together and the *centrifugal forces* that push it apart. Indeed, it should allow us to tell stories about how the geographical structure of an economy is shaped by the tension between these forces.

This is already a strange story of economic and geographical *change*, based on general *equilibrium*, but attached to forces and tensions.

More specifically, a number of modelling elements are put together apart from general equilibrium as an overarching framework. These include '*increasing returns or indivisibilities* … market structure characterised by *imperfect competition* … of course, *transport costs* (broadly defined), which makes location matter. Finally, the *locational movement* of productive factors and consumers is a prerequisite for aggomeration' (p. 141). However, there is a problem for, even with these few elements, 'Put one thing on top of another, and it all starts to look too complicated to convey any insights. But provided one is willing to make some silly but convenient assumptions … things need not be so bad' (p. 142).

In short, the models can be made to work. But can they be put to practical use? In fact, it is freely confessed that, 'so far we have made little effort to draw policy conclusions from the new geography literature … [although] the models in the new economic geography should be a prime target for government intervention' (p. 156). One reason for this is because of, 'how difficult it is to go from suggestive small models to empirically based models that can be used to evaluate specific policies' (p. 156). But, it is also advised that there is, 'concern … that some of the less pleasant aspects of the history of strategic trade policy will be repeated: the frantic efforts of interested parties to recruit reputable economists to endorse questionable interventionist policies' (p. 157).[19]

This all represents a remarkable feat of analytical acrobatics. The models suggest intervention but are too simple to deploy. And even if they were not too simple to deploy, they would be abused by self-interested or incompetent policy makers. But, and this is crucial, if policy makers can make a difference, then they too should be located within the model (as is recognised by other areas of economics imperialism, not least public choice theory and the new institutional economics). Yet, throughout the discussion, there is no reference whatsoever to institutions and politics, let alone power, conflict and violence. These might be thought to have some purchase on the spatial distribution of economic activity! By parading economics as regional science, and regional science as economic geography, mathematical models of market imperfections reign supreme.[20]

Finally, by way of illustration of the new phase of economics imperialism, consider development economics and studies.[21] Development has increasingly been understood both within economics and across the social sciences more broadly in terms of market and non-market failures in contrast to its traditional location outside neoclassical economics and with greater regard to the institutional, the social, the historical and the dynamic (Leys 1996, Gore 2000, Cameron and Ndhlovu 2000 and Toye 1993). Hoff and Stiglitz (2001, pp. 391–2) argue that:[22]

> In leaving out institutions, history, and distributional considerations, neoclassical economics leaves out the heart of development economics. Modern economic theory argues that the fundamentals [by which is meant resources, technology, and preferences] are determinants of economic outcomes …even

> without government failures, market failures are pervasive, especially in less developed countries.

Further, with casual reference to the Black Death, as an illustrative accident of history (like AIDS today?), and multiple equilibria, Stiglitz and Hoff (1999) provide an explanation for the fundamental problem of why 'developed and less developed countries are on different production functions':

> We emphasize that accidents of history matter … partly because of pervasive complementarities among agents … and partly because even a set of dysfunctional institutions and behaviors in the past can constitute a Nash equilibrium from which an economy need not be inevitably dislodged.

Leaving aside the deployment of standard terminology from neoclassical orthodoxy, the result is to define development as shift in level of capital, composition of output, and the functional as opposed to dysfunctional presence of market and non-market imperfections.

Significantly, though, the new or newer development economics, putatively launched by Stiglitz under the rubric of the post-Washington Consensus, has its origins in the neoliberal assault on the Washington Consensus. This had itself displaced the old development economics by emphasising both the virtues of the market and the use of the deductive as opposed to inductive methods. The extension of the information-theoretic approach to development was anticipated by Stiglitz (1986) at an early stage and with it came the claim to have formalised the old development economics in ways of which its practitioners were incapable (Krugman 1992). As a result, Stiglitz has been cited for 'being one of the founders of modern development economics' (Nobel 2001, p. 10), even though at a late stage, as far as development is concerned, he is far from 'sanguine' about 'the future success of our profession' (Stiglitz 1991, p. 140).

That the new information-theoretic approach is as general and universal as the old economic approach that it seeks to displace, or from which it generalises, is made very clear by its own practitioners. One of its most favoured areas of application within development economics is rural organisation – why there should be share-cropping, for example – for which Stiglitz is a classic contributor. In the preface to the leading text, *The Economics of Rural Organization: Theory, Practice, and Policy* (Hoff, *et al.* 1993, pp. ix–x), something approaching an apology is offered for perceiving the rural as a distinct object of study, whether in the context of developed or developing countries:

> In choosing the title for this book, we initially hesitated to treat the Economics of Rural Organization as a separate area of specialization within economics. One could argue that there is a general theory of information and missing markets applicable to all economies. But in the rural sectors of developing countries … the problems of imperfect information and missing markets are especially acute. There the obstacles to perfect markets arising from

> imperfect information are compounded by rudimentary transportation and communication infrastructure, weak legal systems, and conflicts between statutory and customary property rights systems.

Further, as this passage also indicates beyond the rural, understanding of the differences between developing and developed countries, or the obstacles on one becoming the other, respectively, is filtered through the incidence of market and institutional imperfections, compounded by lack of public and private capital. Rather than discuss this further at this stage, it is simply worth observing that development is history in the making (just as economic geography is, in the placing and the spacing).

4 Concluding remarks

As has been seen, the current phase of economics imperialism is remarkable in two respects. On the one hand is its scope of application. On the other hand, this seems to have enhanced its appeal, rather than stretching it to breaking point, by virtue of failing to acknowledge the limits of rational choice. These two features of the influence of economics over the other social sciences are not independent of one another. Whilst the first is driven from within economics itself through the information-theoretic approach, it does so by emphasising the salience of factors drawn from the other social sciences. The second feature, then, is explained by the way in which economics has been able to present itself as more palatable to the other social sciences.

In short, the old-style economics imperialism sought to push out the boundaries of the economic (approach) to incorporate the subject matter of the other social sciences. By contrast, the new style has recognised those boundaries by pushing out its own method both to transgress and, in a sense, to respect those boundaries. Partly as a result of its own intellectual shift, with emphasis on systemic market imperfections, and partly because of its greater palatability to the other social sciences for this and other reasons, the new economics imperialism has been considerably more successful than the old, building upon and extending its predecessor's successes. One general factor in the impact of economics imperialism is the extent to which a rational choice approach has a presence. It has been pioneered in tandem, for example, by Becker and Coleman at the University of Chicago. They ran a seminar together to promote rational choice. Remarkably, Becker has held an appointment in sociology as well as in economics at the University of Chicago, although he confesses that he found sociology too hard to take up as an academic career: 'After reading Parsons, I decided sociology was just too difficult for me' (Becker 1990, p. 29).

Interestingly, Swedberg (1990, p. 6) seeks to prise a difference between the two proponents of rational choice in terms of their respective disciplinary origins:

> Becker … is mainly concerned with how the neoclassical analysis can be extended to areas outside the economy. Coleman, on the other hand, is trying

to recast sociology on the basis of rational choice. Therefore he is more concerned with maintaining certain traditional sociological features in the analysis than Becker.

However, methodologically, these differences are not substantive, since they reflect a difference in starting-point rather than one of approach, given mutual attachment to rational choice. Becker could not be more Colemanesque in his approach to sociological concepts. For example, Becker and Murphy (2000, p. 23) propose by reference to 'habit capital' that: 'We hope to demonstrate that rational choice theory is not inconsistent with the importance of social structure, but rather is crucial in understanding how this structure gets determined.' As economists of the old neoclassical school, the starting-point is perfectly working markets that are extended to non-market areas. Rational choice sociologists, on the other hand, start from the social as defined by their disciplinary traditions and seek to reconstruct it on the basis of rational choice.

More recently, rational choice has been enriched in its capacity to (re)construct the social in light of its pre-occupation with market imperfections. In addition, as previously, purer forms of economics imperialism can be wedded to the non-rational to give rise to mixed models. All this allows what was previously situated across the rational/non-rational divide to be shifted in favour of the rational, and for this to be applied with more influence and more widely in conjunction with the non-rational. The new revolutionary phase of economics imperialism prospers despite its neglect of earlier debates over the discipline's scope and by virtue of the kudos it gains by being less extreme than the older version which it builds upon and breaks from at the same time.

Notes

1 For a fuller account of what follows, in the context of labour economics, see Fine (1998a, ch. 2).
2 For critical accounts of neoliberalism, see Saad-Filho and Johnston (eds) (2005).
3 This can also be interpreted as the collapsing of numbers, even a continuum, of markets for second-hand cars of different qualities into a single market.
4 Whilst frequently referring to the information-theoretic approach as a paradigm shift, Stiglitz appears innocent of its Kuhnian connotations. For a discussion in this light, see Fine (2002b and 2004c). And for a critical assessment of Stiglitz's radicalism as (development) economist, see Fine and Van Waeyenberge (2005). For Ackerman and Nadal (2004, pp. 6–7):

> The economics of limited information has not led to a new synthesis or a comprehensive new method of modeling and prediction. Rather, it justifies intervention to improve on market outcomes on an *ad hoc*, case-by-case basis. It was, in this sense, the ideal theory for the modest and eclectic liberalism of the Clinton administration, in which Stiglitz initially served as chairman of the Council of Economic Advisors.

This was before Stiglitz became Chief Economist and Senior Vice-President at the World Bank where, nonetheless, his dogged and determined commitment to market imperfections was rewarded with his dismissal.

5 Note, as indicated by respective titles and content of their acceptance speeches, the scope of each of the Nobel Laureates for information economics is in order of ambition, given by Spence (2002), Akerlof (2002) and Stiglitz (2002a).

6 For North (1990, p. 4), 'institutions include any form of constraint that human beings devise to shape human interaction', and are divided into formal (constitution, common law etc.) and informal (conventions, norms of behaviour and self-imposed codes of conduct) institutions. He differentiates institutions from organisations which he defines as 'groups of individuals bound by some common purpose to achieve objectives' (p. 5), and which include political bodies, economic bodies, social bodies and educational bodies.

7 For evidence for this and wide-ranging discussion of the scope and limitations of bounded rationality, see the collection edited by Selten (1990).

8 Note that, over a five-year period around the turn of the millennium, the *Journal of Economic Literature* published articles on economics and the arts, emotions, psychology (twice), religion, preference formation, political science, corruption, sociology (twice), the family, and altruism.

9 See Fine (1998a, ch. 3), Fine and Rose (2001) and Rose (2006) for fuller discussion.

10 See also pp. 180–1: 'The Modigliani-Miller theorem, for instance, relies on an arbitrage argument to prove its point ... Modigliani and Miller rely on "perfect capital markets"'.

11 For a critique of the new financial economics, see Fine (1997) and Aybar and Lapavitsas (2001). For a fully referenced contribution from sociology, viewing the financial system from a network perspective, see Uzzi (1999).

12 The idea that the power of finance has held back domestic industry originates with Anderson (1964). See also Fine and Harris (1985, chs 1 and 4) and Ingham (1984). Note how the current idea of 'financialisation' as a systemic property of contemporary capitalism is more or less confined to heterodox economics (Fine 2007a).

13 See Fine and Van Waeyenberge (2005) for an account.

14 This is marked in the work and influence of David Harvey (1982, 1985 and 1989). See also Lee and Wills (eds) (1997) and Castree and Gregory (eds) (2005), for example.

15 Krugman was awarded the Nobel Prize for Economics for 2008 after this book was submitted for publication. Although most of the press commentary following the award concerned his contribution to trade theory, the scientific background offered by the Prize Committee cited 'Trade and Geography' (Nobel 2008). Unwittingly, it offers a remarkable confirmation of the account that follows here. Both trade and geography are situated in the context of general equilibrium; the basis for trade and spatial patterns is found in a combination of increasing returns to scale, product differentiation for consumers, and transportation costs (p. 4):

> His short paper ... contains not only a new trade theory that allows us to explain observed patterns of intra-industry trade, but also the seeds of a new economic geography where the location of production factors and economic activity can be stringently analyzed with the framework of a general-equilibrium model.

The role of the state in (uneven) development does not figure at all, and policy only in passing (how trade may be favourable to countries despite or even because of market imperfections (p. 9)); and there is the presumption, favoured by Krugman himself, that those in the past were unable to promote their views because 'these insights were not supported by well-articulated models' (p. 2). In short, and more or less in closing, 'By having integrated economies of scale into explicit general equilibrium models, Paul Krugman has deepened our understanding of the determinants of trade and location of economic activity' (p. 18). Krugman's own acceptance lecture, '"New Trade", "New Geography", and the Troubles of Manufacturing' (available online at http://nobelprize.org/mediaplayer/index.php?id=1072), is remarkably weak in content.

16 A further telling critique, of general applicability once mainstream and much other economics confront the international, is the impoverished notion of what constitutes the national and the nation-state.

17 Thus Overman (2003) sees the advantage of the new economic geography over the old as being its relating micro to macro through models with sounder statistical work. Note that similar conclusions are drawn for political science by Miller (1997). See also Udéhn (1996, pp. 18–21) for an overview of rational choice applied to politics. For further critique of the new economic geography, see Goodacre (2005).

18 Compare, though, with the later assessment of Schmutzler (1999, p. 374): 'Finally, of course, the new economic geography literature has one great shortcoming: so far, it has hardly generated any policy recommendation.' This is not surprising since it shares this characteristic with the new, endogenous growth theory of which it is more or less a partial replica.

19 It is surely no accident that Krugman (1992) sees the failures of the old, classic development economics as both formal (no maths) *and* practical (in policy recommendations), the latter for their reliance upon state intervention. And, he is in the forefront of those denying that there ever was an East Asian miracle, in light of the region's growth performance being credited primarily to the accumulation of resources.

20 Note that, only in his conclusion (and in passing) for a paper entitled 'Economic Geography: Spatial Interactions in the World Economy' does Venables (2005), a prominent collaborator of Fujita and Krugman, mention institutions alongside endowments of human and physical capital and of natural environment as affecting outcomes.

21 See also Fine, *et al.* (eds) (2001) and Jomo and Fine (eds) (2006).

22 Subsequently, as Chief Economist at the World Bank, Stiglitz (1998a) was to launch the post-Washington consensus. Note the title of his next major contribution in this vein, 'Towards a New Paradigm for Development: Strategies, Policies and Processes' (Stiglitz 1998b), and how both economic history and development economics, and development studies more generally, come under the Stiglitz orbit.

5 From economics, through institutions, to society?

> The foundation stones of the NIE [new institutional economics] are the same as those of neoclassical economics: methodological individualism and individual rational choice given a set of constraints. However, due to transaction or information costs, information is limited and thus institutions matter.
>
> Rudolf Richter (2005, p. 171)[1]

1 Introduction

The previous chapter has both laid out the general principles underpinning the new economics imperialism and offered some specific examples in and of themselves in relation to its shifting content and impact by comparison with the old economics imperialism based on 'as if' perfectly working markets. This and the next chapter continue along these lines but are more intermediate, between general principle and case study. This is because the case studies that are addressed are extremely wide-ranging in content and each could more or less fill out the whole of social science – although each is also idiosyncratic in part in terms of what it does or does not include and how it evolves. Appropriately then, in Section 2 of this chapter we begin with the new institutional economics, since it has become one of the most all-embracing examples of economics imperialism, with many analytical strands and applications. Its influence has also been felt across a number of disciplines (most obviously economic history, for example, as suggested in the next chapter) and is not confined to the relations between economics and sociology. The strength of presence of the new institutional economics is a consequence of the extent, within economics imperialism, to which institutions have themselves become understood as synonymous with anything that is not narrowly and directly economic. In short, the institutional is the antithesis of the market, itself narrowly conceived as supply and demand, and ranges over the formal and informal, from the state through culture to customs and habits.[2]

Not surprisingly, then, as revealed in Section 3 of this chapter, with the rise of the new institutional economics, the tensions between economics and sociology at their boundaries have both intensified and been accommodated by a multiplicity of methods and approaches reflecting greater or lesser tolerance to the concerns of neoclassical economics, on the one hand, and modernist, postmodernist, and even post-postmodernist, sociology on the other. Faced with the economic invaders, sociologists responded, with new economic sociology as their answer, even inspiring pre-emptive strikes with the notion that economic functioning cannot be appropriately addressed in the absence of the sociological factors that underpin markets. This is so of the classic work that is perceived to have launched the rise of the new economic sociology, Granovetter's (1985) argument that markets must be embedded in social networks. The result has been to create chaos around the boundaries between economics and sociology, and hence the definition of the new economic sociology itself. Does the field, for example, signify the rejection of mainstream economics or its acceptance but with refinement through addition of other considerations and methods? Such confusion does not, however, mean that the separate disciplines of economics and sociology have become any less distinct in their core content and practices, and are liable to disintegrate, as seems to be suggested by Hodgson (2007 and 2008). Rather, as discussed in the concluding remarks to this chapter, there is considerable fluidity in what constitutes the new economic sociology, reflecting and reflecting back upon its constituent disciplines and their own separate developments.

2 New institutional economics ...

New institutional economics is the result of the outgrowth of the literature on asymmetric information and new market failures (Bates 1995, p. 29). Its origins, however, go back to Coase's classic 1937 article on 'The Nature of the Firm'. This was written a few years after Lionel Robbins's *An Essay on the Nature and Significance of Economic Science*. The effect of the latter, as seen already in Chapter 1 in this volume and Milonakis and Fine (2009, ch. 12), is the divorce of economics from broader subject matter through the change in the way economics was defined. This, despite widening the scope of the application of the economic approach, was not without a cost. As Coase (1988, p. 3) puts it, 'one result of this divorce of the theory from its subject matter has been that the entities whose decisions the economists are engaged in analyzing have not been made the subject of study and in consequence lack any substance'. Not only that, but despite the centrality of methodological individualism in neoclassical economics, its analysis does not in fact rest on the choices of individuals but on collective entities such as households and firms, which are treated as if individuals and, as such, are not subject to separate analysis. This has led neoclassical theory to what Bates (1995, p. 28) calls 'a crisis of embarrassment'. The contradiction was detected early on by Coase who, in his aforementioned article, tried to uncover the mystery of what came to be known as the 'black box' of neoclassical theory – the firm. Until then, within neoclassical theory, the firm was treated (and, to a very large extent, still is today) as a production function, as a technical unit which transforms inputs into outputs. Coase changed all this by asking the question 'Why do firms exist?'. He answered through the introduction of the concept of transaction costs[3] which, a few decades later, became the basis of what is now known as new institutional economics, mostly associated with the work of Williamson (1975 and 1985).

The new institutional economics has always taken the perfectly competitive economy (transaction costless, fully informed) as its point of departure in order to explain why non-market institutions exist. As Putterman (1986, p. 1) observes, this initially gave rise to what he calls a 'recent' growing interest in the internal nature of the firm and its consequences for firm-market relations. The new literature has subsequently drawn heavily on the lead given by Coase, Simon and Williamson who are themselves heavily dependent upon the classical liberal tradition (p. 23). Indeed, as Putterman notes (p. 24):

> In historical perspective … contemporary economists rediscovered the firm, after it had faded into obscurity in the refinements of neoclassical theory, as something of an embarrassment. The few, such as Coase, who, though basically 'mainstream' in predisposition, were willing to take the firm seriously … were largely ignored for thirty years.

Such contributors and their followers were perceived to be ' "heterodox" by virtue of their identification with such trends as "the economics of property rights", "transaction cost economics", "the new institutional economics", etc.' (p. 24). They share 'a preoccupation with institutions, categories of social reality that play almost no part in the 20th century orthodoxy of Hicks, Samuelson, Debreu and of the standard texts such as Ferguson and Henderson and Quandt' (p. 20). As Williamson (2002) puts it, his difference with the orthodoxy is to substitute a theory of contracts for a theory of choice but this is hardly analytically dramatic, however much it is presumed to shed light on problems and factors that are otherwise overlooked.

By transaction costs Coase (1937, p. 38) means 'the cost of using the price system', or 'the cost (of) carrying out market transactions' (Coase 1960, p. 144). These include search and information costs ('the costs of discovering what the relevant prices are'), bargaining and decision costs ('the costs of negotiating and concluding a separate contract for each exchange transaction'), and policing and enforcement costs (Coase 1937, pp. 38–9 and 1988, p. 6; Dahlman 1979, p. 148). According to Dahlman, all these different types of transaction costs can essentially be understood as arising out of imperfect information, 'fundamentally the three classes reduce to a single one – for they all have in common that they represent resource losses due to lack of information' (1979, p. 148). In Coase's hands, the existence of transaction costs became the battering ram for opening the 'black box' of neoclassical economics – the firm. In neoclassical theory, in the absence of transaction costs for running the market, there is no rationale for the existence of institutions other than the market itself. Hence, but only then, there is a logic to the treatment of the firm and the household as if they were profit and utility-maximising individuals respectively, able to make instantaneous transactions as required. In the presence of full information and zero transaction costs the market itself will, under appropriate conditions, lead to efficient outcomes, making the presence of any other form of institution redundant. In North's (1995, p. 18) words, 'the neo-classical result of efficient markets only obtains when it is costless to transact. When it is costly to transact, institutions matter'. For Coase, if the use of the market mechanism involves costs, then institutions will evolve in order to minimise the costs of transacting, potentially leading to welfare-enhancing outcomes under the conditions of both resource and informational constraints. Thus, for Coase (1998, p. 7):

> Although production could be carried out in a completely decentralised way by means of contracts between individuals, the fact that it costs something to enter into these transaction means that firms will emerge to organise what would otherwise be market transactions whenever their costs were less than the costs of carrying out the transactions through the market.

In other words, the new institutional economics involved bringing the firm back in. But, in a sense, with a universal theory of contracting in the context of transaction costs, the firm is only symbolic of the non-market, of institutions in general and of organisations in particular.[4] What applies to the firm applies to just about everything else, including informal institutions such as customs and culture. Hence, in principle, and soon in practice with Douglass North at the forefront, the theory of the firm based on transaction costs could become a theory of institutions with a corresponding allocation of activity and resources within and between the market and non-market.

This contribution notwithstanding, new institutional economics does not break fundamentally from neoclassical economics. For, what distinguishes it is that it uses neoclassical tools and methods to explain the existence of institutions and analyse issues that hitherto had remained outside the latter's scope of application. What changes is not the organon (the methodological tools and theoretical concepts) but the questions asked (Arrow 1963). The former includes methodological individualism, the idea of scarcity and competition which are the basis of the choice-theoretic approach, the static equilibrium theory of price, marginalism, and comparative statics (Coase 1937, p. 34; North 1995, pp. 17, 19). In other words, the essential elements, or the 'hard core' in Imre Lakatos's terminology, of what Gary Becker has called 'the economic approach', i.e. maximising behaviour, market equilibrium and stable preferences, is retained. To this a modified 'protective belt' in the form of information and transaction costs is added in order to account for the existence and structure of economic organisations. The presence of transaction costs makes the designation of *property rights* indispensable for the analysis of economic organisation. But, as North and Thomas (1973, p. 8) argue, 'the creating, specifying and enacting of such property rights are costly … Governments take over the protection and enforcement of property rights because they can do so at a lower cost than private volunteer groups'. Thus in addition to the property rights constraint, the role of political institutions is introduced, adding two further elements to the 'protective belt'. In sum, what the new institutional economics amounts to is 'the economic approach, augmented by transaction costs and property rights' (Eggertsson 1990, pp. xiv, also pp. 12–14).[5]

Williamson (1985, p. 41), as the leading theorist of the new institutional economics, takes transactions as the basic unit of analysis and tries to erect a more complete theory of the economic institutions of capitalism. In doing so, he takes a step further away from neoclassical economics by substituting the instrumental rationality assumption of neoclassical theory and its maximisation postulate, with Herbert Simon's concepts of *bounded rationality* and *satisficing*, and his own concept of *opportunism*. Bounded rationality – by which Simon (quoted in Williamson 1985, p. 11), means that 'human behaviour is *intendedly* rational but only *limitedly* so', due to the limited computational capacity of the human brain – replaces the neoclassical assumption of instrumental rationality. As a result, the individual agent's goal becomes one of 'finding a course of action that is "good enough"', or satisficing (Williamson 1993, p. 111). This is a more realistic recognition of an *external* constraint on contracting between individuals, and a claim to greater realism on the internally generated motivation and/or behaviour of individuals. Simon's own approach is itself very much restricted in its departure from the notion of rationality. As Langlois (1990, p. 691) observes, the idea of bounded *rationality* is and has been almost completely silent on the issue of bounded *knowledge* – what is unknowable and uncertain as opposed to what could be known or calculated but is not in light of the costs involved. Instead of a more rounded understanding of knowledge itself, Williamson (1985, p. 47) offers the concept of opportunism, which he defines as 'self interest seeking with a guile'. This includes both active and passive forms: lying, stealing and cheating are examples of the former, while adverse selection and moral hazard are examples of the latter. Both bounded rationality and opportunism mean that the transaction costs of negotiating and enforcing a contract are that much greater due to information imperfections alone, and can, in turn, lead to collective outcomes that promote *governance structures* ('the organisation frameworks within which the integrity of the contractual relation is decided' (p. 41)), which, in turn, lower these costs.

Williamson (1998) has ultimately proposed a four-tier analytical schema. At the lowest rung, 'third order economizing', is resource allocation theory that is appropriately addressed by neoclassical economics: 'get the marginal conditions right'. It is set within the context of second-order economising which is devoted to contracting, and analytically subject to transactions costs economics: 'get the governance structure right'. This in turn is determined by first-order economising, concerned with the formal rules of the game, to be examined by the economics of property rights: 'get the institutional environment right'. Finally, social theory is the broadest, first tier, encompassing 'embeddedness: informal institutions, customs, traditions, norms, religion'. It appears to eschew economising and is the subject of social theory (p. 26).

Williamson also provides for feedback mechanisms between adjacent tiers. This renders the initial analytical structure arbitrary, other than in its derivation from a starting point within neoclassical economics, for there is no reason why one tier should be privileged over another and why all should not be determined simultaneously. Indeed, the whole analytical schema is a consequence of taking third-order economising as the starting-point and, partly by design and partly of necessity, moving to 'higher' levels of analysis which might, on a more circumspect approach, be considered to be more appropriate as a beginning. More generally, Furubotn and Richter (1998, p. 436) provide a comprehensive overview of the content and evolution of the new institutional economics;

> At first glance, it might seem that exponents of the new institutionalism would show some interest in the work of the old institutionalists ... Such concern with past work, however, is not found in the attitudes of neoinstitutionalists. While there may be some exceptions to the rule, most neoinstitutionalist scholars have been at pains to disassociate themselves from the central ideas put forward by the old institutionalists. What gave the original NIE advocates such confidence that they could disregard the older work on institutions was the belief that standard neoclassical analysis could be readily *generalized or 'extended' to treat institutional problems*. The position taken reduced to this.

Thus, Furubotn and Richter conclude that the new approach is an amalgam of a critique of standard neoclassical economics (due to the absence of transaction costs, etc.), a continued reliance on formalism and model building, and an apparent move towards greater realism. As Bardhan (1989, p. 4) correctly anticipated at an early stage, formalisation of the new institutional economics at the expense of the old, and even not so old, was inevitable given its greater 'rigour':[6]

> One strand originates ... from a famous paper by Coase (1960), which led to the flowering of a whole school of neoclassical writers on property rights and transaction costs. These writers developed a well articulated endogenous theory of institutions and traced economic history to changes in the institutional ground rules. Although several writers with quite distinct patterns of thought are involved here ... we shall lump them together and call theirs the Coase-Demsetz-Alchian-Williamson-North (CDAWN) school. The other strand grew out of the theory of imperfect information (particularly of the Akerlof-Stiglitz vintage). Even though it has some family resemblance to the transaction cost theory, it provides a more rigorous and sharply defined framework for analysing institutions as substitutes for missing markets in an environment of pervasive risks, incomplete markets, information asymmetry, and moral hazard.

Bardhan is right to point out the distinction between the two schools but the differences should not be exaggerated nor their synergy and complementarity overlooked. Indeed, Bardhan himself continues (p. 6):[7]

> The imperfect information theory of institutions is closely related to that of transaction costs, since information costs constitute an important part of transaction costs. But the former theory is normally cast in a more rigorous framework, clearly spelling out the assumptions and equilibrium solution concepts, drawing out more fully the implications of strategic behaviour under asymmetric information.

The crucial point here is that the casting in a more rigorous framework is to locate the approach and to make it acceptable within the discipline of economics itself. On the other hand, the more informal school provides a flexible analytical bridge between the formal school and the other social sciences. It tempers and disguises the formalism, etc., of mainstream economics as it feeds it to other disciplines, and it plunders the social sciences for the raw materials on which it can feed itself and its more formal version. This is the way of creating 'the articulation of the economic calculus with other aspects of institutional embodiment of a normative structure', as observed by Zald (1987, p. 707) which, for him at that time, 'is a task that lies ahead', in view of the fact that, 'communities depend on trust, dignitary justice, and on other values that economists have difficulty analyzing'. Similarly, Moe (1984) argues that the new economics of organisation compensates for the conceptual simplicity of its mathematical models, however technically complicated in themselves, by eclectic appending of additional factors. Accordingly, Zald's task has been broached by utilising a rational/non-rational approach to institutions that is already noted for evolutionary theory by Putterman (1986, p. 24), and that has arguably strengthened since then as in the evolution of the work of Nelson and Winter (1982 and 2002). For the latter, bounded rationality and dynamics are seen to be sufficient to mark a breach with neoclassical economics but they have, to a degree, become its bread and butter.

In a symposium organised by the *Journal of Institutional and Theoretical Economics*, contributors were asked to respond to an invitation to assess bounded rationality 'as Applied to Modern Institutional Economics' (Richter 1990). The results are revealing and representative of the literature more generally. First, one response is to accept bounded rationality in the limited sense of extending the notion of rationality to the conditions associated with costly transactions. It becomes rational to behave as if bounded, and so bounded rationality is explained as, or reduced to, rationality only in constrained conditions of imperfect and costly information. Second, another response is to seek out additional motivation to complement rationality, as has been so often in terms of the dualism between it and non-rationality. Third, each of the above responses opens up the way to any number of mixed theories, deploying, inventing or re-inventing concepts from across the social sciences – by reference to greater realism ('man is as he is'), evolutionary behaviour, experimental economics, institutions, path dependence, multiple equilibria, aspirations, imagination, cognition, context, coalitions, opportunism, and so on. Fourth, at a detailed level, the results are in some respects extraordinarily modest. Lindenberg (1990, p. 727), for example, cites Simon (1985, p. 295) to the effect that, cognitive psychology 'is no longer limited to dealing with "toy" tasks … in the laboratory, but can give rather impressive accounts of adult performance in professional-level tasks'. Be this as it may, this is a long way from the ambitions of the new institutional economics and its desire to explain macro and social outcomes on the grandest scale.

The problems associated with the new institutional approach in economics are many. Both Coase and Williamson offer a static and timeless approach, which does not break with the neoclassical (Walrasian) framework in its reliance upon equilibrium. They do so through the use of universalistic and ahistorical concepts, such as transaction costs and property rights, to explain the existence of firms and other capitalist institutions while totally neglecting the historical dimension of their emergences and the question of uncertainty as opposed to calculable risk (Fourie 1993; Slater and Spencer 2000; Pitelis 1998; Toye 1995, pp. 65–6). Another problem with the work of Coase and Williamson is that they fail to provide clear and precise definitions of their basic concepts such as firms, transaction costs and capitalism. It is remarkable that Williamson does not even attempt to give a definition – the closest he comes to it for transaction costs is in quoting Arrow's definition as the 'costs of running the economic system' (Williamson 1985, p. 19 and see Hodgson 1988, ch. 9 and 1999, ch. 9; Pitelis 1998). And Zald (1987, p. 706) shrewdly recognises that, although Williamson is concerned with *institutions*:

> No attention is given to defining them or to thinking about institutions as a concept. By 'institution', Williamson seems to mean any form of social organization from a type of contract ... to a type of law ... to a type of complex organization ... Now, there are institutions and there are institutions. All social arrangements are not equally institutionalized.

Further, as Gustafsson (1991, p. 31) observes, with particular reference to North, 'Transaction costs seem to be a rather slim basis for explaining the existence of institutions within an analytical framework, which includes governments and ideology as (the most) important sources of institutions'. Similarly, Papandreou (1994) argues that vague ideas around market imperfections, and externalities in particular, have provided the basis for a theory of corresponding, if not necessarily inefficiency-compensating, institutions.

The same considerations apply to the concept of the firm. Coase (1937, pp. 41–2) loosely and vaguely defines it as consisting of 'the system of relationships which comes into existence when the direction of resources is dependent on an entrepreneur', the latter representing 'the most basic attribute of the firm'. To this the problem of the measurement of transaction costs should be added, since, as Toye (1995, p. 65) puts it, 'unless transaction costs are quantified, they are not being "taken into account" properly'. Simply admitting their existence theoretically can lead to arbitrary conclusions susceptible to strong subjective bias. In other words, without quantification, anything can be explained by invoking suitably defined transaction costs. This way, however, 'transaction cost ends up as an all-purpose tool of explanation, pressed into service to "solve" any and every puzzle – but in fact empty of explanatory power' (see also Matthews 1986, p. 917).

Lastly, and as already indicated as being characteristic of the new institutional economics, albeit rarely recognised, the historically and socially contextual is incorporated only in the narrowest sense and without attention to the meaning of the categories deployed. As Moe (1984, p. 708) observes in anticipating the application of the transaction cost approach to the theory of bureaucracy:

> The advantage of [such] a simple analytical framework is that organizational issues can be cast in a clear, rigorous manner that allows for the application

> of conventional economic methods. A corresponding disadvantage, however, is that such a framework sometimes encourages highly complex mathematical treatment of trivial problems: form tends to triumph over substance, and analytical concerns tend to take on lives of their own that have little to do with the explanation of empirical phenomena.

Thus, it is apparent that the social and the historical are only reintroduced in a nominal fashion without regard even to crude distinctions across the swathe of institutional forms as far as the non-market is concerned.

In addition, however, this leaves open the initially given conditions which determine allocation between market and non-market – why are resources, information, etc. the way they are? The boundary between exogenous and endogenous has only been slightly shifted to widen analytical scope in explaining the market and non-market divide. Two complementary options are open for proceeding further. One is to appeal to 'history' in the form of initial conditions, path dependence, multiple equilibria and the like (to be fully discussed in Milonakis and Fine (forthcoming), as the outcome within the new economic history, but see also Fine and Milonakis (2003) and Fine (2003a)). The other is to shift back the boundaries of endogeneity even further. With considerable overlap, these two ways forward reflect the respective thrusts of North and Williamson.[8]

Consider Williamson's (1975, p. 21) own explicit confession that 'I assume, for expositional convenience, that "in the beginning there were markets"'. From this point on, it is possible to write an economic, social and institutional history of the world as, also in the beginning, there were both transaction costs and bounded rationalities of one sort or another. But what do we mean by markets – are they the same in all circumstances, and how did someone have the idea of markets in the first place in order to use them, let alone allow Williamson to assume them at a later date for his own analytical convenience? As Ankarloo and Palermo (2004, p. 413) have demonstrated in detail, the assumption of markets 'is not an expositional convenience but one of theoretical consistency'.[9] The market has to be assumed in order to allow it to be placed in relation to the non-market and, in this respect, the approach borders on tautology – assume markets exist in order to determine their scope. It also unduly privileges transaction costs as an explanatory device with the absence of power and other traditional variables from across social theory – Zald (1987, p. 705) referencing Perrow (1981 and 1987), for example – although this is not essential in the evolving new institutional economics that can appeal to other factors across the rationality/non-rationality and market/non-market divides. Williamson himself might be thought to have been opportunistic in this regard in order to refine his organisational theory in light of empirical anomalies (and then to test the theory against the evidence, Williamson (2002)). As Clark and Rowlinson (2004, p. 337) conclude:

> The subordination of history to conceptual modelling is evident in Williamson's assertion that his arguments rely 'on a combination of *a priori* theorizing and related natural selection arguments'. Thus he pronounces that it was

'not by history but by logic' that the owners of capital become the owners of enterprise.

In short, it would appear that history is to be made to fit the logic rather than vice-versa.

A significant issue in all of this is where, and not just when, the divides are drawn between exogenous and endogenous and market and non-market (and rational and non-rational). In the beginning, something has to be taken as exogenous. The new institutional economics as pioneered by Williamson, himself drawing upon Coase and the simple idea of transaction costs, initially extends the endogenous in an extremely limited way. The attempt is made to explain the empirically unavoidable existence of firms, not just markets, and to do so in the most parsimonious way by reference to the cost of transactions and how they might be reduced through internal organisation. From such humble origins, much like the market for lemons, the scope both of explanatory factors and of rendering endogenous what was previously exogenous is extended enormously, not least through the analytical prism offered by the information-theoretic approach. This is acknowledged by Williamson (2002) as he finds himself uncomfortable with the property rights theory of the firm that essentially draws exclusively upon the information-theoretic (and incentive compatibility) approach as opposed to his contracting approach because of lack of attention to bounded rationality and 'governance'. The imperialist finds himself colonised!

3 ...Versus new economic sociology

Economic sociology is defined by Swedberg (2003, p. xi) as 'the application of the sociological tradition to economic phenomena in an attempt to explain these'. It is mostly concerned with social action. Its subject matter consists of 'the patterns of social interaction and the institutions that people create in their attempts to make a living and a profit'. In other words, economic sociology examines the role of social relations and social institutions in the economy. It deals with what Max Weber has called 'economically relevant phenomena'. As such, it draws its roots from Weber and Schumpeter's programme of *Sozialökonomik* or social economics. Economic sociology was intended to be part of *Sozialökonomik*, but only part of it. The latter, having failed to become part of the economist's research agenda, was instead dissolved into one or another discipline or sub-discipline the two writers helped to establish (i.e. sociology and economic sociology). By contrast, it hardly warrants a mention, even in history of economic thought textbooks. Indeed Weber (together with Emile Durkheim) was the first to use the term economic sociology, to be followed by the 'economist' (Schumpeter, *et al.* 1994, p. 3).

It is justifiable then that these three writers, together with some other prominent writers such as Karl Marx, Werner Sombart, Karl Polanyi and Talcott Parsons, are considered as the founders and towering figures of this sub-discipline (Trigilia 2002; Swedberg 2003; Smelser and Swedberg 1994). Weber's impact on its emergence and evolution is so great that one of the leading modern exponents of this tradition considers Weber's *Protestant Ethic* as a 'paradigm and a guide for how to proceed in economic sociology' (Swedberg 2003, p. xi, and see Milonakis and Fine 2009, ch. 11). For Smelser and Swedberg (2005, p. 14), it is apparent that the earlier attempts 'to revive economic sociology … attracted little attention, and by the 1970s the field was somewhat stagnant', although 'a number of works inspired in one way or another by the Marxist tradition – and its general revival in the late 1960s and the early 1970s – made their appearance in this period'. With grand or old economic sociology sanitised, it was not long before it could emerge anew as a reaction against the incursions of neoclassical orthodoxy, as opposed to posing its own account of economic and social change.

Over the past two decades, following Granovetter (1985 and 1990), there has been a revival of interest in the field of economic sociology under the banner of the new economic sociology. Significantly, this was and is seen as a reaction against economics imperialism, and in particular against the rise of new institutional economics (Swedberg 1990, p. 17). According to Granovetter (1985, p. 505 and see also Smelser and Swedberg 1994, p. 18; Richter 2001, pp. 3–4, 2005):

> The main thrust of 'new institutional economics', is to deflect the analysis of institutions from sociological, historical, and legal argumentation and show instead that they arise as the efficient solution to economic problems. This mission and the pervasive functionalism it implies discourage the detailed analysis of the social structure that I argue is the key to understanding how existing institutions arrived at their present state.

As seen already, the new institutional economics initially represented the neoclassical attempt to analyse economic institutions, especially the existence and inner workings of the firm as starting point, through application of the concept of transaction costs (Furubotn and Richter 1998). 'With the development of NIE', states Richter (2001, p. 4), 'economists deeply infiltrated sociologists' territory and sociologists, understandably, rose in arms. They lined up to a counter attack under the banner of *New Economic Sociology*'.

Generally, the initial reception to new institutional economics by sociologists was hostile (pp. 14–26). Yet Granovetter's own reflections on the origins of his now classic, initiating 1985 contribution to the new economic sociology are revealing, especially with respect to his introduction of 'embeddedness' to the subsequent literature (Krippner, *et al.* 2004). For a start, his contribution received no influence from the use of the latter term by Polanyi. Indeed, his use predates his having read Polanyi (Krippner, *et al.* 2004, p. 113). Thus, his elevation of embeddedness to prominence as the structural aspects of social networks is seen by him as modest and limited: 'you also have to analyse institutions and culture and politics and all of the micro and macro elements, of which "the meso-level" of social networks is in the middle' (p. 114).

Further, he had no idea in advance that his paper would become a classic and this was not his intention (p. 115):

> I was just trying to get the thing published … I was also reacting against the functionalist economism of writers like Oliver Williamson and Marxist economists, like Samuel Bowles and Herbert Gintis … Maybe if I had known it would be an influential paper I would have taken more care to say that there's more to life than the structure of social networks.

Granovetter even confesses that 'I rarely use "embeddedness" any more, because it has become almost meaningless, stretched to mean almost anything, so that it therefore means nothing' (p. 113).

In short, Granovetter's launch of the new economic sociology was a relatively limited reaction against economics imperialism in its form of new institutional economics, methodologically pitched at, and empirically focusing upon, the meso-level (especially in and around firms). Its detachment from Polanyi, let alone other grand theorists of 'transformation', is symbolic of the extent to which the fledgling new economic sociology discarded big questions and big theory.

By the mid-1980s economists had also started to redraw the traditional boundary separating economics and sociology, and to make forays into areas that sociologists by tradition saw as their own territory. It is also during this period that Becker, Williamson, and others came to the attention of sociologists. Likewise, sociologists began to reciprocate by taking on economic topics. How would economists and sociologists reconcile their differences, if at all?

From that point on, the content and dynamic of the new economic sociology have been determined by an uncomfortable and unsteady straddling of the boundaries between the two disciplines, with each claiming to hold supremacy whilst ignoring the claims of the other. Inevitably, contributions tend to fall upon one or other side of the disciplinary divide. Those on the side of sociology tend to bring back into economic analysis much more in method and substance than is to be found within mainstream economics. Paradoxically, if understandably, those on the other side bring back in much less in drawing upon the technical apparatus of economics but, in doing so, tend to make much bigger claims about what they can explain (most notably, for example, when on occasion the new economic sociology meets the newest economic history of North as an institutional theory of economic change and success or failure).

With these origins, and through these inputs, it is hardly surprising that the new economic sociology should have gone from revival to explosive growth, despite being still mostly confined to America – in Europe it remains more in its infancy. It has provided a broad umbrella in which both sociology and economics can contribute, adding elements from one another's frameworks or critically deploring their absence. As Smelser and Swedberg (2005, p. 20) put it:[10]

> While the current pluralistic approach has given economic sociology richness and vitality, the bolder, creatively synthesizing efforts of the classics are notably missing. Without that complementary line of theorizing, the field of economic sociology … tends to sprawl. Continuing efforts to sharpen

> the theoretical focus of economic sociology and to work toward synthetic interpretations of its findings are essential.

As Reisman (2007) confirms in his review of the massive Swedberg (ed) (2005), there has in the new economic sociology been a loss both of the bigger picture and the influence of Marxism.

Thus, in just a little more than 20 years, the new economic sociology has been transformed almost beyond recognition, as is revealed by the commentary of Zelizer (2007, p. 1056):

> Economic sociology has gone through astonishing changes in the past 25 years. From a simultaneous critique of and complement to neoclassical economics, it has become a rich, self-sustaining field. It has begun to generate or incorporate serious alternatives to neoclassical economics.

She perceives that there has been an important influence for change from within economics through behavioural, feminist, organisational and institutional economics, as well as neuroeconomics, with these serving as critiques of neoclassical models. It is a moot point whether these have served to strengthen rather than to undermine orthodoxy (see Chapter 7 in this volume). But for Zelizer (pp. 1057–8), they have also been complemented by the effect of incorporating power, bargaining and interpersonal transactions as a critique of neoclassical economics from without, and the emergence of 'hybrid disciplines … with their versions of economic processes' – world system theory is one example.

Zelizer goes on to state that 'For my entire career, I have worked on different economic processes … For years, no one, including me, called what I was doing economic sociology' (p. 1056). But, she observes, the second edition of Smelser and Swedberg (ed) (2005) 'prominently features new institutionalism, emotions, behavioural economics, and law, all subjects absent from the first edition's table of contents only 11 years earlier' (p. 1059). Indeed, to her surprise, 'intellectual organizers of the field … started pointing to my work as an example of a new current within the field' (p. 1057). Her own work has concerned the values and meanings, and hence differentiated structures and processes, that agents bring to and draw from markets. This is so much so that she rejects, for example, the idea of a theory of a homogenising money for a theory of monies, each normatively valued and deployed differently by users despite their common form.[11] Thus, firmly on the sociology side of the new economic sociology that claims her as its own (and now vice-versa), Zelizer commendably rejects the idea that it should be neoclassical economics plus something else or dressed in sociological clothing. Indeed, she even hints at the rejection of Granovetter for being too complicit with economics, something common in the more interpretative sociological literature. For her, 'sociological seekers after an alternative economic sociology criticized the idea of embeddedness, which implied that social processes supplied the economy's shell, but the shell's real contents consisted of economics' rational exchange systems' (p. 1058).

But have Zelizer and those like her been integrated into the new economic sociology, enlarging rather than refining and redefining it? It is a bit of both. For, like embeddedness, the traditional concepts of old economic sociology can equally be appropriated by new institutional economics in the image of economics imperialism and lie side-by-side within the new economic sociology with its more nuanced understanding. In deploying a parody of economics itself, Granovetter (2005, p. 47) offers some striking reflections on what has been achieved and his hopes for the future, for reconciliation rather than separation, let alone transformation, of the two disciplines:

> While economic models can be simpler if the interaction of the economy with non-economic aspects of social life remain inside a black box, this strategy abstracts from many social phenomena ... When the black box is opened, it is often with the goal of making networks, norms, institutions, history and culture fully endogenous to economic models assuming that otherwise no systematic argument can be made. But pursuing this daunting agenda makes poor use of economists' comparative advantage. The disciplines that neighbor economics have made considerable progress in unpacking the dynamics of social phenomena, and a more efficient strategy would be to engage in interdisciplinary cooperation of the sort that trade theory commends to nations.

Of necessity, a broader range of sociological approaches is now available to inform the renewal of economic sociology than in the 1930s, especially in reaction to Lionel Robbins, when Parsons recommended that sociology and economics go their separate ways in view of their differences of method, if not necessarily subject matter (Milonakis and Fine 2009, ch. 12). On the other hand, the options available from the economics side of the fence, in terms of both weight and confidence, have narrowed to the principles of marginalism that Parsons was so determined to avoid. Contra Granovetter, it is disputable whether a new economic sociology based on the principles of comparative advantage between the two disciplines as trading partners is liable to be anything other than an economics imperialism.

4 Concluding remarks

New institutional economics and new economic sociology are, then, two typical examples of the 'incessantly shifting' boundaries between economics and other social sciences, in this case sociology. The former represents a typical example of an attempt by economics to invade the subject matter of another social science, sociology, through the use of the economic organon comprising rationality, efficiency and equilibrium, supplemented by transaction costs to add the explanatory power to address the existence and functioning of institutions. In other words, institutions exist because markets work imperfectly and are understood accordingly. New economic sociology, on the other hand, represents an attempt by sociologists to use, as it were, the sociological organon (or organons) to analyse economic phenomena and the role that 'economically relevant phenomena' play in economic processes. These two traditions certainly share some common ground as far as their subject matter is concerned. But the analytical tools, and the approaches used, differ considerably.

Despite differences, there have been recent attempts to forge a compromise. Richter (2001, p. 32), for example, even thinks that 'in the course of time NES [new economic sociology] and NIE may converge into some "NSE" (New Socio-Economics)'. If so, it will remain a mish-mash of unresolved tensions and differences. Yet, almost inevitably, whether the dream of NSE is realised or not, the outcome will be a creeping, even galloping, encroachment of new institutional economics as a cloak (and dagger) exercised on behalf of economics imperialism as its presence within the new economic sociology is strengthened. The logically possible alternative of a sort of reverse imperialism (see Chapter 7 in this volume), in which sociology prevails not only over the new economic sociology but, by extension, even to economics itself, is inconceivable given the rigidity and uncompromising nature of mainstream economics as a discipline.

In short, the fate of the new economic sociology remains for it to be open and diverse. But there are severe limits imposed on the input that will be derived from economics. This is crucial to bear in mind in considering the prospects for the overall balance of the field, both in terms of the relative weight contributed by the two disciplines and, at least for sociology, the substantive content that is incorporated at the expense of economic orthodoxy. Economics imperialism is nothing if not tenacious and is bound to prevail to the extent that sociology fails to offer alternatives grounded in a political economy of capitalism that displaces the privileged position occupied by neoclassical economics, which currently serves, at most, as a critical point of sociological departure.

Notes

1 Rudolf Richter is the longstanding editor of the *Journal of Institutional and Theoretical Economics*.

2 Nonetheless, the new economic sociology that remains critical of neoclassical economics, around the notion of embeddedness for example, emphasises that markets themselves are differentiated and need to be constructed through the non-economic. This notion of embeddedness can, however, itself be reduced to, and incorporated within, market imperfection economics.

3 In fact, Coase did not use the term itself – it was introduced by Arrow (1969).

4 For North's distinction between institutions (formal and informal) and organisations see Chapter 4 in this volume, Note 6.

5 In addition to the role of political institutions, North (1981 and 1990) has also added ideas, ideologies and belief systems as crucial factors in explaining institutional change. For a critique of North's theory, see Fine and Milonakis (2003) and Milonakis and Fine (2007).

6 Significantly for the following discussion of development, Bardhan (1989) continues: 'Since this environment in some respects is particularly acute in developing countries, the recent literature in development economics has seen a number of attempts to model institutions, especially in agriculture, on these lines.'

Also of relevance, for the colonisation of radical political economy (for further discussion see Milonakis and Fine (forthcoming)), Bardhan (p. 5), confesses:

> In my fits of heretical eclecticism, I also believe that Marxists can profitably draw upon some of the ideas of the other two schools in building firmer micro foundations for their theory of historical materialism, just as at least one distinguished member of the CDAWN school, Douglass North (1981), seems to have integrated a significant part of Marxist ideas in his neoclassical property rights theory of history.

See also Hodgson (1994a, p. 22).

7 See also Dahlman (1979) and above.

8 This is reflected in the recent, synthesising work of Aoki (2007), for whom institutions are a form of game. But this then raises the issue of how the game is defined, with his running from pillar to post to endogenise what would otherwise have to be explained – and leading to the most bizarre analytical outcomes. Institutions are defined thus: '*An institution is self-sustaining, salient patterns of social interactions, as represented by meaningful rules that every agent knows and are incorporated as agents' shared beliefs about how the game is played and to be played*' (p. 6). Hence, Aoki can close, '"history matters" as well as "institutions matter"' (p. 28).

9 See also Clark and Rowlinson (2004).

10 Swedberg's (2005, p. 32) own response in closing is 'the following maxim: *follow the interests!*'. But there remains a pluralistic eclecticism of epic proportions, as this involves, 'production, exchange, consumption, and profit the four main themes in an economic sociology of this type: to these should also be added the impact that law, politics, and culture may have on these' (pp. 30–1).

11 See Zelizer (1994) and Fine and Lapavitsas (2000) for a critique and Zelizer (2000) for a response.

6 From social capital to freakonomics

Since the science of economics is primarily a set of tools, as opposed to a subject matter, then no subject, however offbeat, need be beyond its reach.

Steven Levitt and Stephen Dubner (2006, p. 14)

Although … previous volumes dealt with learning processes, the present volume moves this theme to center stage by asking explicitly how firms, industries, and even nations can learn to overcome uncertainty … The essays in this volume thus mark a transition from focussing on problems that are common to a whole class of firms or industries to explaining why firms, groups, and nations can differ in important and persistent ways.

Naomi Lamoreaux, Daniel Raff and Peter Temin (1999, p. 10)

While early work had focused primarily on governance, macroeconomic rates of growth, and (in closely related) work school performance and job placement, we now are beginning to see how social capital can influence everything from infant mortality rates to solid waste management to communal violence.

Robert Putnam (2002, p. xxii)

1 Introduction

Eric Hobsbawm (1994) entitled his history of the twentieth century *The Age of Extremes*, reflecting the diversity and range of experience characteristic of the period, which closed with capitalism triumphant and under US hegemony. We hesitate before using Hobsbawm's account either as a metaphor or as an explanation for the extremes to which the social sciences in general, and economics in particular, have been driven over the last century. Nonetheless, the parallels are compelling as interdisciplinarity has given way to fragmentation into separate social sciences, modernism to postmodernism, and economics has become little more than an outpost of the US professionalisation, homogenisation and dominance of the discipline.

In Section 4 of this chapter we consider one of the extremes to which even that most extreme of disciplines, economics, has been driven by its inner logic and continuing momentum. For, over the past decade, the language of extremes has been adopted by the discipline to describe itself in the form of 'freakonomics', although the term has been deployed, extraordinarily successfully, in promoting a particular type of economic analysis to popular audiences to an extent that is unprecedented. However, despite its nomenclature suggesting something out of the ordinary, we show that freakonomics is a natural progeny of economics imperialism, both reflecting and promoting its designs on the other social sciences. Its apparent anomalies in relation to economic orthodoxy are more a reflection of the latter's own dissonances in terms of the limitations of its own theoretical grasp, the realisation of these through econometrics in practice, and the extension of that practice to the non-economic. Indeed, freakonomics tends to close off alternatives to the mainstream as far as economic theory is concerned. For it does not so much question that theory as apply it on a broader canvas with a fuller pallet of colours, much like economics imperialism itself.

Before we explore its progeny in the form of freakonomics, two more examples, if less extreme, of economics imperialism are given in this chapter. Similar to the new institutional economics, discussed in the previous chapter, there have been other devices, as covered here in Section 2, by which the social and the historical have been reintroduced into economics in the same general, all-embracing way to denote non-market relations and the passage of time, respectively. Such is the thrust of social capital and of the newer economic history that builds upon the new economic history, or cliometrics, that represented an ideal illustration of the old economics imperialism. As such, it drew upon an 'as if' perfect market vision of economic history, one without transaction costs. These are introduced with the newer economic history and Ronald Coase, who first emphasised transaction costs in the 1930s, (re)discovered them as the basis for explaining institutions from the firm through to the state. But, as revealed in Section 3 of this chapter, the adoption of this Coasean world of transaction costs is anomalous since Coase himself rejected the extension of what he termed blackboard economics to the discipline itself, let alone to others. Thus, not only did Coase have to be discovered, he also had to be reinvented more or less as his own antithesis in order that economics imperialism could prosper on the basis of transaction costs in his name.

In this light, the concluding remarks of this chapter draw attention to a peculiar interaction between the three topics – new institutional economics (covered in the previous chapter), newer economic history, and social capital. Whereas the first two heavily overlap and are mutually supportive, social capital has been more or less absent from the other two. This is less a reflection of lack of compatibility with one another than the disciplinary origins of the subject matter and the timing of its incorporation.[1] Despite these differences, what all of these topics demonstrate is the shifting interactions between the social sciences, with freakonomics as a prominent outcome in light of economics imperialism.

2 Economic history and social capital?[2]

The marginalist revolution had the effect of taking the social and the historical out of economic theory, most notably in the mathematical theorems associated with general equilibrium and its corresponding technical apparatus. But economics imperialism involves attempts to incorporate them once more on the basis of the method and techniques associated with mainstream economics, and especially in view of its methodological individualism of a particular type. Social capital and the new economic history provide outstanding illustrations, in part by way of contrast with one another.

The new economic history, or cliometrics, much like the old economics imperialism in general and public choice theory in particular, emerged relatively soon after the Second World War.[3] Initially, it was primarily a product of the United States, and for good and paradoxical reason. As with American institutionalism, 'old' economic history in the interwar period was the outgrowth of historical economics following its marginalisation within economic science and the channelling of the intellectual efforts of its practitioners into the newly emerging discipline of economics history, see Milonakis and Fine 2009, chs 5 and 8. It had more of a narrative bent but had been located within economics, as opposed to history, departments and was a compulsory component of courses in economics. This opened the way at an early stage in the postwar period for those trained in economic principles to recognise the potential of extending them to economic history. It offered an opportunity for economists to exercise revenge for having been forced to study history. As Douglass North (1963), a pioneer in the field, was to suggest, economic theory should be applied to historical problems irrespective of the level of realism involved. The result was to give rise to a revolution in economic history and the creation of the field of cliometrics. In principle, any economic theory could have been applied. But, in practice, it generally involved the direct or indirect consequences of individual optimisation in the context of neoclassical price theory, with the proviso that these should, where possible, be tested against data usually through some ex post calculation of costs and benefits or some simple form of econometrics. According to one of the protagonists who was later to receive the Nobel prize (together with North) for his contribution to cliometrics, Fogel (1966, p. 651): 'The methodological hallmarks of the new economic history are its emphasis on measurement and its recognition of the intimate relationship between measurement and theory.' This amounted to the official introduction of positivism into economic history (Freeman and Louçã 2001, ch. 1).[4]

Cliometrics established itself so successfully that it was already understood as a revolution within the discipline of economic history within a decade or so. But it did not go unopposed, precisely because of its intellectual location in relation to history, albeit practised by what were primarily economists. New economic history attracted considerable controversy from the outset. Indeed, both success and opposition were so strong that history was divided into separate camps of economic and social history, with powerful boundaries between the two, both of subject matter and methods. These divisions were consolidated further as economics became increasingly formal in models and statistical techniques and social theory embraced various forms of postmodernism with considerable influence within social history (Lamoreaux 1998).

This impasse has only begun to be broken recently, if at all, with the emergence of what we have termed the newer economic history. Like the new economic history, it recognisably draws upon the economic theory to which it can attach itself: the notion of market imperfections in general and of information-theoretic economics in particular. The newer economic history essentially has two broad claims or, more exactly, a confession and a claim. The confession is that the new economic history had been too aggressive on too narrow a basis as a result of undue reliance upon an 'as if' perfect market version of neoclassical economics. As a result, critics had appropriately pointed to the absence of their traditional concerns with the role of the non-economic, from institutions through to the historical process itself and its attachment to specificity.

The claim, however, is that this can now all be corrected by the deployment of a more rounded and appropriate economic theory, one that recognises that markets do not work perfectly. As a result, they are complemented by both economic and non-economic historical forms that have an effect on outcomes. In short, history matters, institutions matter, and so on, as had been claimed by opponents of cliometrics all along in criticism of the use of universal models without attention to context and meaning (see Temin (ed) 1991; Lamoreaux and Raff (eds) 1995; Lamoreaux, *et al.* (eds) 1999; Lamoreaux, *et al.* 1997; and Lamoreaux 1998 for clear statements and pioneers in the newer economic history, and Fine 2003a for a critical assessment of them in particular).

A moment's reflection, however, and closer scrutiny of what is meant by such matters is highly revealing. For it uncovers that critical concerns have not so much been addressed as incorporated into the new framework for economic theory simply because it is able to do so. Thus, that history matters is merely to accept one or more of the following propositions. First, there may be more than one way of modelling individual behaviour once interdependencies between individuals are recognised. Second, there may be more than one equilibrium even for a given model. And, third, the path to an equilibrium, and which one, may depend upon initial conditions or random shocks along the way. Only in these ways is it recognised analytically that history matters. It is a matter of seeing the historical as the passage of time, with so-called path dependence allowing variation between one outcome or another as far as equilibrium and passage to it are concerned. In rhetorical terms, however, it is a different story or narrative. For it becomes possible for the newer economic history to deploy the language of social history even though its concepts remain rooted in the universals of neoclassical theory. Context, meaning and specificity are simply for the purpose of choosing which model and the starting point when winding it up and starting it off.

The rise of social capital within economics is very different in two crucial respects. On the one hand, initially, it derives entirely from outside economics. On the other, it does not have a history prior to the rise of the new economics imperialism. Indeed, although there are casual uses of the notion of social capital prior to the 1990s, these are sporadic and accidental.[5] Over the last two decades, however, social capital has experienced a meteoric rise in academic, and wider, circles, if not on so grand and wide a scale as 'globalisation', with which it can be usefully contrasted (Fine 2004b).

More specifically, social capital theory takes the view that there are social resources that exist independent of individuals but upon which they can call. It is summed up by the mantra, 'it's not what you know but whom you know that matters'. The problem is that, on this basis, social capital has given rise to a chaotic literature across what we mean by 'knowing' as it has come to cover most if not all social forms of interaction involving, for example, trust, networks, civic participation, religion and beliefs. And it has been equally chaotic in its spread across subject matter and disciplines. Almost anything that has been written about before as X can be written about again as X plus social capital, and much the same is true of globalisation.

Three further features of social capital have made it particularly amenable to appropriation by the new economics imperialism. First, social capital is heavily motivated by the idea that it provides the opportunity for positive-sum outcomes in all spheres of life in general. If only we 'knew' one another better, we could come to better arrangements collectively and individually. This is as true of neighbourliness as it is of contracting parties who can be more pro-active the more they trust one another. Thus, more social capital means better outcomes in general. And, in particular, social capital finds an ideal match in the information-theoretic, or market-imperfection model of the economy. For, not only does this model suggest the market economy does not work perfectly, it also points to the potential for correction of those imperfections through non-market interactions, that is social capital. Second, social capital is fundamentally built up on the basis of what might be termed a layered methodological individualism. There is an aggregation of individual interactions that give rise to social capital with which individuals can also interact or draw upon themselves. Third, and as a corollary, this does not mean the absence of social categories, like gender for example, and these can be imposed and do not have to be derived from an individualistic methodology. Rather the mix of individual and social analysis, however consistent and well-founded, has been skewed away from certain forms of social theory. In particular, social capital theory has been more or less free from considerations of power and conflict at a systemic level, together with consideration of the meaning and context attached to its incidence. Here, there is considerable contrast with what has become the thrust of the globalisation literature. It has explicitly come to concern itself with the nature of world capitalism at the turn of the millennium, its historical specificity, its variable meanings across time, place and activity, and the systemic consequences at, above and below the level of the nation-state.

These are all notably absent from the social capital literature, and the two literatures never intersect even though they both often range over much the same topics and disciplines. In other words, social capital and globalisation occupy entirely different analytical universes, although they do tend to fill out the universe. And, it is hardly surprising that the new economics imperialism should find itself in the social capital camp with scarcely a word to offer on globalisation.[6] Social capital offers an entrée for functional efficiency, individualistic methodology, and absence of the systemic, power and conflict.

Social capital also fits in neatly with the analytical thrust of mainstream economics, as was readily recognised by Becker (1996). For it, capital is a resource, an input into a production function. This has been extended successively across physical resources to include physical capital and natural resources and even environmental capital. It has been applied to claims on resources, as in financial capital. Human capital is a further twist, being an asset endowed or acquired within the individual. And capital has become incorporated in non-physical forms as in the intangible assets attached to brands and reputation. For Becker, these are forms of capital that can just about be assigned to individuals, and he designates them as personal capital. Whether for analytical or empirical purposes, it makes sense to have a shared form of capital that fills out all other resources that contribute to welfare, directly or indirectly.

Hence Becker is one of the first economists to use the notion of social capital despite his having no relation to the new information-theoretic economics. For the latter, though, it is a jack-of-all-trades as far as incorporating social variables into economic analysis is concerned. It can be done at the analytical level with the social chosen or induced (through spill-overs) over time through individual interactions. Or more or less any individual, household or social variable can be incorporated into an econometric analysis. In short, social capital is the conceptual essence of the new economics imperialism.[7]

3 From Coase theorem to Coasean worlds

In 1991, Coase was awarded the Nobel Prize in Economics. This was a surprise even for an award whose two enduring attachments are to idiosyncrasy and (laissez-faire) orthodoxy. It must have been something of a surprise to Coase himself. For, just a few years before, Coase (1988, p. 1) had bemoaned:[8]

> My point of view has not in general commanded assent, nor has my argument, for the most part, been understood … As the argument in these papers is, I believe, simple, so simple indeed as almost to make their propositions fall into the category of truths which can be deemed self-evident, their rejection or apparent incomprehensibility would seem to imply that most economists have a different way of looking at economic problems and do not share my conception of the nature of the subject. This I believe to be true.

As is now well known, the difference between Coase and his fellow economists is the latters' failure to take transaction costs into account. Coase makes a fundamental distinction between a world with and without transaction costs. He takes the world without them to be the domain of orthodox economics, and comes to dramatic conclusions for such a world for the purposes of *reductio ad absurdum*. These results have been deemed to be the Coase theorem, the term deriving from Stigler and not Coase himself, although acceptable to him (Coase (1988 [1959]).[9] In fact, there is no such theorem (formal consequences from deductive reasoning) for reasons that will become clear. For, in a nutshell, in a world of zero transaction costs, there is no friction or cost of any sort, broadly interpreted, in undertaking exchanges or human interactions of any sort, so that anything can be accomplished painlessly to mutual advantage. As Coase (1988, p. 163) himself puts it, 'Most objections to the Coase Theorem seem to underestimate what costless transacting could accomplish'. As Masten (1997) suggests, Coase has a very broad definition of transaction costs, the resources necessary to accrue a mutual advantage of any sort. In this light, the theorem (things can be perfect) is more or less automatic in an informal way of thinking. To reiterate Coase himself from above, it is 'so simple indeed as almost to make their propositions fall into the category of truths which can be deemed self-evident'.

Coase does address the implications of his 'theorem' in two prominent contexts. First, he suggests that zero transaction costs imply no need for firms. Second, externalities in particular, and market imperfections in general, would not matter, according to Coase (1988, p. 14), as long as property rights are assigned and can be negotiated, costlessly of course:

> I showed in 'The Nature of the Firm' that, in the absence of transaction costs, there is no economic basis for the existence of the firm. What I showed in 'The Problem of Social Cost' was that, in the absence of transaction costs, it does not matter what the law is, since people can always negotiate without cost to acquire, subdivide, and combine rights whenever this would increase the value of production. In such a world the institutions which make up the economic system have neither substance nor purpose.

The implication that Coase draws from his 'theorem' is that it is futile to study its world of zero transaction costs, as firms obviously do exist and the law obviously does matter.

So, in contrast, he seeks to investigate what he himself calls the Coasean world of positive, not zero, transaction costs. But, unfortunately, it is the world of the Coasean theorem rather than the Coasean world that preoccupied economists, at least until transaction costs became one of the bases for market imperfection economics. As Coase (1988, p. 16) says of the world of the Coasean theorem:

> It would not seem worthwhile to spend much time investigating the properties of such a world ... What my argument does suggest is the need to introduce positive transaction costs explicitly into economic analysis so that we can study the world that exists. This has not been the effect of my article. The extensive discussion in the journals has concentrated almost entirely on the 'Coase Theorem', a proposition about the world of zero transaction costs. This response, although disappointing, is understandable. The world of zero transaction costs ... is the world of modern economic analysis, and economists therefore feel quite comfortable handling the intellectual problems it poses, remote from the real world though they may be.[10]

As a result, Coase is particularly scathing, as is already apparent, in his criticism of mainstream economics for its empty deductive theory in that other Coasean world of zero transaction costs. He cites himself to the effect that 'Judges seemed to show a better understanding of the economic problem than did many economists … I did this not to praise the judges but to shame the economists' (Coase 1996, p. 105). And, more specifically, Coase (1988, p. 3) adds:

> This preoccupation of economists with the logic of choice, while it may ultimately rejuvenate the study of law, political science and sociology, has nonetheless had, in my view, serious adverse effects on economics itself. One result of this divorce of the theory from its subject matter has been … [w]e have consumers without humanity, firms without organization, and even exchange without markets.

And, noting the previous absence of any theory of industrial organisation in micro-economics (as a complement to no theory of why the firms exist), Coase (1994, p. 5) complains that, 'What is studied is a system which lives in the minds of economists but not on earth. I have called the result "blackboard economics"'.[11] Thus, mentioning Paul Samuelson explicitly, Coase (2006, p. 275) is still complaining that, 'the belief in the truth of the theory leads to a lack of interest in what actually happens is not uncommon in economics'.

This is all very well by way of critique of the imaginary world of the Coasean theorem, beloved of mainstream economists, in which there are zero transaction costs. But in what way does the Coasean world of positive transaction costs differ? Coase does not offer any alternative theoretical considerations of any weight at all. Rather, his approach is one of *empirical* study of the incidence and nature of transaction costs in practice. As he puts it, the Coase theorem 'follows from the standard assumptions of economic theory. Its logic cannot be questioned, only its domain' (Coase 1994, p. 10). The domain of the theorem is clearly understood to be negligible. Hence, his conclusion is 'Let us study the world of positive transaction costs' (Coase 1994, p. 10). In contrast to Friedman's methodology of unrealistic assumptions and empirical testing of predictions, he explicitly advises that we should not 'lose touch with reality' (Coase 1994 [1982], p. 18). And his own inclination is to study law as the basis for identifying 'the rights to perform certain action … which individuals possess' (Coase 1994 [1982], p. 18), and hence transaction costs in practice, on which he devoted the major part of his career. For 'the legal system will have a profound effect on the working of the economic system and may in certain respects be said to control it' (Coase 1994, p. 11).

In view of this outline of Coase's posture, it is not hard to see why he should have been neglected over the passage from Lionel Robbins in the 1930s to the 1980s.[12] But why should he have been thrust so rapidly to prominence with and around the award of his Nobel Prize? In terms of providing a foundation for market (and information) imperfection economics, the answer is transparent. As seen above, transaction costs are, for example, through Coase or otherwise, a major motivating element in the new institutional economics. As Zerbe and Medema (1997, p. 179) put it, Coase 'has opened up and focused for many mainstream economists ideas which hitherto were left to the heterodox economist. He has not been alone in this, but he has been significant'.[13]

But there is much more to it than this. For, as a precursor and inspiration to transaction cost economics, Coase is a paradoxically awkward building block. There is, after all, his rejection of blackboard economics and his contempt for his fellow economists not least for their inability to think outside their narrow frame. He explains this in terms of Kuhnian commitment to normal science although, not surprisingly, he rejects the Kuhnian idea that empirical anomalies (the actual existence of firms for example) might prompt a revolution in thought and paradigm shift. Rather, within their world, economists seek knowledge for its own sake and for the glee of beating an opponent (Coase 1994, pp. 27–31).

Most remarkable, and perverse, in light of his future influence, are Coase's views on economics imperialism. He is sarcastic about Becker's promotion of the economic approach, noting that it is 'analysis of choice … which gives the theory its versatility' (Coase 1988, p. 2) but so much so that it can 'be applicable to animal behaviour' (p. 3).[14] And his antipathy to Richard Posner as purveyor of Becker to economics and law breaks out into open warfare from time to time (Coase 1993a and b and 1996).[15] More specifically, Coase's (1978, p. 209) judgement is that there is limited scope for economics imperialism to prosper for 'the analysis developed in economics is not likely to be successfully applied in other subjects' not least because of 'the relative unimportance of technique' for 'subject matter is really the dominant factor'. Indeed, he is more upbeat about the way in which the incorporation of material from the other social sciences will improve economics' own understanding of the economy, rather than making inroads into other disciplines and subject matter itself. For, as Coase continues: 'Economists may, however, study other social systems, such as the legal and political ones, not with the aim of contributing to law or political science, but because it is necessary if they are to understand the workings of the economic system itself' (p. 210). Looking ahead, Coase concludes that 'we may expect the scope of economics to be permanently enlarged to include studies in other social sciences. But the purpose will be to enable us to understand better the working of the economic system' (p. 211).

In short, Coase considers economics to be so limited in substance and to technique that it will offer little to the other social sciences and, at best, it will be enriched itself rather than colonising. Yet, the Coasean world of transaction costs has inspired exactly the opposite outcome, regenerating economics from within and embarking upon economics imperialism with renewed vigour from without. So, with economics imperialism in its new phase, Coase is turned into his own opposite. But, without wishing to blame the victim, he is not entirely innocent as far as the fate of his own work is concerned. For it has only been possible because of the limited nature, and location, of his own contributions. Whilst the Coasean world is one in which markets do not work perfectly, Coase is a Chicago economist, fundamentally in favour of the market. This, it should be emphasised, is not his starting point in principle, as has frequently been observed by those who have consulted reflections on his own work and its reception (see McCloskey 1997, for example). Rather, Coase's point of departure from blackboard economics is that neither market nor the state work perfectly in light of transaction costs. Thus, Samuels and Medema (1997) correctly see Coase as more pragmatic than ideological within the Chicago tradition, more concerned with policy framework than policy.

Nonetheless, despite claims that he was a socialist in his youth, Coase (1996, p. 106) admits to being converted to the virtues of the market at the London School of Economics in the 1930s,[16] and his laissez-faire stance in practice could hardly be stronger, especially in opposition to Pigovian welfare economics for which, 'The analysis proceeds in terms of a comparison between a state of laissez-faire and some kind of ideal [state correction] world' (Coase 1988 [1960], p. 154). Indeed, in the context of externalities, etc. Coase states (p. 153):

> It is my belief that the failure of economists … stems from basic defects in the current approach to problems of welfare economics. What is needed is a change of approach. Analysis in terms of divergence between private and social products … tends to nourish the belief that any measure which will remove the deficiency is necessarily desirable. It diverts attention from those other changes in the system which are inevitably associated with the corrective measure, changes which may well produce more harm than the original deficiency.

What Coase has in mind here are the distortions introduced by government intervention, anticipating in many ways the rent-seeking literature, if the costs of intervention are taken to include the previously mentioned 'other changes' that are its inevitable consequence (p. 153):

> The government is, in a sense, a super-firm (but of a very special kind) since it is able to influence the use of factors of productions by administrative decree. But the ordinary firm is subject to checks … because of the competition of other firms … and also because there is always the alternative of market transactions against organization within the firm if the administrative costs become too great. The government is able, if it wishes, to avoid the market altogether, which a firm can never do … It is clear that the government has powers which might enable it to get some things done at a lower cost than could a private organization … But the government administrative machine is not itself costless.

At an even more abstract level, Coase is refined enough to acknowledge that Adam Smith posits both self-interest and sympathy (or co-operation in his own terms) as motives underpinning individual behaviour but sees this as strengthening the case for the market as combining them in 'the only way in which this could be done' (Coase 1994 [1976], p. 115). In case the message is still not clear enough, as far as *successful* government regulation is concerned, for Coase (1994 [1975], p. 62), 'My puzzle is to explain why these occasions seem to be so rare, if not nonexistent'. And further: 'the advice that has to be given is that all government activities should be curtailed … [But] the present overexpanded governmental machine may not give us much indication of what tasks the government should undertake when the sphere of government has been reduced to a more appropriate size' (p. 63).

In this vein, it is hardly surprising if erroneous for Coase (and his theorem) to have been interpreted as occupying a world of perfectly working markets, given the presence of sufficient competition, at least in relative terms through a limited role for the state. But, equally important for his acceptability over and above his Chicago credentials to those who want to improve upon market imperfections is what is analytically absent from Coase. In rejecting the Coasean theorem for the Coasean world, he empties out the theoretical baggage of blackboard economics but puts nothing in its place other than empirical investigation of transaction costs. No wonder he can be captured and reinterpreted by a blackboard economics that incorporates transaction costs. The weakness of his approach is its exclusive reliance upon presence or not of transaction costs as if this were the be-all and end-all of economic functioning. And it is a weakness of criticism and of alternative. Consider, for example, the analogy of mechanics without friction. It is the basis on which we understand physical movement, including situations in which friction is introduced. Why would the same not apply to transaction costs? Why is it so privileged in Coase and why does he overlook other factors that are crucial to economic functioning in the 'real' world?

For there are any other number of factors that might have been chosen as highlighted by their absence from blackboard economics. Absent from Coase's approach is any consideration of power and conflict, for example. Indeed, the only analytical tool brought to bear is the amorphous and homogenised notion of transaction costs. Shifting from the vacuous Coase theorem to the Coasean world brings these in alone. The absence of so much else from the Coasean dualism between theorem and world is striking. For Langlois (1997), there is neglect of production itself (as opposed to the costly transactions that make it possible), and there is no account of the cognitive limitations on economic agents (as opposed to the costs of that cognition). For Hodgson (1997), Coase is exclusively preoccupied with allocative efficiency rather than creative activity, and the firm as a capitalist institution based specifically on an employment contract is absent. And, apart from neglecting issues of causation, Duxbury (1997, p. 187) pinpoints Coase's lack of attention to power: 'Was I somehow at fault for making my face available to be punched?' is a possible Coasean interpretation of a fracas. And, for Coase (1994 [1974], p. 72) himself, questions of meaning, understanding and context do not seem to arise, as everything in human interaction belongs to differentially organised transactions at greater or lesser cost, whether this be market goods or non-market knowledge:

> I do not believe that this distinction between the market for goods and the market for ideas is valid. There is no fundamental difference between these two markets and, in deciding on public policy with regard to them, we need to take into account the same considerations.

In short, Zerbe and Medema (1997) see Coase as a Marshallian, more concerned with understanding than prediction, with induction at least alongside, if not prevailing over, deduction, and attention to the behaviour of individuals and institutions over blackboard economics.[17] And for Mäki (1997, p. 253), Coase rejects zero transaction costs as an imaginary world, that is 'bilge'. But Coase only differs over the process and not the level of abstraction – add in transaction costs to understand the working of the market. Hence Coase is characterised by 'methodological Americanism', 'the belief in the power and wide applicability of the metaphor of the market' (p. 266). In this light, it is hardly surprising that he should be so readily appropriated by Americanised economics in its imperfect market form once his theorem had gained sufficient purchase. Coase is also heavily steeped in the tradition of empiricism but in this respect, and in his methodology more generally, is superficial and inconsistent on a careful reading, as is demonstrated by Bertrand (2007).

That this is the case is also sharply revealed by Demsetz (1997, p. 4) who, in what is essentially an article in praise of economics imperialism, accepts that 'institutional arrangements in neoclassical theory are correctly described as "black boxes"'. Further, though, opening the black boxes associated with the theory of the firm, and institutions more generally, 'waited upon completion of the central inquiry of economics' despite acknowledging that a foretaste was offered by Coase (p. 11). That central inquiry is indicated by Demsetz in the opening to his article (p. 1):

> The strong export surplus economics maintains in its trade in ideas and methods with the other social sciences is an important indicator of the success of economics. Not much has been said about the source of this success, but it has been attributed largely to advantages offered to other social sciences by the economics *tool kit* … The emphasis here is on the broad scope of the phenomena that can be explained by our *tool kit*.

So utility and production functions allow economics to lord it over the other social sciences, not least because these have allowed it to solve problems within its own subject area (although these problems are those of its own making, not those of the economy, a distinction that he does not seem to acknowledge). For, as Demsetz continues (p. 2):

> Economics may be judged the more successful social science because it has explained phenomena within its traditional boundaries better than the other social sciences have explained phenomena within their respective traditional boundaries. The primacy of economics may be established in this sense even if economics never influenced the other social sciences.

It is precisely on this basis of the economist's tool kit and inner success that Demsetz rejects Coase's claim for further empirical inquiry and the more rounded understanding to be derived from the other social sciences. The methods of arch economics imperialists, Becker and Hirshleifer, are preferred. This is so much so, and indicative of the bringing back in of the non-rational on the basis of the rational, that Frank Knight is rejected as suffering from 'arm-chair psychoanalyzing' and he and Herbert Simon 'are virtually (I would say entirely) empty of empirical relevance' (pp. 7–8). Indeed, the reduction of Knight's uncertainty to risk is made explicit with Barzel and Kochin (1992, p. 19) for whom, in interpreting Coase, 'Knight implicitly introduced significant transaction cost considerations to the analysis of the firm. His uncertainty – the driving force in his theory of the firm – is best understood as being like risk except that it is too costly to transact in the market'.

Thus, if Coase has inspired the theory of the firm, and much more besides, it has been in the image of economics imperialism. This departs from the world of the Coase theorem but is no closer to the Coasean world of Coase himself.

4 Freakonomics – abnormal economics as normal

Economics imperialism reaches its extreme in the form of 'freakonomics', which has garnered considerable popular interest. The best-selling book with that title, Levitt and Dubner (2006), co-authored by the originator of the term (Levitt) and a journalist, introduces each chapter with a telling quotation from a *New York Times Magazine* article of 3 August 2003. The book's topics are diverse and idiosyncratic, ranging over the effect of abortion legislation on crime, through the Ku Klux Klan, real estate agents, drug dealers living with their moms, corruption in Sumo wrestling, cheating by pupils and teachers on exams, and the impact of naming and parenting on children's outcomes. From the quotation with which this chapter begins, and with the lead author an economics professor at Chicago and winner of the J. B. Clark medal,[18] it would appear as if we have been situated squarely within the playground of economics imperialism. As the entry for *Freakonomics* in Wikipedia appropriately opens:[19]

> The book is a collection of economic articles written by Levitt, translated into prose meant for a wide audience. Levitt, who in the book is ascribed the epithet 'rogue economist', had already gained a reputation in academia for applying economic theory to diverse subjects not usually covered by 'traditional' economists; however, he accepts the standard microeconomic model of rational utility-maximization.

Yet this is not so simple a story. For there is apparent distance between freakonomics and economics imperialism although, not surprisingly, it does not approach absolute detachment. First, there is little or no reference to other economists. Gary Becker, George Akerlof, Milton Friedman and Paul Krugman garner a mere five entries between them in the index, more by way of narrative in passing than in providing analytical substance. Neither John Maynard Keynes nor Joseph Stiglitz appears at all. Of course, separation from earlier, even recent, scholarship is standard for economics as an academic discipline that has no interest in its own history, but it takes extreme and unusual form in case of *Freakonomics*.

Second, there is more, if still extremely limited, reference to earlier, even heterodox economists. In the lead come Adam Smith and J. K. Galbraith. And, for the former, there is reasonably accurate interpretation rather than reduction and distortion through the prism of general equilibrium theory and the fundamental theorems of welfare economics. It is recognised that Smith focused on the tension between pursuit of self-interest and the desire for self or social regard through satisfaction of moral imperatives. And this tension is itself associated with the rapid economic change at the end of the eighteenth century.

Third, freakonomic analysis is not reduced to rational economic behaviour alone. Rather the latter is complemented by social and moral incentives (Levitt and Dubner 2006, p. 21, see also p. 50), although the economic incentives were magnified tenfold by the changes happening around Smith's lifetime (p. 15). This is no more, though, than a minor refinement of the division between rational and non-rational behaviour and, accordingly, involves mixed or dirty models of behaviour – the economic with something else – although *Freakonomics* remains confined to the analysis of incentives to individuals and, accordingly, is committed to methodological individualism. In short, there is considerable emphasis upon the pursuit of self-interest within what is normally an exogenously given system of incentives. Do you penalise parents for late pick-up from childcare and, if so, what is the response? Parents are even more negligent for low penalties, both because it is worth paying the cost and the low penalty falsely signals how little the moral cost is for transgressing norms.

Fourth, there is a deliberate posture of distancing from orthodox economics. This is not so much a question of subject matter, for freakonomics at most takes this to minor extremes and idiosyncrasy in light of economics imperialisms' own advances. Rather, freakonomics exhibits a distaste for esoteric mathematical modelling, 'and represents something that everyone thinks they will be when they go to grad school in econ but usually they have the creative spark bored out of them by endless math' (p. 53). In its place, much more emphasis is placed upon uprooting and deploying data in correspondence to unusual explanations. To this end, the book offers elementary lessons in the difference between correlation and causation, and the need for multiple regression in case of diverse influences. Freakonomics, then, wants to take economic rationality as its core and add to it whenever necessary to explain something more, whether that something be the economic or the social. The aim is to complement economic rationality with other motives, incentives and factors according to their social and historical relevance, this itself being a matter of speculation and investigation of the facts. Indeed, for Levitt and Dubner (pp. 13–14), 'Economics is above all a science of measurement' – not, one might ask, the allocation of scarce resources between competing ends? – and 'there is nothing like the sheer power of numbers to scrub away layers of confusion and contradiction'.

This is not as alien to economics as a discipline as would appear at first sight once account is taken of the relationship between economic theory and econometrics.

Emphasis in this volume has been on economic theory with little reference otherwise to methods of empirical investigation, and the latter are paramount to freakonomics. They have also developed prodigiously in their own right, often with little or no attachment to economic theory. This has been especially so in wake of the computer revolution that has allowed ready availability both of large-scale data sets and numerical estimation techniques. Use of these now only requires the loosest of dependence upon underlying theory. This is also common across other disciplines – use of theory to suggest statistical relations between variables with little more than guilt by association through reference to some theory or other. But, within economics, it is much more pervasive at all levels, together with little or no corresponding critical assessment of theory itself within the discipline.

So, in its emphasis upon the empirical, freakonomics is not unique. The sort of analysis that it deploys has become commonplace within economics. So, it is not surprising that freakonomics should be underpinned by articles published in leading academic journals of economics, authored by a Chicago professor of economics, both renowned and young. Consider, for example, the emergence and evolution of new or endogenous growth theory over little more than the past 20 years. Initially, it began as a theoretical explanation for productivity increase, drawing upon standard techniques – what *theoretical* factors might shift a production function, for example. The author of its first, universally acknowledged, classic contribution is highly eloquent on its origins and, by implication, the nature of modern economics both in terms of its relation to the history of economic thought and the real economy, as opposed to abstract speculation. In Snowdon and Vane (2005, p. 686), in response to the question of whether Joseph Schumpeter influenced his thinking, Paul Romer confesses:

> No, I can honestly say that it has not. Schumpeter coined some wonderful phrases like 'creative destruction' but I did not read any of Schumpeter's work when I was creating my model. As I said, I really worked that model out from a clean sheet of paper. To be honest, the times when I have gone to try to read Schumpeter I have found it tough going. It is really hard to tell what guys like Schumpeter are talking about [*laughter*].

Subsequently, hundreds of models have been developed, most of which use some microeconomic factor (learning by doing, skills, externalities of one sort or another) to derive increasing returns to scale from corresponding market imperfections. Such microeconomic factors are then extrapolated into the working of the economy as a whole, explaining why some economies might grow faster than others despite potential free flow of capital and technology across countries. To address this empirically, however, requires incorporating all those factors that might affect growth. The technique that came to be used is known as Barro-type regressions. Essentially, growth rates are regressed on anything that might be considered to be relevant.

The theoretical and statistical rationale for doing this is highly questionable, however. Underlying theory has simply been abandoned for a sophisticated form of graph drawing, at least in the sense of using regressions in place of paper and pencil, and with the quantity of regressions through cheap computing power increasing without limit.[20] This is similar to freakonomics, with the pursuit of self-interest as its core but residual theoretical point of reference whilst it otherwise ranges over whatever it pleases.[21] For the new growth theory, though, interrelations between the variables that affect growth, and there have been hundreds of them introduced, remain unexamined. And little attention has been directed towards whether the regressions are designed towards estimating growth patterns within or across countries, or whether along or adjustment towards those equilibrium growth paths.

These sore deficiencies have been exposed by more careful surveys of the growth empirics as it is known. These surveys reach remarkable conclusions. For Durlauf, *et al.* (2004), for example, the empirics raises questions of when and why the growth of some countries takes off and, equally, why there are slumps; what the consequences of dramatic policy change or other reform are; why there is differential response of growth to shocks. And, ultimately, they suggest the need for country-specific studies, drawing upon the historical and institutional context. Similarly, Islam (2003) finds, for example, that there is bimodality in the distribution of growth rates across countries (one group with high growth rates and one with low, or developed and developing, in common parlance), with limited convergence between the two.

This all warrants five observations. First, as previously indicated, whilst prompted or inspired by theory, the empirics drifted entirely free from it, once they confronted the empirical evidence, as data, in any detail. Second, in particular, the conclusions drawn from the empirics do more than drift away from the theory, they positively contradict it. The theory is one of steady-state balanced growth paths, a sort of expanding equilibrium in which everything else remains much the same, apart from size (constant proportions across the economy). But growth spurts and collapses and the emergence of institutions and the like are inconsistent with these presuppositions.

Third, despite this, the empirical results are of interest, although the way in which they have been derived is extraordinarily roundabout: start with unrealistic theory to organise the data and procure empirical regularities that undermine the theory. But, as already indicated for freakonomics, this creates some affinities, at least in the outcomes, with earlier traditions of thought. This is especially so of the new growth theory relative to the old development economics and its quest for stages and patterns of growth, for social and historical regularities are the basis for inductive theory (rather than the test of deductive axiomatics).

Fourth, this is all indicative of an uneasy, even contradictory, relationship that econometrics has with economic theory. Certainly, the self-image of theory being tested against the facts, and possibly rejected as a result, is false. Further, the use of statistical methods is itself often deeply flawed, with multiple regression being used to test theory as models on at most a partial basis. Whilst the distinction between correlation and causation is recognised, causation is itself conceived in simplistic fashion in terms of deterministic and quantitative, if stochastic, outcomes. Far better, as in the conclusions to the growth empirics, is to discover regularities that require investigation and are not taken to be proven.

Fifth and last, this suggests that the theory remains in the driving seat however much it may be qualified or even contradicted or discarded in the shift to empirical investigation. Despite its putative anomalies as far as orthodoxy is concerned, freakonomics is indicative of the way in which economics imperialism ingratiates itself with the other social sciences. Far from questioning its own economic principles, it extends them, inconsistently modified and applied if necessary, in appropriating a widening range of subject matter. Freakonomics presents itself as technical and neutral, with its originator something of a geek, interested in the peculiar workings of the world, much like the hacker in software and viruses. But the freak is not neutral for, whilst the attachment to contemporary economics appears limited apart from the obsession with incentives, there is no reference at all to issues of structure, power and conflict. The task, then, is not so much to deplore and resist the designs of economics imperialism, 'freako' or otherwise, as to offer alternatives in the form of political economy.

5 Concluding remarks

If the twentieth century was the Age of Extremes, when it comes to economics, the extreme has become both commonplace and popular. For freakonomics has inspired imitators, most notably, and tellingly, the books of Frank (2008), *The Economic Naturalist: Why Economics Explains Almost Everything*, and Harford (2008), *The Logic of Life: Uncovering the New Economics of Everything*. These extremes or freaks are taken seriously and represent and promote the much less extreme. For, until this latest phase of economics imperialism, an uneasy but definite compromise prevailed over the borders between economics and other disciplines, revealing a general if not universal respect for differences in method and subject matter. The previous chapters have sought to demonstrate the extremely wide-ranging and established reservations surrounding the economic approach attached to the earlier phases of economics imperialism – the latter had to know its limitations. How have these been swept aside in the new phase of economics imperialism, based on informational asymmetries and market imperfections more generally? It proceeds in a paradoxical and devilish fashion. On the one hand, it does draw substantive distinctions between the social and the individual, the economic and the non-economic, the market and the non-market, the exogenous and the endogenous, and the rational and the non-rational. Thus, collective and customary behaviour, culture and social norms are explicitly acknowledged and incorporated, as informal institutions, alongside the potential violation of narrowly defined, single-minded pursuit of self-interest. On the other hand, these are endogenised by continuing to tie them to individuals who ultimately optimise in recognised conditions of historically evolved market *and* non-market imperfections.

The corresponding scope of application that goes with this bringing back in of the historical and the social is well illustrated by the newer institutional economics and economic history, and social capital. All are marked by the generality of the scope and content that they bring to the new economics imperialism. In addition, there is a close, overlapping, relationship between the newer institutional economics and the newer economic history just as there was in their older, or new, versions – not least with North pioneering both the new institutional economics and the new economic history in tandem with one another.

How remarkable, then, that social capital, itself heavily adopted within economics as a way of addressing the social, should be more or less absent from the discipline of history (Gaggio 2004). This is despite its covering much of the same ground, in much the same way as the newer economic history. As Fine (2008b) argues there are two reasons for this. First, because of its attachment to the new institutional economics long before social capital emerged to prominence from the 1990s onwards, new(er) economic historians have had no need of social capital. Institutions, formal or informal, cover everything that it has to offer as these themselves have been used to convey anything that is not directly economic or attached to market exchange in some pure sense. Second, the rise of the new economic history drove a wedge between itself and a more traditional social history, one concerned with class, power, conflict, systemic change, variable meanings, and a more discursive style and method (Lamoreaux 1998). By its nature, and by its opposition to the new(er) economic history, it is hardly likely that social history would welcome the notion of social capital given its lack of sensitivity to these analytical elements.

Of course, mainstream economic theory has long since discarded any such delicacy in its methods. As with new growth theory, it is more than happy to seize upon and deploy any variable for theoretical and/or empirical purposes, and to throw it into an optimising model or regression, a form of parasitism highlighted in the next chapter. But the deeper, and different, point is to recognise how this leaves open how the other social sciences respond to such vulgarity. The outcomes are different both by topic and by discipline, as is evident for the peculiar absence of social capital from both economic and social history, albeit for entirely different reasons. Crucial is whether (new) economics imperialism, and its potential instruments such as social capital, are embraced, ignored, critically fought or constructively opposed by provision of an alternative rooted in a genuine political economy – issues to be taken up in our final chapters.

Notes

1 A striking illustration of the absence of social capital from the new institutional economics, for example, is to be found in the work of Elinor Ostrom. Her overview of institutional analysis scarcely merits a mention of social capital, despite being rooted in a narrow orthodoxy (Ostrom 2007). By contrast, her co-edited 600-page anthology on social capital is explicitly organised around the idea that it is the institutional form taken by the solution to collective action problems (Ostrom and Ahn 2003).

2 Social capital and economic history have been so central to our work that they have already been extensively addressed elsewhere. They are included here in summary form for completeness. See Fine (2001, 2007d and e, and 2008a–c) for the most important or recent contributions on social capital, and Fine and Milonakis (2003) and Milonakis and Fine (2007 and forthcoming) for the new(er) economic history.

3 Contributions by Conrad and Meyer (1957 and 1958) are usually cited as having

launched the new economic history. See also Lyons, *et al.* (eds) (2008) for retrospective contributions from the pioneers themselves.

4 On positivism and logical empiricism see Milonakis and Fine (2009, ch. 12 and references therein). For a good critical review of the cliometrics revolution see Freeman and Louçã (2001, ch. 1) and for a more detailed account of the evolution of economic history more generally see Milonakis and Fine (forthcoming).

5 The major exception is the work of Pierre Bourdieu but he has increasingly been ignored by the literature in deference to the rational choice sociology of James Putnam. For the best attempt to trace historical origins in the use of social capital, see Farr (2004 and 2007), but also Fine (2007e) for a critique of the futility of doing so beyond its most recent meteoric rise. In any case, it appears as though James Buchanan inspired James S. Coleman who inspired Putnam, with hints of (unwitting) plagiarism and reinforcement of the rational choice origins of social capital, as highlighted by Fine (2001). For Buchanan (1986, p. 108), cited in Amadae (2003, pp. 151–2):

> My diagnosis of American society is informed by the notion that we are living during a period of erosion of 'social capital' that provides the basic framework for our culture, our economy, and our polity – a framework within which the 'free society' in the classically liberal ideal perhaps came closest to realization in all of history.

This in fact from Buchanan (1981), 'Moral Community, Moral Order, or Moral Anarchy', The Abbot Memorial Lecture, no 17, Colorado College, Colorado Springs, Colorado. It continues: 'My efforts have been directed at trying to identify and to isolate the failures and breakdowns in institutions that are responsible for this erosion.' See also Fine (2008b).

6 Significantly, despite its title, Stiglitz's (2002b) best-selling *Globalisation and Its Discontents* scarcely deals with either of the topics in his title.

7 In this respect, there is a parallel with new growth theory for which all economic and social variables can be investigated for their impact on productivity increase (Fine 2000, 2003b and 2006b) and for a more general critique of new growth theory.

8 Many references to Coase are taken from the two books of collected essays (Coase 1988 and 1994). Where different, although not separately listed as references, the date of publication of originals are given in square brackets, as this is of relevance and interest in terms of timing of contributions.

9 See Zelder (1997) for a sarcastic account of the parentage, birth and reception of the Coase theorem.

10 See also Coase (1988, pp. 175–6):

> The world of zero transaction costs has often been described as a Coasian world. Nothing could be further from the truth. It is the world of modern economic theory, one which I was hoping to persuade economists to leave … in such a world the allocation of resources would be independent of the legal position … even the qualifying phrase 'under perfect competition' can be omitted.

11 For Coase (1988 [1972], p. 58), 'What is curious about the treatment of the problems of industrial organization in economics is that it does not now exist'.

12 Coase (1996, p. 106) reports Robbins as showing no interest in his 'theorem'.

13 For his own messianic hopes for the new institutional economics, see Coase (1998, 1999 and 2002).

14 We note though, Sam Jones's observations in *The Guardian*, 24 November 2007:

> Paying peanuts may result in a workforce of monkeys, but if those peanuts are unfairly distributed, the result is a simian strike, researchers found. Scientists at Emory University in Atlanta, Georgia, found that our primate cousins get as irate as

humans when they see one of their number better rewarded for doing the same job. They found brown capuchin monkeys that had been happy to accept cucumbers as rewards refused them if they saw other monkeys get better payment, such as grapes, for the same amount of work. Individuals worked harder when rewards were fairly distributed.

15 See also Williamson (1997), Coase's progeny in institutional economic, for the failure of Posner to move beyond law and economics to law and economics and organisation.

16 As Coase (1991) reports in his autobiography:

> I then had an extraordinary stroke of luck, another accidental factor which would affect everything I was to do subsequently. Arnold Plant, who had previously held a chair at the University of Cape Town, South Africa, was appointed Professor of Commerce (with special reference to Business Administration) at the London School of Economics in 1930. I attended his lectures on business administration but it was what he said in his seminar, which I started to attend only five months before the final examinations, that was to change my view of the working of the economic system, or perhaps more accurately was to give me one. What Plant did was to introduce me to Adam Smith's 'invisible hand'. He made me aware of how a competitive economic system could be coordinated by the pricing system.

But Coase does not say how, in any depth, a competitive economic system is coordinated by other factors. For, Sir Arnold Plant himself, Professor of Commerce at the University of London, writing in 1936:

> The paradoxical situation in which a scarcity of [South] African labour is accompanied by average wages of about one-quarter (including rations) of those paid to Europeans is explained in part by the peculiarities of the labour supply. So long as the African peoples remain out of contact with European modes of life, the wage incentive exerts only a limited influence upon their willingness to work for European employees. In so far as Africans work for only a more or less fixed sum, whether to pay taxes or to purchase commodities, higher rates of wages may for a period actually reduce the amount of work which they are willing to do.'
>
> (cited by Feinstein (2005, p. 68), from Walker (ed) (1936)

Walker (1936) delivers a mild rebuke on the grounds that Africans would already have been familiar with European habits by his time of writing and there is a confusion between individual and aggregate labour supply. More important, though, is the extent to which Africans dispossessed of land had no alternative but to work for low wages, and were subject to coercion and discrimination as Feinstein, if not Plant, does acknowledge.

17 Coase (1988, 1975 and 1994 [1990]) is obviously fascinated by Marshall, to the point of speculating over his motives for concealing the humble origins of his birth place. For the record, not available to Coase at his time of writing, this is apparently once and for all and accurately recorded as Bermondsey in the 1901 Census!

18 The biennial recognition for best US economist under the age of 40.

19 Not surprisingly, the Wikipedia entry is able to point to a literature that deplores both the simplistic and empirically flawed analyses offered by freakonomics.

20 Not satisfied with running four million regressions or more in Sala-i-Martin (1997), the number was ratcheted up to 89 million in Sala-i-Martin, *et al.* (2004). For a critique of the procedure and many other issues, see also Rodriguez (2006).

21 Of course, the main difference for freakonomics is its flexibility over explanatory variables and what is to be explained (which may not be traditionally perceived to be 'economic'). For an ideal illustration of this, see Ayres (2007) which claims that

freakonomics should be given a chance to investigate corrupt referees in basketball, with attention to surprising outcomes when they matter to one of the combatants. But the analysis offered contains no economics at all as opposed to statistical investigation of patterns of results around important matches.

7 Economics confronts the social sciences

Resistance or smooth progression?

> At a time when the King of England claimed to be also King of France, he was not always welcome in Paris. The claim that economics is the science of human choice will not be enough to cause sociologists, political scientists, and lawyers to abandon their field or, painfully, to become economists.
>
> Ronald Coase (1978, p. 207)

> It is perhaps not surprising if economists do not know much about precolonial African economies or the classics of economic anthropology. But what is astonishing – at least to me – is how many of them do not know anything about, say, European economic history, or have never read Marx or Max Weber – or even Smith, Ricardo, Schumpeter, or Keynes.
>
> James Ferguson (2000, p. 996)

1 Introduction

In previous chapters, casual reference has been made to the new phase of economics imperialism as a revolution in thought. In Section 2 of this chapter, this is not so much justified as set aside as simply serving as a dramatic, if deliberate, attention-seeking label. The substantive issue is what has happened between economics and the other social sciences. For this, a simple label will not suffice either for overall assessment or as a framework for more detailed case studies by subject matter or discipline. Yet, in Section 2, it is argued that the notion of revolution for the latest round of economics imperialism does at least have the advantage of highlighting that it is economics that is doing much more to the other social sciences rather than vice-versa. This is based on the continuities that exist in the transition as marked by representatives Gary Becker and George Akerlof, for old and new economics imperialism, respectively, despite the significant differences that followers of the latter would seek to emphasise.

To suggest continuities across this revolution in the relationship between economics and the other social sciences is to reinforce ideas already put forward in earlier chapters concerning the extremes to which economics has been driven, even as it expands the range of its subject matter. As suggested in Section 3, the paradox is that as economics reduces the analytical principles deployed, and the content contained within them, so it both expands their scope of application without regard for the alternatives on offer from other disciplines or even from the history of economic thought. It is as if nothing of worth can exist unless it can be viewed through the narrow prism of unexamined economic principles and techniques. As suggested in the concluding remarks, this means that the latest phase of economics imperialism is caught between the extreme limitations of its origins within an increasingly esoteric microeconomics and the demands of the social theory that it is essentially incapable of addressing satisfactorily.

2 From Becker to Akerlof and beyond

In previous chapters, the most recent developments within economics imperialism have been dubbed a revolution in or, more exactly, around economics. What is the rationale for this other than to seek to make a dramatic impact in pointing to what is going on? One reason, as indicated by the new and newer fields developing in and around economics, is because of the scope of what has been involved, the sheer scale by which economics is colonising the subject matter of other disciplines and those that have previously not been traditional to its coverage. Another is because of the comparison that can be drawn with the marginalist revolution of the 1870s. As already seen, that can be interpreted as having taken the social and historical out of economics. The latest phase of economics imperialism is explicit about addressing the social, albeit only in the sense of moving outside the confines of the 'as if' market rather than as a rejection of a special type of methodological individualism. On the basis of market/informational imperfections, neoclassical economics has squared the circle of explaining the social, rather than taking it as exogenously given and hence the prerogative of the non-rational and other disciplines.

Otherwise, the methodology and theoretical apparatus of the latest phase of economics imperialism has deeply entrenched continuities with the economics that preceded it. As a result, its revolutionary potential is limited. To the extent that it relies exclusively upon its continuing method, its appeal to other social scientists is potentially heavily constrained. But if it combines this method, across the rational/non-rational and exogenous/endogenous divides, with that of other disciplines, it is far from clear that economics is colonising the other social sciences rather than the other way around! In other words, why should we talk of economics imperialism, let alone a revolution attached to it, if economics is being influenced, even civilised, by the contribution of other disciplines? As Buchanan (1972, p. 18) put it at an early stage in seeking transformation of prescriptive (non-economic) into descriptive (economic) models:

> If this transformation can be effected, noneconomic models can be extended to many aspects of behavior, including an invasion of the domain traditionally commanded by the economists. If the theory of public choice and related work represents 'economic imperialism', the way is surely open for the

> noneconomists to turn the tables and extend behavioral models of their own into the realm of market interactions.

If Becker's economic approach is truly universal across the social sciences then it is surely economic in name alone, an accident of its historical origins. The crucial issue, though, is the extent to which economics itself is transformed as a discipline by the input of other disciplines and, here, the evidence is very much against a reverse imperialism as can be seen by considering the content and impact of the work of Akerlof. As a pioneer of the information-theoretic approach to economics, he has been more willing than many of his followers to draw upon, rather than simply to appropriate, elements from other social sciences. As previously indicated, economists are liable to reconstruct the non-rational or non-economic as economic even if their attention is drawn to the non-rational in the first place as a complement to the rational.

Akerlof's respect for other disciplines, something shared more widely by economists of his generation, is reflected in the distance that he places between himself and the thrust of the economics imperialism emanating from the Becker/Coleman axis. Akerlof (1990, p. 73), for example, even lampoons Becker in terms of Samuelson's image of Friedman's monetarism as having learnt how to spell banana but not knowing when to stop![1] This suggests that Becker's 'as if' perfect market analysis should be confined to market-like circumstances. Within economics, the tradition of doing so, despite the universal marginal principles and derived technical apparatus, remained strong during the Becker-phase of economics imperialism, despite or even because of the definition of economics laid down by Lionel Robbins in the 1930s. Although Coase (1978, p. 209) has been concerned with institutions such as the firm, there is a presumption that economics is about magnitudes measurable against money, fairly close to being market-like:

> Economics, it must be admitted, does appear to be more developed than the other social sciences. But the great advantage which economics has possessed is that economists are able to use the 'measuring rod of money'.

But Boulding (1969, p. 4), in his American Economic Association Presidential Address, could hardly come closer to totally rejecting Robbins's universal notion of economics:

> Economics specializes in the study of that part of the total social system which is organized through exchanges and which deals with exchangeables. This to my mind is a better definition of economics than those which define it as relating to scarcity or allocation, for the allocation of scarce resources is a universal problem which applies to political decisions and political structures through coercion, threat, and even to love and community, just as it does to exchange

So economists, especially those critical of Becker's 'bananalytics', see a major difference between Becker and Akerlof, favouring the latter. On his own account, Akerlof (1990, p. 61), for example, in contrasting his approach to that of Becker, who is perceived to rely too much on market-clearing and rationality, rather than on 'why the economy is not working', explicitly views himself as seeking to incorporate non-economic insights into economics (p. 72).[2] Equally acerbic, Solow (1990a, p. 276) sees Becker as oscillating between positing the obvious and the false – but wryly denies him sympathy in his predicament by correctly anticipating that he would become a Nobel Prize winner. Sen (1990, p. 264) suggests that, 'Becker's tools have been chosen on the ground of their alleged success in economics, but they are too narrow and do not have much predictive and explanatory power even in economics'. Schelling (1990, p. 194) confirms Akerlof's self-image, as the latter 'is more creative ... (and) does the opposite of economic imperialism. He looks into sociology for concepts that he can import into economics'.[3] Similarly, Elster (1990, p. 238) sees Becker as reflecting 'the imperialist trend of economics, which ... just ignores sociological theory in its attacks on sociological problems',[4] as opposed to Akerlof, who 'takes sociological theory seriously and uses it to study economic problems'. Gustafsson (1991, p. 22) views Akerlof as introducing, 'class interest, social custom and loyalties as endogenous variables'.

Yet, significantly, despite the antipathy to extending Becker's economic approach beyond the market, there was an equal reluctance to incorporate the non-economic into economics, so strong was the mutual respect for disciplinary boundaries. Akerlof's classic paper on the market for lemons is reported to have been rejected by both the *American Economic Review* and the *Journal of Political Economy* in the mid-1960s before being accepted by the *Quarterly Journal of Economics* for publication in 1970 (Akerlof 1990, p. 65).[5] The profession was not yet ready at the earlier date for the new information-theoretic approach. Was this because of its breach with the assumptions of perfect competition or because of its peculiar way of attaching sociology to economics, its respect for sociology and/or the idea that it did not belong within economics? There is an irony here, with history repeating itself, for Becker's own work on applying the economic approach to politics had been rejected in the early 1950s,[6] persuading him to turn to other topics.

There can be no doubt, then, that Akerlof's approach incorporates sociological insights, that it was originally rejected by economics orthodoxy for doing so, that it reflected the traditional divide between the rational and non-rational, and that it has now become widely accepted. In view of Akerlof ultimately receiving a Nobel Prize with Joseph Stiglitz and Michael Spence (the latter for 'screening' in labour markets) in 2001 for asymmetric information, it might be thought that this represented a tempering, even reversal, of economics imperialism, not least with sociological ideas being brought to economics rather than vice-versa. Is this a glass that is half full or half empty? Two factors are crucial in resolving this conundrum – in favour of economics imperialism.

First, internal to Akerlof's own work, and uniquely characteristic of mainstream economics across the social sciences, is the continuing absolute neglect of close scrutiny of any literature concerned with the meaning of its categories of analysis, in ethical or other content. This is strengthened as a consequence of reducing sociological categories to the consequences of market imperfections, thereby extinguishing the underlying distinction between market and non-market, except as outcomes. It is brought out markedly in Akerlof's most recent work, purporting to examine the consequences of identity, for example. Possibly the most significant category of socially constructed analysis in the wake of postmodernism, Akerlof and Kranton (2000) addresses the question of identity in the crudest reductionist fashion, as an element in a utility function, and as an asocial factor reflecting interpersonal externalities in consumption (archetypically without substance, as in identity as choice to be either the colour red or green).[7] This is prior to moving to consider the substance of gender, race, etc. Akerlof and Kranton do draw upon a limited range of the vast quantity of work in social science that has examined identity. But they do so as if postmodernism never existed (how identity is socially constructed with *meaning*) despite this being the theme of much of the work that they cite (with authors liable to be appalled at the way in which they have been interpreted).[8] Interestingly, setting aside identity for institutions, observe that at an early stage in the emergence of the new institutional economics, 'Granovetter (1985) challenges Williamson and, expressly, most of economic theory for employing a disembedded and functionalist approach to economic life … Granovetter would make sociologists the imperialists!' (Zald 1987, p. 705). Yet, even though Granovetter himself only has a limited understanding of embeddedness in terms of failing to incorporate context and meaning, his contribution to the new institutional economics (and economic sociology) as far as economists are concerned, has remained limited unless reinterpreted in terms of informational analytics. It would appear that if economics is to be interpreted as having been colonised by sociology, it has not proceeded far enough to incorporate the results of the relatively limited critique offered by Granovetter, now twenty or more years previously.

Significantly, in this light, the analytical strategy adopted by Akerlof is two-fold. On the one hand, there is the extension of the principles of rationality, like Becker, to economic and non-economic phenomena, only in the enriched context of imperfect information. On the other hand, there is the incorporation of alternative behavioural principles derived from the other social sciences, associated with norms, habits, and the like, reflecting a continuing respect for the traditional distinction between the rational and the non-rational, as discussed in the previous chapters in this volume. Thus, whilst in accepting his Nobel Prize he suggests that asymmetric information can explain why firms do not pay rock bottom wages, Akerlof (2002, p. 415) prefers non-economic explanations:

> In my view, psychological and sociological explanations for efficiency wages are empirically most convincing. Three important considerations are: reciprocity (gift exchange theory from anthropology), fairness (equity theory from psychology), and adherence to group norms (reference group theory in sociology and theory of group formation in psychology).

This, in theoretical practice, promises much more than it delivers, for as Mirowski (2000, p. 928) describes it:

> If they wished to maintain the relative inviolability of a 'cultural' sphere outside that of the 'economic', or maintain some humanist credentials, they would, like Kenneth Arrow or George Akerlof, still write down neoclassical models, but only now with psychological or sociological factors serving to account for 'frictions' and 'disequilibria' relative to *optimum optimorumi* of full general equilibrium. They might even imagine that the economy required a set of shared symbols and norms in order for markets to operate, only subsequently to subsume these entities in a meta-utilitarian calculus of game theory. Culture, initially posited as the residual category of everything that the economy was not, was repeatedly and predictably absorbed back into the realm of the economic as the demands of consultancy and the exigencies of intellectual fashion permit.

Thus, each of the non-economic explanations is capable of being grounded in methodological individualism and reabsorbed into economics.

Significantly, in more recent work, Akerlof (2006) has made clear his commitment to methodological individualism, despite a continuing, if possibly lesser, commitment to importing insights from the other social sciences in the form of a 'dirty' methodological individualism in which it is supplemented by norms. In his putative restoration of Keynesianism following its battering by new classical and new Keynesian economics,[9] he confesses that he 'will derive behavior from utility and profit maximization' but the preferences will be modified 'to incorporate the norms of the decision makers' (2006, p. 4). Akerlof even uses the analogy of DNA to motivate the importance of his approach for, 'Such observation of the small often has been the key to the understanding of the large' (p. 54). In other words, from appropriate study of the behaviour of the individual, it is possible to reconstruct the anatomy of the whole. And, interestingly, he considers that this approach has validity whether it is interpreted by reference to inner calculation of the individual or their incorporation of external influences for, 'Formally, any model of mental accounting can be translated into a model of norms: just replace the rules of mental accounting as the norms that people think they should follow' (pp. 26–7). This is an effective way of bringing back in some if not all behaviour of the individual and its synergy with the social in reconstructing economics whilst retaining its core technical apparatus.[10]

This all leaves open the shifting boundary between the economic and the non-economic as it is always possible for the non-rational to be reconstructed as rational. This continuing tension between the two approaches is, for example, reflected in the collection edited by Karen Schweers Cook and Margaret Levi entitled *The Limits of Rationality* (2002), although this is a considerable misnomer as it is mainly concerned with breaching traditional limits and neglecting those that persist. For example, Levi (2002, p. 416) argues in conclusion that 'rational choice is not simply economics applied more generally. Neoclassical economists assume that all actors are self-interested … [but] for rational choice theorists, the content of preference functions depends on the *actors* and the *context*' (emphasis added). So rational choice theorists can endogenise preferences and explain non-rationality as the consequence of rationally chosen change in preferences, something that Becker (1996) has explicitly formalised (see Fine 1998b and 2002c for a critique).

There is nothing here to bother economists once actors and context are endogenised in light of imperfectly informed and calculating agents. For, from where do the actors and context derive? In total conformity to James S. Coleman's rational choice sociology (see Chapter 3 in this volume), Levi (2002, p. 402) is clear about where context derives from:

> I start with the assumption that individuals create institutions, which then constrain the subsequent choices of the same individuals or future generations. In other words, there is path dependence.

This deals with the historical aspect of context and corresponds to a more general approach to 'argue for a theory of rational choice that includes the context of decisions as well as the decisions themselves' (p. 402). In short, the limits of rationality are more or less non-existent once the social and historical are neither neglected nor taken as exogenous. But they do become reducible to aggregation over (rational) individuals. And this may be used to preclude an independent element of non-rationality. At the very least, *The Limits to Rationality* as book and research programme is symbolic of a stepping stone to this condition, one that denies the traditional division between rationality and non-rationality but, now, on a much wider compass than originally posited by Becker. In its understanding of behavioural variation, cognition and (social and historical) context, it is devoid of an understanding rooted in the meaning of the concepts deployed and their correspondence to specificity. At most, the non-rational, as other than the rational, is retained as an explanatory residual, especially in the hands of mainstream economists who are only committed to the contribution of the other social sciences as a refinement of their basic understanding and application of rationality. This is illustrated in the most recent attempts by economists to handle well-being, Dixon (1997) being one example. As surveys do not find that people report themselves as better off over time despite rising income but do so across populations at a moment of time, it is a simple matter to complement utility (rationality) with relative aspiration (non-rationality) to provide an explanation. The nature of well-being itself need not be examined nor its complex treatment by other disciplines. Keeping up with the Joneses suffices to complement rationality in otherwise inexplicable anomalies in peoples' perceptions of their own happiness. Even where economics is influenced by other disciplines, it is liable to reconstruct that influence in light of rationality or at most append it to an otherwise unchanging economics.

The second factor in loading interpretative balance heavily in favour of economics imperialism (as opposed to a colonising influence on economics by other social sciences) follows from the nature and dynamics of economics as a discipline. It is entirely intolerant of alternative economic approaches and, as argued, is open to incorporate ideas from the other social sciences only in order to reinterpret them in its own image as the result of market imperfections. Thus, to question the fact of economics imperialism, or to perceive it in reverse, on these terms is akin to arguing the colonies were the colonisers whenever and however their presence is felt in the metropolis (as in the replacement of fish and chips by chicken tikka masala as Britain's favourite takeaway food!). Further, quite apart from its colonisation of other social sciences, or relegating them to the suburbs, the new information-theoretic micro-foundations have had the effect of undermining radical political economy through a sort of pincer movement of intolerance complemented by internal colonisation. For the new theory is able to address the traditional concerns of radical political economy in terms of market imperfections, as opposed to class, power and conflict. An outstanding illustration is provided by segmented labour market theory which, even as late as the mid-1980s, was perceived to be incoherent by the mainstream. Within a decade, it had been reconstructed along neoclassical lines to explain why labour market structures might arise as a result of efficiency wages and the like (see Fine 1998a and also Spencer 2000).

The dramatic and early rise of analytical Marxism is also testimony to the influence of rational choice within economics heterodoxy, no doubt paradoxically reflecting the greater openness of those interested in Marxism and its ideals to stretching the boundaries of the mainstream.[11] A recent and more striking example of convergence between radical political economy and orthodoxy is furnished by Bowles and Gintis (2000a). For McCloskey (1990a, p. 224), Bowles and Gintis's writing on contested exchange, 'in short is a ponderously formalized version of Good Old Chicago School theories'. As Hodgson (1994b, p. 22) puts it, 'as yet, the "political economy" term does not itself provide a secure defence against the ravages of economic[s] imperialism'.

Thus, in rejecting the hypothesis of economics colonised, given its unchanging methodology, assumptions and techniques by comparison with the old, the new approach is not open to transformation in the foreseeable future nor in a foreseeable fashion. This is so, given its extraordinary intolerance of dissent within its own discipline, despite its critical and continuing weaknesses.[12] It is not possible to imagine how mainstream economics will transform itself other than through colonisation of the other social sciences, lest it be through the adoption of a wider set of esoteric models derived from biology (evolution), physics (chaos), or otherwise.[13] If heterodox economists are not tolerated by the orthodoxy for, in part, raising a challenge to methodological individualism, why should non-economists succeed?

3 Economics: bright light or dim science?

The old joke runs that the economist is like the drunk looking for keys under a lamp post, not because they are lost there, but because it is the only place where there is any light. For economists have a set of techniques, or a torch, that they apply to whatever problem comes their way, whether it is suitable for the purpose or not. Like a child with a new toy hammer, everything gets hit as if it is a nail. But more than this, the economist recognises no other tools. So, whatever the reasons for economics imperialism, its colonisation of the other social sciences is particularly open to being parasitic, arrogant, ignorant and contemptuous. These are harsh words, rarely if ever raised in the context of normal science, although possibly wielded as revolutionary science seeks to replace an old by a new paradigm. Why are they justifiably attached to economics imperialism?

The parasitism of colonisation arises out of the lack of social and historical content that characterises the underlying theory. Its origins within economics mean that it has been applied first to market imperfections in isolation in order to explain why markets may be inefficient, fail to clear, or be absent altogether. It is then extended to non-market forms and to any other problem in the social sciences – with the exception of anything more than nominally involving the social construction of meaning for which it is powerless. But, by its nature, the theory does not construct problems; it only offers solutions to problems that already exist, together with the corresponding concepts with which they have been posed. Within economics, the problems are why it is that markets might not work perfectly and why the market is not the only form of social organisation. These are well-established problems within economics, especially outside the mainstream, with a correspondingly wide range of answers, varying from different versions of Keynesianism to different schools of political economy that share in common a rejection of methodological individualism. Otherwise, in the other social sciences, any number of theoretical issues and concepts can be appropriated and reinterpreted within the new information-theoretic approach. One way of being innovative, far from uncommon within economics (imperialism), is simply to invent the nature of the subject matter or causal factors, either through sheer speculation or through some casual knowledge, bloated to the extreme for analytical purposes. This may garner success within the discipline through recognition of technical expertise but is liable to reinforce antipathy from other disciplines and constrain the passage of economics imperialism for lack of realism. How much better to advance by appeal to ideas plundered from the other social sciences and by claiming to deploy them more rigorously. Of course, all analytical advances are liable to confront, draw upon, and even revolutionise traditional scholarship. But as a result of its reductionism, the new approach to economics imperialism can best do this in the form of reinterpretation through its own understanding of informational imperfections.

In much colonisation by economics of the other social sciences, such parasitism is also associated with arrogance in two respects. For, having exploited the other social sciences for their problems and concepts, the results of previous scholarship are reproduced as if innovative by virtue of having been based upon informational imperfections. At times, this borders on the farcical with naïve economists claiming to have shown, for example, that institutions or history matter, and that they can prove it, and that labour markets differ from other markets, as if this were not already well-known from a variety of other perspectives. Solow (1990b) is a remarkable book for finding it necessary to explain to fellow economists why labour markets are different from those for fish – and he gets it wrong! (see Fine 1998a). More generally, and harshly, Guerrien (2002) posits that, 'Akerlof, Spence and Stiglitz have no new "findings", they just present, in a mathematical form, some very old ideas – long known by insurance companies and by those who organize auctions and second hand markets'.

In addition though, as the second form of arrogance, it is precisely the failure of previous analyses to have proceeded from informational imperfections which leads them to be perceived, from the perspective of economics imperialism, as both deficient and lacking theoretical rigour. Becker and Murphy (2000, p. 5) reveal of their study of the social that it was only 'upon rereading Thorstein Veblen's influential *Theory of the Leisure Class*' that they 'were surprised to discover … that he anticipated many of our results, although he does not make a systematic analysis'.

Such analyses, in the hands of economic theorists, always mean mathematical modelling irrespective of conceptual coherence and validity. And where theory ends, statistical methods in the form of econometrics are taken as the only benchmark by which to assess theory, as if falsifiability as a criterion of science had never been questioned.[14]

Thus, the new economics imperialism, like the old, is subject to an unseemly display of arrogance, as well-established results are discovered anew and claimed as innovative in view of the reductionist methods through which they have been obtained. The failure of other social sciences, it is asserted, is in their inability to proceed both scientifically and rigorously. As Cooter (1982, p. 1260) puts it:

> The technical superiority of economics makes its spread into other social sciences irresistible, just as Newtonian mechanics spread into economics … Rigor drives out less structured modes of thought.

The *nouveaux riches* of economics imperialism inevitably brush away charges of intellectual philistinism as the result of entrenched intellectual conservatism and incapacity. Yet, can it really be the case that economists have the nerve to tell other social scientists that history, institutions, and collective forms of behaviour matter? Heilbroner and Milberg (1995, p. 6) refer to an 'extraordinary combination of arrogance and innocence'. As Ingham (1996, p. 262) observes in reviewing the new economic sociology:

> It is difficult not to share this irritation when confronted, for example, with … 'agency theory' which quite simply tries to reduce the complexity of social and economic organisation to the individual propensities of the amoral maximiser … The issue is not merely that this form of theorising can easily be made the subject of cogent theoretical and empirical critiques … but that the authors were so structurally insulated by the social organisation of intellectual specialisation that they were able to disregard the huge non-economic literature on the very problems that they had posed for themselves.

Similarly, for Toye (1995, p. 64) on the new institutional economics (NIE):

> The main weakness of the NIE as a grand theory of socio-economic development is that it is empty … the theory adds nothing to what we already have. No new predictions can be derived; no new policies recommended. No historical

> episodes can be explained better now than they were by the historians who have already studied them.

With respect to ignorance, the colonisation of social sciences by economics has been marked by total disregard for the scholarship of the appropriated disciplines and that attached to the object of analysis other than for the parasitical purposes outlined previously. It is simply a matter of investigating sources of, and applications for, models of informational imperfections. At best, earlier contributions are filtered for this purpose. Nor is ignorance confined to acquaintance with the traditions and contributions of the colonised disciplines. It also prevails for the history of economics itself as a discipline and the same is true of its method (see the opening quote to this chapter by Ferguson, citing McCloskey (1986) for support).

Further, Boylan and O'Gorman (1995, p. 27 fwd) refer to a post-positivism phase as prevailing in economic methodology over the last quarter of a century, characterised by a desperate but unsuccessful attempt to rescue falsifiability from its inescapable fallacies. But the existence of this prison and themselves as its prisoners is unknown to the vast majority of economists who continue to proceed as if distinctions between positive and normative and theory and evidence are well founded. A stunning illustration of ignorance (and reconstruction in own image) is provided by Paul Krugman. His 'The Fall and Rise of Development Economics' (available online at http://www/wws/edu/~pkrugman/dishpan.html) offers a reconstruction of the lost development economics of the 1940s and 1950s in general, and of Albert Hirschman in particular, but opens by confessing that 'My acquaintance with Hirschman's works is very limited'! Indeed Ingham (1999) offers an apposite account of how the understanding of the individual in the classics of development economics has been lost, although that lost world is now being recycled and re-invented! Similarly, in his *Whither Socialism?*, Stiglitz confuses his own concept of (costly, objective) information with Friedrich von Hayek's concept of (tacit, subjective) knowledge. The explanation for this parallels Krugman's case and is to be found in Stiglitz's list of references that only includes one work by Hayek himself, next to more than a hundred references to his own work.

Finally, in colonising the other social sciences, economics reveals its contempt for them by the sum of the previously outlined features, with the sum greater than the individual parts. For anything that does not conform to its approach is dismissed as lacking 'rigour' and 'science', terms that are well known within economics as a superficial code for policing anything that does not ultimately rest on a mathematical model and/or statistical testing. Edward Lazear's 'Economic Imperialism' (2000) is salutary reading in this respect, putting into print in an issue of a leading journal devoted to the current state of economics what is commonly to be heard from economists as a matter of course.[15]

Lazear's essay is an unwitting parody of the ideas presented here; it is replete with the claim that economics is rigorous and scientific,[16] drawing upon casual references to classics such as Aristotle, Adam Smith and David Ricardo but with particular homage paid to Becker. For economics is 'the premier social science' in terms of its popularity, with the ability 'to address a large variety of problems drawn from a wide range of topics' (p. 99). As indicated earlier, his view is one of the superiority and power of economics in light of its 'rigor', 'scientific method', 'formal refutable theory', and 'willing[ness] to abstract'. Further, 'during the last four decades, economics has expanded its scope of inquiry as well as its sphere of influence', stripping away complexity to get at what is essential and drawing upon three themes – individual maximisation, equilibrium, and efficiency. On this basis two claims are made: 'economics has been imperialistic and … economic imperialism has been successful' (p. 103). The topics concerned include intrafirm behaviour, modelling tastes, demography, discrimination, the family ('Ideas that were considered bizarre and almost comical twenty years ago are now standard' (p. 112)), social interaction, religion, human capital, personnel economics, finance, accountancy, organisation, marketing, law, political economy, health, and linguistics (understood as why majority languages are liable to prosper because of externalities between speakers).[17] Whilst it is suggested that rigour need not be mathematical, no other sort of rigour is cited. Indeed, 'it is the obsession with theories that are consistent, rational, and unifying that gives economics its power … Economics has been successful because, above all, economics is a science' (pp. 141–2). In terms of how economics imperialism evolves, Lazear acknowledges that one problem is that economists make simplifying and general assumptions that narrow its scope of applicability. This contrasts with the approach of 'broader thinking sociologists, anthropologists and perhaps psychologists [who] may be better at identifying issues, but worse at providing answers … [hence] much can be learned from other social scientists who observe phenomena that we often overlook' (p. 103). Finally, colonisation can proceed either by invasion or internalisation, for 'one possibility is that scholars outside of economics use economic analysis to understand social issues … Another possibility is that economists expand the boundaries of the economics and simply replace outsiders as analysts of "non-economic" issues' (p. 104).

5 Concluding remarks

The old economics imperialism is rooted in the idea of perfectly working markets extended to the non-market. It is neatly symbolised in the tale of the economist who walks past a £5 note on the pavement on the grounds that, had it been real, someone would have picked it up already. As a leading and early proponent of public choice reflecting upon this anecdote, Tullock (1972, pp. 327–8) asserts there are no £5 notes to be found on the sidewalk, in what is possibly more or less the world of the Coasean theorem, for:

> No economist would deny that if a positive correlation between all good things *did* exist, we should move out along the ray indicated. What we, in fact, say is that we have already reached the end of the possible changes which have this favourable outcome, and must now pick and choose among courses of action which have both advantages and disadvantages.

Both at the level of the economy and more broadly, the information-theoretic approach and the new phase of economics imperialism take an entirely different view. There is no reason to presume that there are no efficiency gains to be made, and that an 'as if' perfectly working non-market complements and compensates for an imperfectly working market.[18]

Indeed, one conclusion is that (in)efficiency depends upon non-market organisation. If the information-theoretic economist stepped on a dog turd on the pavement, it is only because it was presumed that, had it been real, collective solidarity or custom would have led an individual already to have cleared it up (or possibly not depending on the history of the matter). Could the market have done this, or the allocation of appropriate property rights in the pavement, or community collectivity? With the rise of neoliberalism as an ideology and of new classical economics as an academic doctrine in the vanguard of economics as a discipline, the latter seems to have imploded upon itself both analytically and policy-wise. For the latter, not only does government intervention become inefficient and/or ineffective but also, for the former, the macro no longer even exists. For the leading new classical economist, Lucas (1987, p. 108), 'the term "macroeconomic" will simply disappear from use and the modifier "micro" will be superfluous' (cited by Davis 2003, p. 35).

It is against such extremes that the latest phase of economics imperialism has reacted, within economics itself but, increasingly, across other disciplines as well. It is well grounded within the discipline in terms of its traditions by method, theory and techniques. It is well rounded in being able to confront economic and social realities in terms of market and institutional imperfections. And it offers a sound basis for discretionary policy in light of incidence of these imperfections, with the goal of attaining as much efficiency out of the market and non-market as exogenously determined factors allow. But analytically it remains bound by its origins within marginalism, specifically its methodological individualism and universalism. Yet its lack of ease with concepts such as power, conflict, context and uncertainty, with approaches that are systemic, and in critical self-examination of the meaning, specificity and history of its own categories of analysis, reduce the leverage that it can exercise in intellectual and popular terms. What are its prospects and, with them, the fate of the other social sciences under its greedy eye?

Notes

1 This can be extended to bananarama or even substituted for by taramasalata!

2 More generally, see Akerlof (1984 and 1990), and Fine (2001a, ch. 3) for comparison of Akerlof and Becker as economic imperialists, revolutionary and non-revolutionary, respectively, although Becker (1996) did become more revolutionary, and temporarily and partially in the vanguard, with his adoption of social capital.

3 But for Schelling as cold war warrior, see Sent (2006).

4 Note that Elster's critique of Becker for relying on perfect competition is misplaced, since Becker accepts the presence of monopoly and even (individually rational) collective action (see Becker 1996, for example). But Becker's preference is to explain as much as possible on the basis of perfect competition, full employment, unchanging preferences, etc. unless forced to do otherwise by empirical observation or the object of study.

5 See also Levitt and Dubner (2006, p. 214).

6 Becker (1958), as a shortened version of a graduate paper, was turned down by the *Journal of Political Economy* in 1952–3. Becker (1990, p. 33) expresses regret at how his disappointment led him not to persist elsewhere with the longer version: 'nobody paid it much attention … I was applying economics to politics as early as anyone. But the rejection hurt'.

7 See also Akerlof and Kranton (2002, 2003 and 2005). For a critique of neoclassical theory for its neglect of culture in its understanding of preferences, see Rosenbaum (1999), although this is itself limited by him to interdependency of preference. On a personal note, the interpretation by Akerlof and Kranton (2000) of Sen's Paretian Liberals, as attached to interdependent and/or game-playing preferences, was first put forward in Fine (1975). For a full critique of the economics of identity, see Fine (2007b) and Davis (2006b and 2007b).

8 Note that Kranton's (1996) account of 'Reciprocal Exchange' is entirely free of any consideration of the meaning of what is exchanged, being more concerned with the relative survival, incidence and efficiency of gift as opposed to market exchange for *given* goods. She reports that 'reciprocal exchange … has received little attention in the economics literature' (p. 832), neglecting why economists should previously have shied away from the issue, and the contributions of economic anthropology, and its formalist versus substantivist debate. Economists in the past may possibly have been mindful of the limitations of their methodology and tools for examining such issues (at least until they are stripped of interpretative content). In any case, for rejection of the dichotomy between gift and exchange (commodity) for unduly homogenising within each category, see Fine (2002c) and Lapavitsas (2003).

9 See also Akerlof (2007).

10 This is, in a sense, unwittingly recognised by Akerlof in a footnote for he continues by suggesting that the mental accounting may or may not override the norm subject to outer persuasion or inner speculation: 'With the mental accounting interpretation … a wise friend [could] make them aware of the *logical* problem of their reasoning'. It would also appear, then, for Akerlof, that logic prevails over individual action once given the chance.

11 Some classic works on analytical Marxism are Cohen (1978), Roemer (1981 and 1982), and Elster (1985). Mayer (1994) and Roberts (1996) offer good critical reviews of the literature. Carver and Thomas (eds) (1995) is a compilation of articles debating analytical Marxism.

12 See Lee and Harley (1998) and Lee (2007) for the UK, Hodgson and Rothman (1999) for US influence, and Coats (ed) (1996) for Americanisation, for which read, in addition, monopoly by the mainstream. See Neary, *et al.* (2003, p. 1248) for the conclusion that 'the gap between economics research in Europe and the United States is narrowing, but still remains very wide. No European economics department can claim to be in the top ten in the world'. This self-deprecating establishment idea, that European economics is lagging US economics for lack of publication in leading journals, depends upon a total exclusion of heterodoxy and is motivated by the wish to strengthen replication of US quality in Europe. See also Bernstein (1999), Siegfried and Stock (1999), and, for an account of the continuing corresponding flaws in econometrics, Wible and Sedgley (1999).

13 Interestingly, mainstream economists and critics of the hypothesis of economics imperialism have both perceived this as the way forward for the orthodoxy. See Thompson (1997 and 1999), in debate with Fine (1999) for example, who appears to draw upon Hahn (1991). See also Nielsen and Morgan (2004 and 2006) and Fine (2006a), and contributions to *Journal of Economic Perspectives*, vol 14, no. 1 (2000) for mainstream views about its own future, and Chapters 8 and 10 in this volume for further discussion of this and what follows.

14 See Brenner (1980, p. 187) who, in response to Coase (1978) and by putative claim

to Kuhnian mature normal science, claims, '(a) that economics has a paradigm while the other social sciences do not and (b) that this approach has demonstrated a greater explanatory [equals predictive] power'. Note that Demsetz (1997, p. 2) sees 'that economists have been more successful in dealing with the traditional problems of their own discipline than other social scientists ... Success breeds confidence, and sometimes over-confidence'.

15 For a critique of Lazear, see Fine (2002a). On a personal note, this response to Lazear was returned unrefereed on the grounds that the readership of the *Quarterly Journal of Economics* would be insufficiently interested in its content. And more or less exactly the same happened with the response of Fine (2007b) to Akerlof and Kranton (2000).

16 His is an unduly positive view of the rigour of economics on its own terms, both in principle and in practice. See, for example, Kirman (1989 and 1992) on the deficiencies of general equilibrium and the representative individual, respectively.

17 Note that Becker (1990, p. 41) refers to a seminar (by David Laitner) on why one specific language rather than another should be chosen on the basis of rational choice. The reductionism in this instance, and associated plundering, ignorance and arrogance in addressing linguistics, is truly astonishing. But see also Ferguson (2000, p. 995) who reports:

> Today's development economists ... proceed to theorize institutions ... in a way that makes anthropologists, and indeed, most sociologists and historians not so much disapprove as start giggling. (I do not mean this rhetorically; I remember some years ago seeing the linguistic anthropologist, Michael Silverstein, reduce a room full of staid anthropologists to helpless laughter by the simple expedient of reading out loud, line by line, Milton Friedman's theory of the origin of language.)

18 See also, in this light, discussion of path dependence in Milonakis and Fine (forthcoming).

8 Whither economics?

> Economics has become increasingly an arcane branch of mathematics rather than dealing with real economic problems.[1]
>
> Milton Friedman (1999, p. 137)

> In my youth it was said that what was too silly to be said may be sung. In modern economics it may be put into mathematics.
>
> Ronald Coase (1988, p. 185)

> The attempt to construct economics as an axiomatically based hard science is doomed to fail.
>
> Robert Solow (1986, p. 21)

1 Introduction

This chapter begins by offering a review of how economics has become the way it is in terms of its shifting methodological, social and historical content. These are all brought together to examine the social and historical content of economic theory as it has evolved. Section 2 of this chapter ranges over the methodological, theoretical and technical momentum of the discipline's theory, as well as the role of external intellectual and material factors. It does so to explain not only how economics should be able to forget the social and historical but also to seek to reclaim it without missing a step in its forward march. Economics has undergone enormous change in both content and scope with scarcely a backward glance at what it has discarded.

Section 3 ranges over general considerations concerning the professionalisation of disciplines and academic scholarship, not specific to economics as such, through to the Americanisation and mathematisation of economics in particular. By doing so it seeks to provide a fuller explanation of the why and how of the transition from the old to the new economics imperialism. Ultimately, a full answer needs to draw upon factors internal to the logical drive of the discipline itself, and the influence of external events and ideas. These have given rise to an economics that is diminished in many respects relative to its fellow social sciences. This is a result of its extensive inner weaknesses, in absolute and relative terms across the social sciences, that are nonetheless excused if not overlooked through claims of the discipline's being uniquely scientific and rigorous.

2 How economics got its spots

In our companion book, *From Political Economy to Economics*, we have charted the evolution of economic theory from classical political economy to general equilibrium primarily through the prism of its shifting social and historical content (see also Chapter 1 of this volume). Not surprisingly, a significant aspect of the account has been to highlight, as Geoffrey Hodgson's title puts it, *How Economics Forgot History* (2001). A major element in this memory loss has been the increasing pre-occupation with, and commitment to, economic rationality. This notion does itself have a history of its own within economic science in a number of respects. First, it has moved from the idea of maximising utility, something that potentially includes a range of motives and activities, through a variety of stages to become narrower to the extreme in content – a theory of choice attached to preference satisfaction. It is worth emphasising that the reduction of utility maximisation to a logic of choice has meant that there has been no conceptual advance in demand theory since the marginalist revolution. Instead, there has been an intensive and prodigious development of the technical apparatus associated with the consumer or, more exactly, the narrower demand theory, that is, how much of this or that given market conditions. Indeed, mathematical formalisation of the theory has both reflected its reduced analytical content and precluded wider considerations (Fine 2008d).

Second, this notion reflects two crucial methodological aspects. On the one hand, there has been the absolute triumph of the deductive over the inductive *and* other methodological principles. On the other hand, most notably in the axiomatics of the representative individual, the social and historical are excised in deference to an entirely formalistic analysis of (an) undifferentiated individual(s) optimising over the production and consumption of undifferentiated goods. By the same token, the social and historical are precluded in the sense of not allowing any variability in the meaning both of individuality and of goods.

Third and last, the rise and evolution of economic rationality within economics has inevitably been accompanied by a tension over its sphere of application. As a universal and general theory of human, and not just economic, behaviour, most notable in its becoming known as rational choice theory, there are no bounds, economic or otherwise, on its scope. Yet, it is precisely because so much – and not just the social and historical – is excised by appeal to an increasingly narrow economic rationality as a universal theory, that it has been perceived to be so limited in range of application and depth of explanation. Consequently, economic rationality gives way to alternatives. But what, when and how are not pre-determined, which explains why the social and historical content of economic theory is variable in extent and nature.

Interestingly, Coase (1978) argues that the very generality and universal applicability of marginalist principles reduces their appeal outside of economics where other factors are brought into play (see Chapter 6 in this volume). He further suggests that, for non-economic topics, non-economists can readily learn the necessary economic principles and apply them as necessary according to context and subject matter. At most, economists should have a comparative advantage on their own turf of the economy because of their greater awareness of the institutional and other empirical aspects of economic life. How wrong Coase has proven to be, although the signs were already in place at his own time of writing (see Brenner 1980, for example) and soon to be heavily reflected in the rejection of Coase's own view of blackboard economics once his idea of transaction costs was incorporated within it.

But it would appear that foolish economists, or economics imperialists, rush in where the angels of the other social sciences fear to tread, proclaiming the unique characteristics of economics as a rigorous science to be brandished across social theory as a whole. And, from the marginalist revolution onwards, there has been a piecemeal or, more exactly, piece by piece strengthening of the role of rationality both within and around economic theory. This has a number of logical, social and historical elements. First, the original sin as it were was the widespread and continuing acceptance that there is some scope of application for economic rationality. This was so even for the most extreme members of the various Historical Schools of thought. Their concern was to dispute the possibility of a *purely* deductive economic theory, and that the scope and significance of economic rationality needs to be situated relative to other motives and their social and historical context. To a large extent, not least for Alfred Marshall and his immediate followers, such a perspective was not in dispute. The difference lay in whether it was appropriate to take that terrain of economic rationality and develop it on its own terms in isolation from other considerations that were to be addressed separately and, at most, added subsequently.

That difference, prospective at the time in what it was liable to yield beyond Marshall's partial equilibrium principles, did provide the thin end of the wedge from which so much more would be forced through. In retrospect, from the perspective of today's economic theory there can be little doubt that the founders of the marginalist revolution would be appalled at the extent to which its principles have been applied both across subject matter and to the exclusion of other considerations. The journey from the marginalist revolution has involved a set, not entirely a sequence, of steps, each of which has built upon what went before. Whilst each step has been contested or, at least, hedged with caveats, these have rarely been carried forward to impede the subsequent momentum of the discipline (Fine 2007c). Only by standing outside orthodoxy, gathering together the weaknesses that have previously been exposed, is it possible to question what economics was and was becoming. The notion of general equilibrium, for example, was already present in the work of Leon Walras. But its acceptability in its modern form has depended upon a reduction to the optimising behaviour of individuals and the reduction of the economy as a whole to a simultaneous system of supply and demand, quite apart from a thicket of unacceptable technical assumptions within the theory itself around absence of sources of market imperfections.

The second element in the rise of economic rationality is the shifting relationship between economics and the other social sciences. This has two aspects. On the one hand, the most obvious is the difference in methods and subject matter, with economics increasingly establishing its core as the science of the market through supply and demand determined by economic rationality. This core has been developed prodigiously from relatively humble origins. In doing so, it has filled out its scope of application. It has gone from partial to general equilibrium and, more recently, with economics imperialism, from market to non-market.

Thus, on the other hand, the subject matter of economics is not necessarily confined to the core provided by marginalism. This confinement did prevail when marginalism remained underdeveloped on its own terms, as is the case prior to general equilibrium, and/or was perceived to be inappropriate to the economic problems posed and addressed in the past. Thus, the relationship between economics and the other social sciences has been buffered by the extent to which the discipline has internally departed from marginalism and the extent to which that departure has incorporated an interdisciplinary content. Accordingly, the relationship between the rational and non-rational and the economic and the non-economic do not necessarily coincide.

Such considerations are most relevant to the interwar period. They are reflected, for example, in the creation of the traditional division between microeconomics and macroeconomics, as Keynesianism (and business cycle theory) proved necessary to complement (dispute even) the idea of economics as the allocation of scarce resources between competing ends. As it evolved in the postwar period, however, other than in its reliance upon macroeconomic aggregates, Keynesian macroeconomics increasingly took upon the methodological and technical characteristics of the marginalist core. General equilibrium implicitly provided the long run from which short-run deviations are merely of concern. The subsequent evolution of macroeconomics, through its various Keynesian and monetarist versions, can in part be interpreted as increasingly incorporating the influence of general equilibrium, in drawing both upon representative, optimising individuals and upon simultaneous consistency across all markets.

At the other extreme to the evolving relationship between microeconomics and macroeconomics as the means of filling out the discipline of economics is the space created for heterodoxy, and the old marginalism associated with Marshall, potentially with an interdisciplinary content. Such an outcome is demonstrated by the strength of the 'old' institutional economics in the interwar period, especially in the United States and, if to a lesser extent, the rise of radical political economy in the 1960s. Each of these demonstrates the influence of the broader material and intellectual environment upon the dynamic of economics as a discipline. In the interwar period, an as yet partially developed and accepted marginalism was entirely unsuited to address the empirical realities, analytical conundrums and policy issues presented by the Great Depression. Circumstances were entirely different by the end of the postwar boom. Marginalism had attained its analytical pinnacle of general equilibrium and, paradoxically, a discredited Keynesianism had narrowed the scope of 'macroeconomics' to an axiomatic calculus of aggregate supply and demand and their effects.

The drive of marginalism to impose its narrowing notion of rationality on an expanding subject matter has broader implications. As a deductive and universal approach, methodological individualism of a special type, it induces these aspects to be taken as representative of the discipline more generally and even where economic rationality as such is absent or at most implicit. The prodigious advance in the technical apparatus of marginalism also becomes symbolic of the discipline, with abstract (mathematical) formalism appropriating precedence over substantive content. By the same token, with little or no critical understanding of the conceptual content of its categories of analysis, economic theory has been characterised by a fundamental reductionism, not only to economic rationality but also to few and relatively arbitrary nostrums concerning its subject matter and irrespective of other contributions from political economy or other social sciences. This is not surprising given that the theory is independent of its application.

This is, in turn, closely associated with the way in which economic orthodoxy has related to the empirical. It has eschewed any attempt to grasp the nettle of 'realism' however that might be interpreted. And it has masked its methodological and theoretical deficiencies by appeal to econometrics as a separate but increasingly prominent and core element within the discipline, with its own attendant problems in terms of reducing knowledge and causation to the statistical significance of estimated coefficients.

As is acknowledged by the majority of its own committed practitioners, economics has become a discipline that is pre-occupied with optimisation, equilibrium and efficiency, all addressed through the prism of a technical apparatus that serves as conventional wisdom. On this basis, economics claims to be the only truly rigorous and scientific discipline across the social sciences. To do so, it relies upon methodological and theoretical principles that are both extreme in and of themselves and in their collective vulnerability to any amendment. As a result, there is little or no room to accept, or to debate with, alternatives. At most heterodoxy is marginalised if it is acknowledged within the discipline, especially as the marginalist core takes hold and broadens its scope within microeconomics and from microeconomics to macroeconomics. Thus, paradoxically, analytical vulnerability increases with strengthening disciplinary stranglehold.

But, irrespective of the naïve and questionable notion of rigour and science that this involves, the discipline has extreme difficulty living up to its image of itself whenever it steps outside its own axiomatic formalism, either to address specific subject matter or to address material realities. General equilibrium, for example, can only be shown to exist and to be unique and stable under the most highly restrictive assumptions. Problems associated with externalities and increasing returns tend to be set aside where they would otherwise obstruct the emergence of meaningful equilibrium. Thus, realism tends to be sacrificed in deference to the technical apparatus where the two are in tension with one another. But, tellingly and remarkably, the technical apparatus itself remains sacrosanct even when confronted by its own inadequacies by its own standards. This is most transparent in the defeat over the Cambridge capital controversy, both in the debate itself that was motivated on one side to save the orthodoxy and, subsequently, in the failure to accept the implications of defeat. Use of the illegitimate but ubiquitous production function remains standard within the discipline as if it had never been shown to be invalid.[2] This demonstrates that the orthodoxy's commitment to its technical apparatus and methods, including its econometrics which displays similar disregard in practice to its own, internally generated self-criticisms, takes precedence over *both* realism *and* its prided internal consistency.

In this light, it is hardly surprising that external, interdisciplinary critique should have no purchase upon orthodoxy as it cannot or will not engage with it. At most, it is perceived to be (ir)relevant through being complementary. The social and historical have been excised without any lingering regard for the step-wise intellectual processes, and accompanying objections, that had made this possible. On the contrary, as the marginalist core gained content and status through development of its technical apparatus, so it extended its scope to incorporate the non-economic in the first phase of economics imperialism. But to treat the non-economic as if subject to economic rationality, and in the context of an 'as if' perfectly working market, is to stretch the credibility and appeal of the approach in two respects. For the wider the application of the economic approach in practice, the less acceptable it becomes to suggest that history does not matter and that all can be reduced to issues of optimisation, efficiency and equilibrium. In addition, the colonising designs of economics have limited appeal to the other social sciences to the extent that the absence of social and historical factors is both explicit and absolute.

Thus, whilst the logic of marginalism is to drive out the social and historical, the logic of economics imperialism is to address them again, this time by colonisation, once marginalism has secured its dominance within economics, and the discipline is not otherwise filled out by alternative heterodox and interdisciplinary approaches. The market imperfections or information-theoretic approach has, first and foremost, both incorporated the technical apparatus of marginalism and, thereby, drawn the conclusion that history, alongside a full variety of social factors do matter. It explains why *social* and *historical* differentiation or homogenisation, and structuring, might arise out of individual optimisation across economic and non-economic variables. And it does so by merely marginally departing from the assumptions previously deployed for perfectly working markets. Indeed, *within* the discipline's norms, it seeks to explain why markets might not exist, clear or function efficiently according to socially and historically specific circumstances. History and society are reintroduced into the picture but it is an entirely different history and society than the ones that were taken out.

It follows that the taking of the social and historical out of economic theory is a *relatively* long and complex process involving: the predominance of the technical apparatus of marginalism in its deductive method; its use of a narrowing notion of rationality and its expanding scope of application in subject matter and in going from partial to general equilibrium; the filling out of the discipline at the expense of heterodox and interdisciplinary alternatives; and the rise of econometrics. Throughout, the process has been perceived by those pushing it to be slow and impeded by a conservative and self-serving profession resistant to new ideas rather than, as is the case, offering genuine reservations that are forgotten alongside the social and historical content they imply. In retrospect, and of crucial importance, the pace of change has been remarkably rapid in *absolute* terms, whether it is the demise of the old institutionalism and other forms of heterodoxy or the triumph of new classical economics over Keynesianism, or the emergence of market imperfection micro-foundations. It seems as if the reservations expressed as marginalism and its technical apparatus were being established were stronger and more long-lasting than after it was established. For then, after the social and historical were being brought back in rather than being taken out, this was a matter of deploying rather than justifying established techniques albeit on a wider terrain in the era of economics imperialism (Fine 2007c). If anything then, on its own terms, the pace of change within mainstream economics is accelerating as fashion in mathematical models is enabled to sweep across the discipline without regard to conceptual content and reality check from alternative perspectives. How and how well that sweep, in the new phase of economics imperialism, can transcend disciplinary boundaries whilst devaluing the social and historical is far more contentious.

3 The why and the how

With respect to the current phase of economics imperialism, a number of paradoxes present themselves. First, although the new approach appropriately presents itself as less dogmatic than the model of perfect competition that it has sought to displace as a special case, it has prospered in an intellectual climate in which economics as a discipline has itself become even more intolerant of alternatives. Radical political economy has been considerably depleted and, even where it has not, the modelling and statistical techniques of the orthodoxy are increasingly imperative as a condition of entry to the profession, to the exclusion of almost all else. Blaug (1998a, p. 12) reports from John Hey, previously managing editor of the *Economic Journal*, that there is a 'journal game', based on use of irrelevant material, the stylised facts observed by an author, and designed to demonstrate cleverness rather than address crucial economic problems. Blaug (1998b, p. 45) himself opines:

> I am very pessimistic about whether we can actually pull out of this. I think we have created a locomotive. This is the sociology of the economics profession. We have created a monster that is very difficult to stop.

Such a view is also offered by Samuels (2002):

> A driving force within economics is status emulation. Decisions as to department type, membership, publication, outlets chosen and rewarded, curricular

> content, attitudes towards mathematics and econometrics, the sociology of training graduate students, the finessing of criticism, and so on, are driven by considerations of rank and power. Some heterodox economists have undertaken work to impress – be read by – leading orthodox economists rather than to promote their heterodox paradigm. Some economists within orthodoxy have downplayed the radical aspects of their ideas so as to avoid endangering their status.

Further, Blaug (1998a, p. 11) reports from a survey of a lack of interest in the real world on the part of elite graduate economics students as opposed to honing their skills in the latest econometrics and mathematical economics.[3] This is confirmed by Khalil (1987, p. 126) who, in drawing upon Axel Leijonhufvud, observes that 'Isolating practitioners in an ivory tower allows the aesthetic criterion to play a role in theoretical endeavours … (with) beauty and elegance rather than empirical corroboration as the basis of theory selection'. Interestingly, a different view is expressed by Krugman (1998) who, nonetheless, agrees that mathematical economics has a poor image outside the profession. He argues, though, that it has been in touch with the real world and policy, but has neglected popular elaboration of its ideas and their significance. This is, however, to miss the point. For it is not the failure of mathematical economics to be in touch with the real world that is in dispute, once it incorporates market imperfections, but the way and techniques with which it does so and its failure to address criticism and alternatives.[4]

On the other hand, the report on graduate economics education by the American Economic Association does find deep dissatisfaction with the lack of realism and policy implications in core curricula on the part of students (COGEE 1991).[5] It also finds that the same curriculum is taught more or less everywhere irrespective of hierarchy over quality between institutions. But COGEE also essentially fails to discuss the extraordinarily low ranking of 'institutions-history' and 'literature' (or history of economic thought) in the supply of and demand for types of knowledge to be taught in comparison with the high rankings of theory and econometrics (Hansen 1991, p. 1069).[6] No doubt this is taken for granted, in contrast to the heated debates over them in the past.

It seems that by choice or selection, those going on to become mainstream economists are very rapidly socialised to the discipline. Not surprisingly, Kasper, *et al.* (1991, p. 1105) simultaneously report for COGEE on the low number of graduates from US liberal arts colleges taking up graduate study in economics:

> Graduate study [in economics] is no longer merely the advanced specialization of the undergraduate field, but instead has nearly become a discipline distinct from undergraduate study … The emphasis on technique, at the expense of less attention to the analytical issues of economics, tends to depreciate the importance of the intuitive and creative talents of the liberal arts graduates.

By the same token, so narrowly trained are those with economics doctorates taking up teaching posts in the colleges that they do not have the breadth of knowledge required to teach at the liberal arts colleges, even in their own specialisms. To deal with all of this, it is recommended that advanced economic theory be offered at the liberal arts colleges even though this 'may lessen the ability of the colleges to offer basic courses in economic history and history of thought' (p. 1106). As Chandler (2003, p. 397) pithily reports:

> In the late 1970s, graduate students in economics at Harvard were required to take Alexander Gershenkron's course in economic history. In the early 1980s, that requirement was replaced by a required course in mathematics. Some time later, two such courses were required. I recently attended a conference at Harvard of economists who were reviewing the status of their discipline. One major concern was that economics was becoming a refuge for second-class mathematicians.

A decade later, Yonay (1998, p. 195) cited Debreu's (1991) Presidential Address to the American Economic Association, which noted that 'more than a few faculty members in the best economics departments got their Ph.D.s in mathematics'.

A second paradox, then, with the new economics and economics imperialism is that whilst it purports to be more worldly, in acknowledging both market imperfections and the social as distinct from the economic, its lack of realism is in other respects becoming increasingly marked. For McCloskey (1990b, p. 23):

> Economists spend a lot of time worrying whether their metaphors – they call them 'models' – meet rigorous standards of logic. They worry less whether their stories ... meet rigorous standards of fact. The choice [of economists is] to have high standards of logic, low standards of fact, and no explicit standards of metaphor and story ... If economists become economists by way of the Department of Mathematics, for example, it will not be surprising when they bring along a rhetoric of logic-is-enough ... Few economists become economists by way of the Department of English ... and so not many know they are telling stories.

No, they come from the Department of Mathematics and tell tall stories too!

In this respect, particularly striking is the degree of 'Americanisation' of economics. This is not simply excessive and irrelevant use of mathematics, statistics, methodological individualism of a special type, and obsessive pre-occupation with equilibrium and efficiency. It is marked by the excessive command of journals, textbooks, appointments, doctoral training, even Nobel Prizes, by a limited range of institutions and individuals. Significantly, the Nobel Prize in Economics was only awarded from 1968 to mark the 300th anniversary of the Swedish Central Bank and, other than in name, has no other connection with the prizes established for peace, literature, physics, chemistry and medicine in Alfred Nobel's will which were first awarded in 1901. Nobel has no direct living descendants but those of his brother, Ludvig, are reportedly unhappy as Alfred required that prizes should be confined to those 'who have conferred the greatest benefit on mankind'

(Brown-Humes 2002). As Ludvig's great grandson, Peter Nobel, a human rights lawyer, is reputed to have complained in a newspaper article published in Stockholm on 23 November 2001, 'The vast majority of economic prizes have gone to people who reflect the dominating Western view of the world. It's doubtful whether this is really of benefit to all mankind'. That was the year in which the three US economists, George Akerlof, Michael Spence and Joseph Stiglitz were the laureates. Revealingly, whilst the number of doctoral students in economics is increasing in the United States, the number of US origin is in decline, revealing the export and adoption of its economics at the top of the profession throughout the world. Thus, whilst there are traditions that lie outside the Anglo-Saxon, these are subject to erosion, most symbolically reflected in the emergence of the acronym ATKE for American-trained Korean economists. The same story, with or without acronym, could be told for most, if not all, countries, not least China (a major source of converts from mathematics to economics), transitional societies, and the developing world more generally.

But perhaps the most rhetorically persuasive and satisfying evidence for the Americanisation of economics is provided by the leading proponent of the new paradigm. For Stiglitz (2001b, p. 6), 'the question is, how can we *institutionally* facilitate the replacement of the old [neo-liberal, competitive equilibrium] paradigm with the new perspectives?'. The answer is through networking and PhD programmes, to be sponsored by foundations. But tenured jobs are hard to find as these depend upon publications, although 'many journals are not as open to alternative perspectives as they should be'. So new journals will also be necessary. Yet, this is the view of a Nobel Laureate, and a former chief economist to the US President and to the World Bank. As mentioned already, his contribution ten years ago on the prospects for socialism (Stiglitz 1994) contained over 100 citations to his own work, predominantly published in the major journals, and his list of academic publications runs to over 65 pages. Thus, whilst Stiglitz is correct to point to the strength of neoliberal thinking, and the stranglehold of (American) orthodoxy on the economics profession, it is not a monopoly either at his expense or at the expense of the (equally American) approach that he would seek to foist upon us all. And Stiglitz's own break from orthodoxy is hardly extensive and he relies on the standard methodology and tools of the trade. He appears radical by comparison with neoliberalism but not relative to the Keynesianism of the postwar period, let alone interwar institutionalism.

Thus, as an Americanised profession, there can be little doubt, as Garnett (1999) observes, that mainstream economics continually and dogmatically reasserts its scientific status and superiority relative to other forms of economic discourse, thereby creating boundaries for definition of the profession, entry conditions, and associated benefits in employment, prestige, financial support and intellectual independence. But, as a third paradox, given the monopoly over economics, why should the discipline seek to extend its supposedly superior form of science to other disciplines, over and above its enhanced capacity to do so in light of the new information-theoretic economics?

It is not possible to provide a full sociology of knowledge in explaining the new phase of economics imperialism, linking it more fully both to changing interests and to material developments outside of intellectual endeavour itself. In part, this is because the world of (academic) ideas does not follow so closely, crudely and uniformly upon its objects of study. But it is possible to posit a certain maturing in the current dynamic of the discipline and its disciples. Consider, first, accounts of those who have sought, possibly indirectly and partially, to explain the evolving relations between economics and the other social sciences.

A common approach, dusted off the shelf and displayed on demand, is the appeal to sclerosis, conservatism, and entrenched interests within the profession. This rests both upon an unquestioning faith in the superiority of economics imperialism and, even accepting this, that corresponding intellectual life apes any change in fashion. As a result, it is not necessary seriously to interrogate the substance of the ideas that are being resisted, the practices of the profession, nor the external environment, intellectual or otherwise, in order to bemoan economic imperialism's lack of progress but to herald its inevitable triumph. Thus, Tullock (1972, pp. 320–1) refers to the 'finite nature of the human brain', leading new developments to be ignored for lack of spare grey matter but, 'we can confidently expect that twenty years from now the problems of specialization and conserving of intellectual capital which today still restrict the influence of the new methods will no longer constitute serious barriers'. So confident is Tullock (p. 320) in his economics imperialism that he reports offensive 'Ludditism' at his own expense from the student newspaper of the University of Virginia which he left in 'somewhat tense circumstances':

> Admittedly, Mr Tullock published a good deal, but the quantity of his writing easily exceeded their quality. Mr Tullock, who had pretensions to competence as a political scientist as well as an economist, was looked on by professionals in the field very much as George Plimpton was looked on by members of the Detroit Lions.

There is a difference, though, in that Tullock had much more influence upon the field of political science than Plimpton did on the football field.

Stigler (1984, p. 311) too points out that old ideas die hard. For him, economics imperialism is resisted by the senior members of the profession:

> One reason for this scientific conservatism … is presumably that older scholars wish to protect their specific human capital – the knowledge they possess of their field – and innovations in a discipline tend to make that knowledge incomplete or obsolete.

At least Stigler does make an intellectual case for explaining 'Why did economics begin its imperialistic age so recently as the last two or three decades?' (p. 312). His answer is in terms of its 'growing abstractness and generality'. In other words, as explained above, having taken out the social, and a fair bit of method as well, some of it could be brought back in, once resistance is overcome! Similarly, Buckley and Casson (1993, p. 1039) in their 'Economics as an Imperialist Social Science' are surely behind the times, if not simply wrong, in asserting:

> If extending the domain of economics is so fruitful, it might be asked, why have economists not been more active in this respect? The explanation seems to be that economics is a conservative profession, so that economists have exploited the versatility of their core assumptions only when under threat.

As observed, to appeal purely to the persistence of ideas due to conservatism is to offer no explanation at all. It is necessary to go into the details of the ideas themselves and those who do or do not profess them – why, how and when – since it becomes impossible to explain the change in ideas that do take place other than as slow accrual of influence over accumulated resistance. By contrast, however, we would emphasise just how rapidly ideas have changed within economics, with it taking at most little more than a generation to replace, however completely, old marginalism with general equilibrium, Keynesianism with neoliberalism, and new classical economics (itself a rush to prominence) with market imperfections. By way of telling anecdote, through our own research it is remarkable how little the past classics of the discipline have been consulted, as measured by their being borrowed from libraries, often being confined to the stores, so long has it been since they were required.

More penetrating, then, on the issue of change is McKenzie (1978, p. 640) who, in drawing upon Friedrich von Hayek and Frank Knight, refers to the influence of changes in material factors. For McKenzie (pp. 640–1), the rise of the predictive method, within economics and more generally, at the expense of others is a consequence of the rise of the state and the corresponding need for a belief in the power to manipulate behavioural outcomes:

> Because control has become more specific, the need for more predictive theories has grown, and ever more specific (and debatable) arguments have been introduced into the individual's utility function. The demands for social policy, in other words, have required the scientific community of economists to accept more specific, but less realistic, descriptions of behavior. It means that we have been induced to accept theoretical models which have taken on the appearance of a 'Skinnerian box', with little room for the creative consciousness as a viable social force.

Significantly, for McKenzie, the imperatives of expanding the domain of policy (rightly or wrongly, although he is clearly of liberal persuasion in the Austrian mode), lead to analytical loss and authoritarian tendencies. This is of extreme relevance to the theory and practices of the World Bank in the contemporary world, not least in the shift from the Washington to post-Washington consensus, and the corresponding shift from old to new forms of economics imperialism in the field of development studies.[7] It is not unusual now to find economic and social engineering of the type that so many more telephone lines will cause so much more growth, and so much more growth will cause so much more poverty reduction.[8]

Toulmin (2001, p. 13) offers a more wide-ranging and long-standing perspective on the rise of formalism and its relationship to rationality, with reference to the shift from political economy to economics:

> Seventeenth-century natural scientists … dreamed of uniting the ideas of rationality, necessity, and certainty into a single mathematical package, and the effect of that dream was to inflict on Human Reason a wound that remained unhealed for three hundred years – a wound from which we are only recently beginning to recover.

He sees the invention of disciplines at the beginning of the seventeenth century as a consequence of the emergence of professions (p. 26). The formation of their boundaries hardened in the twentieth century, through striking a balance between specialisation and rigidity within disciplines, with a corresponding loss of roundedness that becomes institutionalised. For Toulmin (p. 42):

> Problems begin when people forget what limits they accepted in mastering the systematic procedures of their disciplines. Once forgetfulness sets in, the ground is prepared for misunderstandings and cross-purposes: the selective attention called for in a disciplined activity is elevated to the status of being 'the one and only right way' of performing the tasks in question, and the possibility of approaching them from a different standpoint, or with different priorities, is ignored or, we may say, 'bracketed off'.

Similarly, Lawson (2003, ch. 10) provides a history of the mathematisation of economics on the basis of an evolutionary model of cumulative causation. The more we use it, the more it gets used. He also adds that the shifting intellectual environment attached to the Cold War and McCarthyism was associated with an opposition to intellectuals and more reflective approaches.[9] However, despite his, and Toulmin's, heavy emphasis on the general drive to mathematise social phenomena as a dominant force in Western culture, he recognises that this raises questions, but leaves them unanswered, of why economics, where and when, and with what content?

In his implicit account of the rise of economics imperialism as the loss of institutionalism and history, Hodgson (2001) ranges over an array of factors. These include the discrediting of progressive German scholarship by Nazism, although many of the more rounded scholars were Jewish and emigrated to the United States; the love of all things American in light of its economic success; the vulgar materialism of scholars such as Joseph Schumpeter and Talcott Parsons in pursuit of their Harvard careers; and the death of Allyn Young and his replacement as Director by Lionel Robbins at the London School of Economics. None of these explanations seems sufficiently strong, and nor are the mechanisms spelt out by which a whole discipline became dominated by an orthodoxy and, ultimately, sought to dominate others.

This is characteristic of most of the foregoing discussion. Most useful in this respect as a corrective is Amadae's (2003) account of the promotion and rise of rational choice across US social science. For Amadae (pp. 11–12), during the period of the formalist revolution after the Second World War, 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.

These were the Research and Development Corporation (RAND) 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, 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 as the benevolent state correcting market imperfections. But the relative lack of interest by economists in these at the time did not reflect a lack of involvement. On the contrary, Kenneth 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 has himself made, and Cowles itself reflecting an interventionist stance at macro and micro levels (see also Mirowski 2007b).

Thus, if like a latter-day Marshall, 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. They had relatively little interest in contributing to the formalist revolutions 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. They were 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'. And the suspicion attached to Keynesianism amongst conservative elements in the United States was sufficient to have a profound impact on how it would be taught. Whilst it could not be made consistent with microeconomic principles, it should not be allowed to promote alternatives concerned with questioning the realities of 'monopoly capitalism'.[10]

In this light, it is possible to identify the limited intellectual environment in which the rapidly expanding academic economics profession found itself – somewhere between Keynesianism plus marginalism and rational choice. The safest and most acceptable ground was to remain confined to developing the technical apparatus and its application within economics. Where this was breached to incorporate a more rounded account, it was more likely to be done to promote the market and even to oppose the conventional Keynesian wisdom and Pigovian welfarism on these grounds. Only now that the corresponding technical apparatus of utility and production functions established as sacrosanct are the earlier opportunities offered by game theory, behavioralism, institutions, etc. being incorporated in the latest phase of economics imperialism. But the context currently is one of mild reaction against neoliberalism rather than an alliance with it against communism.

And it is important to recognise that leading representatives of the current economics imperialism believe themselves to be making radical and revolutionary breakthroughs, against the grain, and the most recent information-theoretic approach is no exception. As revealed in an earlier quotation, Stiglitz is inclined to refer to a shift in paradigm, although without any explicit reference to Thomas Kuhn's notion of scientific revolution. In doing so, he tends to identify neoclassical economics with models of perfect competition, the better to be able to present his alternative as anti-orthodoxy and anti-neoclassical. This is hardly surprising in view of his earlier definition of the orthodoxy as, 'the perfect competition, perfect market model in all of its representations' (Stiglitz 1991, p. 135). Yet, the picture of continuity rather than rupture is more accurately painted by Harcourt (1997, p. 3) who refers to Stiglitz as providing, 'one of the most profound *internal* critiques of mainstream economics I have ever read' (emphasis added).

For market imperfections of the old type, if without the emphasis on asymmetric information, are far from new, having been around within mainstream, neoclassical economics at least since the marginalist revolution, most notably through the work of Marshall, Pigou, see Milonakis and Fine (2009, ch. 7). Further, the orthodoxy is less about models of perfect competition than a methodology, a method, and a theory and set of techniques based on optimising individuals. As Hahn and Solow (1995, p. vii), two neoclassical mainstream economists highly sympathetic to Stiglitz have put it, in criticising the new classical economics:

> We also both regarded ourselves as neoclassical economists in the sense that we required theories of the economy to be firmly based on the rationality of agents and on decentralised modes of economic communication among them.

At the end of the day, clarity of thinking apart, it might be thought that this all reduces to a narrower or wider definition of neoclassical orthodoxy. But, especially in the context of economics imperialism, more is at stake. For the idea of a radical rupture with the past, as presented by Stiglitz, places a veil over considerable continuities between the old and new. According to Lazear (2000, pp. 102–3), for example, in celebrating economics imperialism:[11]

> The power of economics lies in its rigor. Economics is scientific; it follows the scientific method of stating a formal refutable theory, testing the theory, and revising the theory based on the evidence. Economics succeeds where other social sciences fail because economists are willing to abstract. The old joke about a stranded, starving economist assuming a can opener to open a can of food pokes fun at our willingness to assume away what we believe to be unimportant or difficult details. Economists are used to posing the counterfactual question to do an analysis. What would one expect in the absence of the hypothesized effect? What would be observed? Do the data allow us to choose between various hypotheses? Economists are not alone among social scientists in following this method, but this form of enquiry has become standard for economic research.

In respect of these boasts, very little has changed with the new approach. Whatever its methodological deficiencies, mainstream economics has remained firmly committed to an unchanging method – one attached to methodological individualism of a special type, utility maximisation, to equilibrium as an organising concept, and to considerations of efficiency – the three distinctive scientific elements emphasised by Lazear (2000). In addition, the technical apparatus and the barrage of associated techniques has at most become a little more sophisticated and extensive – with the fundamentals in terms of production and utility functions being instantly recognisable, albeit supplemented by the incidence and sources of (market and government) failure.

With the increasing mathematisation of economics, the conditions of entry to the intellectual vanguard of the profession are extremely technically demanding. As the degree of mathematical and statistical sophistication has been ratcheted up, so existing professionals who do not conform have found themselves marginalised to a greater or lesser extent. On the other hand, the newly trained academic economists have been highly tuned in the techniques and are growing in numbers.

On casual observation, and discussion with colleagues, there is now no shortage of 'American-trained' economists, searching out careers.

Further, in a world in which 'publish or perish' and a doctorate are not enough, the new recruits need outlets for their abilities, satisfied to some extent by the emergence of new journals. But a crucial intellectual factor is involved here. This is that the analytical and technical *principles* underlying the new information-theoretic approach are demanding but, once commanded, are limited in scope and economic application. It is simply one market imperfection and model after another. Whether by virtue of intellectual boredom of those who are already well established – one more market, one more twist on a technique – or the search for new avenues by those who have yet to establish themselves, the other social sciences provide new if not virgin terrain on which to play out those skills that would otherwise exhibit rapidly declining marginal productivity! In effect, neoliberalism is the death of economics because, if the market works perfectly, there is no need to study it. By contrast, the market imperfection, information-theoretic approach keeps the discipline alive but only at the expense of intensifying technical virtuosity, relying upon ever more esoteric models and, most important in reserves of potential, by their extension to non-market applications.

By the same token as publish or perish, academia in general increasingly depends upon external research funding. Compared to their colleagues in business, accounting, marketing and finance, academic economists are generally unsuited to serving the needs of the private sector. Where they are able to oblige, the rewards they can command by being within the private sector itself heavily outweigh those of remaining within academia. On the other hand, economists have also been less than willing and attractive participants in more publicly minded research, not least because of their being unworldly. As Balakrishnan and Grown (1999, p. 135) reveal in their study of foundation support for economic research:

> When the Ford Foundation funded multidisciplinary graduate programs in social science and health, for example, it found it impossible to convince economists to join the effort. Similarly, when the MacArthur Foundation sponsored a competition for multidisciplinary research on the human dimensions of global environmental change, economists were generally absent from the teams of investigators.

However, in deploring this absence of economics, Balakrishnan and Grown are heartened by 'recent developments in economics and philanthropy [that] provide new openings to re-examine and renegotiate this relationship' (p. 135). They refer specifically to, 'lively interest in the economics of information and incentive problems due to asymmetric information in settings as varied as the provision of public services, labour markets, credit markets, insurance markets, and Third World agriculture' (pp. 124–5). Thus, intellectual, professional and personal imperatives have been conducive to the outward thrust of economics imperialism, consolidating a paradigm of market imperfections extended to non-market outcomes, despite internally unexamined analytical weaknesses from the perspectives of other social sciences. In short, economics imperialism allows for intellectual complacency, (competition for) jobs, publications and research grants! It is a powerful combination.

4 Concluding remarks

It is far from difficult to find destructive weaknesses within mainstream economics across the multiplicity of elements that (ought to) make up the historical and the social within theory. Reductionism to methodological individualism of a special type and to axiomatic deductivism, even as these principles are applied more broadly across subject matter, leave the content of the resulting theory extraordinarily limited in both absolute terms and relative to contributions from other socials sciences. Yet, despite this, mainstream economics has managed to establish something approaching a monopoly within its own discipline whilst extending its reach across the other social sciences. This means that intellectual rigour in and of itself is not necessarily sufficient to provide an alternative to the mainstream since it can be ignored or, paradoxically, dismissed as lacking rigour for not conforming to the putative scientific demands of the discipline. In short, strength of analysis must be combined with judicious choice of subject matter and target audience. The issue is not only one of exposing the weaknesses of the mainstream but also of seeking out strategic directions for promoting alternatives, to which we now turn.

Notes

1 Leontief (1982, p. 104), the 1973 Nobel Laureate in Economics and no stranger to mathematics himself, complained that:

> Page after page of professional economic journals are filled with mathematical formulas leading the reader from sets of more or less plausible but entirely arbitrary assumptions to precisely stated but irrelevant theoretical conclusions … How long will researchers working in adjoining fields, such as demography, sociology, and political science on the one hand and ecology, biology, health sciences, engineering, and other applied physical sciences on the other, abstain from expressing serious concern about the state of stable, stationary equilibrium and the splendid isolation in which academic economics now finds itself? … The methods used to maintain intellectual discipline in this country's most influential economics departments can occasionally remind one of those employed by the Marines to maintain discipline on Parris Island.

(Parris Island is a military installation near Beaufort, South Carolina, tasked with the training of enlisted Marines.)

2 This disagrees with the view of Cohen and Harcourt (2003, p. 206) that production functions 'fell out of favor in the 1970s and early 1980s until their revival with endogenous growth theory and real business cycle theory'. These later developments merely symbolised how the (forgotten) criticisms fell out of favour. Similarly, they are unduly optimistic in concluding that because 'the questions have not been resolved, only buried … we predict controversies over these questions will be revisited, just as they were time and again in the 80 years prior to the Cambridge controversies' (p. 212).

3 See Varoufakis (2007) for the strongest of statements that economics bears no relation to reality but is its own flawed invention based on methodological individualism, instrumentalism and equilibrium.

4 For a disparaging view of Krugman's claim, as being based on his own pretensions in creating and serving in the role as people's mathematical economist, see Martin (1999). For further critiques of Krugman, see Klamer and Meehan (1999) for his putting his own views forward with undue confidence and his failure to explain why academic economics is not more influential with policymakers, and Amariglio and Ruccio (1999) for his failure to treat non-academic forms of economics discourse seriously.

5 The composition of the reporting committee included what were or were to become three Nobel Prize Winners (Arrow, Lucas and Stiglitz) and three Chief Economists at the World Bank (Krueger, Summers and Stiglitz). In view of intellectual as well as subsequent public and personal differences – Summers 'sacking' Stiglitz from the World Bank, Stiglitz condemning Krueger's appointment to the IMF in 2001 – one can only speculate on the differences between them reflected in the diplomatically phrased comment that, 'No one would endorse every sentence, and in many instances some members of COGEE have strong views that are not expressed in this document' (COGEE 1991, p. 1037).

6 See also Klamer and Colander (1990). Note that in his interestingly placed retrospective, Colander (1998), following Krueger, likens its immediate impact to the dropping of a pin relative to the sound of thunder. Otherwise, unsurprisingly, the trends and character of the discipline highlighted by COGEE are seen to have been heavily consolidated. See also Colander (2003 and 2005a).

7 For a critical presentation of the post-Washington consensus, see Fine, *et al.* (eds) (2001), Hildyard (1998), Standing (2000) and Jomo and Fine (eds) (2006), for example.

8 See Devarajan, *et al.* (2000), for example, and Fine (2006c) for a critique.

9 See also Fusfeld (1998, p. 511). He argues that, 'In the case of mathematical general equilibrium theory, it was highly useful both ideologically and politically in the era of the cold war' but that in the world of ideas, 'a selection process is at work that brings some ideas to prominence and rejects others, as if by an invisible hand'. Inconveniently, however, other than through a different invisible hand, economic history during the Cold War remained remarkably reflective (by comparison with what was to follow), if resolutely anti-communist, not least with Rostow in the vanguard. See Milonakis and Fine (forthcoming).

10 See Lee (2009) for the politics and ideology underpinning the rise of US (and UK) economics orthodoxy.

11 Note that his assertions about what economists do have long been known to be a false image of themselves – see Blaug (1980), McCloskey (1986), Boland (1997), Lawson (1997) and Wible and Sedgley (1999). Note also that Shapiro (2005) finds that rational choice political science is also extremely limited in applying itself, let alone successfully, to empirical evidence so much is it a 'flight from reality'. See also Green and Shapiro (1994).

9 Whither social science?

> The recognition of the inextricably social roots of all social behaviour leads to the view that macrofoundations must precede microbehaviour, not the other way around.
>
> Robert Heilbroner and William Milberg (1995, p. 8)

1 Introduction

This chapter consists of two main sections. In the first, we seek to characterise the current intellectual climate and its significance for the directions being taken by social theory, and the potential to influence these. For, unlike the excesses of formalism and mathematisation currently witnessed in economics, the situation in other social sciences is very different. The latter, currently abandoning the excesses of neoliberalism and postmodernism, find themselves at a crossroads, with concepts like globalisation and social capital coming to the fore. Both are characteristic for their conceptual looseness and all-embracing character as evidenced in their overwhelming presence and general applicability across the social sciences.

In Section 3 we seek a suitable methodological framework for an interdisciplinary political economy that would incorporate the social and the historical dimension from the outset. Such a framework needs to be flexible enough to break away from the excesses of both methodological individualism and methodological holism that imply that either pole in the structure/ agency division fully determines the other. It is argued that the principle of methodological structurism provides such a framework.

2 Beyond neoliberalism and postmodernism: social science at a crossroads

As will be argued in the next chapter, the need is not simply to restore the social and historical to economic theory but to do so in a way that addresses the social relations of capitalism as a starting point. In addition, the success of such a venture depends only in part on its analytical virtues – it also depends on how it interacts with the current intellectual environment. Currently, for example, the relationships within and between the social sciences are undergoing major changes. These are uneven and diverse in content but, at the general level, two broad trends are discernible. For the turn of the millennium has been marked by the dual retreat from, if not a complete abandonment of, the extreme excesses of both neoliberalism and postmodernism. For the first, peddling the idea of leaving everything to the market and making as much activity as possible subject to market forces has begun to exceed its intellectual sell-by date. As a result, the debate around market versus the state has given way to the exploration of their complementary roles. This is accepted in the ideology of the Third Way of social democratic parties, or of the Comprehensive Development Framework of the World Bank in its putative turn away from the neoliberal Washington Consensus. Further, the influence of postmodernism has also been on the wane, especially its preoccupations with discourse, meaning, the subjective and identity. It has increasingly been recognised that such concerns need not to be abandoned but to be wedded to the material processes that make them possible as well as the constructions that are placed upon them. In case of consumption, for example, possibly the focus of postmodernism par excellence, it is now a matter of how objects are received in every sense and not just how they are interpreted (see Fine 2002c for a discussion of the literature and its shifts in emphases over the past decade). This material turn, or return, in the study of (the cultures of) consumption is marked in economic (and social) history as well as more generally across social sciences other than economics, a frequent exception to general intellectual trends.

The declining influence of neoliberalism and postmodernism is indicative of a more general renewal of the wish to get to grips with what might be termed the realities of contemporary capitalism, as opposed to the creation of a 'virtual world' of free and pervasive markets (Carrier and Miller (eds) 1998). Significantly, this was well-illustrated through the 1990s by the successive emergence of two key concepts. The first is globalisation. It is notable for the way in which it began as the quintessential consequence of neoliberalism promising, both for left and right, the erosion of national barriers to the market and the death of the state – a promised to be regretted and welcomed respectively. Across the social sciences, globalisation has now become drawn to an opposite stance – in recognising the global only to counterpose it with the 'local'. In particular, the death of the nation-state is deemed to be premature, with the 'glocal' ranging over finance, knowledge, communications and the media, culture, technology, oligopolies, and so on (see Fine 2002c, Chapter 2 in this volume and 2004b for an overview).[1]

Following hard upon the idea of globalisation has been 'social capital'. Whilst pitched at the level of the nation-state or below, this notion has been motivated by the wish to address the role of culture, custom, associations, networks, etc. as *real* factors in economic and social outcomes (with the discursive occupying a distinctly rearguard position). The point here is not so much to appraise the emergence and use of these concepts but to suggest that they provide evidence of the dual retreat from neoliberalism and postmodernism in the attempt to come to grips with how the world is at the turn of the millennium.

The picture around economics is much less clear-cut, however. For a start, economics never participated in postmodernism and has had, therefore, neither reason nor potential to retreat from it. Amariglio and Ruccio (1998, p. 237) implicitly see this as a methodological advantage:[2]

> If postmodernism as critique has exhausted itself in cultural and literary circles, this result stands in sharp contrast to the situation within contemporary economics. The destabilizing effects of postmodernism are only beginning to be noticed in the area of economics, and the resistance of philosophers and historians of economic thought to the critical currents of postmodern theory is precisely because they have understood (correctly, we think) the mostly nihilistic implications of adopting epistemologically 'relativist' antiscientific stances.

This is, however, of little relevance to your bog-standard economist, who still remains ignorant of such methodological issues (as opposed to the limited dwindling numbers of those engaging in history of economic thought or economic method, these rapidly diminishing in terms of professional recognition within the discipline).[3]

The retreat from neoliberalism, however, is a different story as far as economics is concerned, although commitment to the market remains strong.[4] Indeed, as argued, something akin to a revolution is taking place in or, more exactly, around economics as a result of its emphasis upon market imperfections in conformity to the retreat from neoliberalism. And consideration of market imperfections has given rise to a *new* phase of economics imperialism that is both more influential upon, and palatable to, the other social sciences, despite the dual retreat from neoliberalism and postmodernism and the (re)turn to the real in the attempt to understand contemporary capitalism.

The new-found vigour of economics imperialism has realised uneven and mixed results across the social sciences both by topic and by discipline. As is to be expected, the new style is undoubtedly most successful where rational choice method and/or the old economics imperialism have already prevailed. But social science has primarily been concerned with the social and not the individual. Consequently, mainstream economics is liable to remain alien to the other social sciences to the extent that its analytical roots are recognised and quite apart from its intimidating technical virtuosity and statistical methods. Further, in retreating from the excesses of postmodernism, a continued emphasis upon the cultural, the customary, etc – all wrapped up in the 'institutional' as involving the social construction of meaning – will not be abandoned but, rather, be wedded to understanding of the material forces upon which they depend.

In this respect, however, the presence of an understanding of the economic across the social sciences is extremely weak, in part reflecting the previous 'cultural turn' and in part explaining the rapid rise to prominence of analytical surrogates such as globalisation and social capital. Exaggerating, these serve as simple fixes in place of economics. But each does so in a different way. Globalisation takes pure financial markets as an extreme exemplar, timeless and boundary-less. It has the effect of incorporating systemic analysis, and the corresponding presence of process, power and conflict beyond the bounds of individual agents. Not surprisingly, globalisation rarely appears in mainstream economics, at most serving piecemeal as an umbrella for liberalisation of trade, finance and investment in disaggregated fashion.[5] In this respect, it is crucial to recognise that, where it uses the term, globalisation for economists means something very different from its use across other social sciences and popular discourse.[6]

By contrast, social capital is more, if not entirely, acceptable to mainstream economics, and it has been heavily promoted by the World Bank and others, with its leading proponent, Robert Putnam, reputedly the most cited author across the social sciences in the 1990s (Fine 2001, Chapter 6 in this volume).[7] It has increasingly become a way of examining the social that is entirely compatible with the new phase of economics imperialism. Associations, networks, customs, culture, etc. can all be understood as the rational, time-dependent response to market imperfections. Conflicts, power and the systemic in any other sense simply fade into the background. In polemical terms, globalisation leads to protests in Seattle, social capital does not. This is not to suggest that social capital is purely or primarily an artefact of economists. It is, however, open to capture by them, as the catch-all for the non-economic. Otherwise, social capital is used by non-economists to avoid, at most shadow-box with, economics in suggesting that civil society, institutions, customs and values, or whatever, are important and have been neglected by economics. But this is no longer the case, and almost all social capital analysis is subject to capture and reinterpretation by a colonising economics, even as social capital itself is used to appropriate and transform social theory in its own image.

Social capital raises in its specific context the issue of whether, as some suggest, the other social sciences are colonising economics rather than vice-versa (see Chapter 7 in this volume). To labour the metaphor, is one or the other an interimperialist rival or sub-imperial ally? 'Social capitalists' like to believe that they are civilising economists, prising them away from their reliance upon perfect competition and their failure to take the social seriously. Whilst there may be some element of truth in this perspective, the bigger picture suggests the opposite. Such proselytising social capitalists are working with a model of economics that has already been superseded by the new information-theoretic approach (not that market imperfections as such are novel to the mainstream). Further, the impact of social theory on this approach is not to change but to feed it with raw materials for reconstruction of the social as market imperfection. What is needed is not for social science to bring the social and historical to economics but to challenge that economics itself.

The broader implication of these examples of globalisation and social capital is that cross-disciplinary endeavour that includes economics is liable to be caught on the horns of a dilemma, how to incorporate the economic without economics. If the analysis remains truly social in the sense of the systemic, distinct from aggregating over individuals, then mainstream economics has very little, if not nothing to offer.

For it is silent over the social relations, structures, power, conflicts and meanings that have traditionally been the pre-occupation of the social sciences.

In short, the task that faces the social sciences is not to succumb to a complicit asset-stripping in order to improve economics. Many social scientists recognise, and some welcome, the export of ideas from other disciplines to economics, judging it to render a civilising influence through reversed imperialism. In practice, whatever the intentions of those pursuing this route, the net effect will be to consolidate and promote economics imperialism. For the Panglossian perspective overlooks that a warm embrace is only offered to such incursions as long as they are consistent with an unchanging methodology and method; and it is stretching credibility to imagine that mere social theorists will transform a discipline that has effectively outlawed any dissent from within. This is because heterodoxy and political economy have been more or less systematically squeezed out of contention by the intolerant intellectual policing wielded against other schools of thought for their supposed lack of rigour and science. But nor, however, should alternatives be proffered to other social sciences in an imperialist fashion. Rather a new and truly interdisciplinary political economy is called for.

With the retreats from neoliberalism and postmodernism then, there is liable to emerge a debate across the social sciences around the economic that remains, as yet, remarkably open. Economics imperialism is attempting to occupy that space. If it succeeds, a great opportunity will have been lost to have promoted the political economy of capitalism as an alternative to the dismal science.

3 Structure and agency in social theory[8]

Of pivotal importance in erecting an alternative multidimensional and interdisciplinary form of political economy is the stance adopted on the crucial question of the relationship between structure and agency in social theory or, in David Lockwood's terminology, between 'system integration' and 'social integration'. This is hardly the place for a comprehensive treatment of what amounts to one of the most controversial, complex and unresolved issues that has puzzled social theory from its inception, from Karl Marx and Max Weber to Lockwood and Anthony Giddens. Instead our own position on this issue will be briefly stated.

As seen in previous chapters in this volume, in the form of the (instrumental) methodological individualism adopted by neoclassical economics, the individual becomes the basic unit of analysis, the point of departure as well as the most pervasive element. Even, however, within new institutional economics, everything from the existence of institutions to structural change is seen as the result of the (rational) action of individuals. Individual agency takes precedence over structural factors and the latter are either treated as the result of individual action (in the form of rational choice) or else are taken as exogenously given and, as such, are not explicable from within the model. Once in place, institutions influence behaviour by acting as constraints on individual action. Extreme forms of methodological holism, on the other hand, imply that human behaviour is totally determined by social factors. Here structural factors take precedence over individual agency with the degrees of freedom of the individual being severely constrained by the social milieu in which s/he belongs (see Milonakis and Fine 2009, ch. 2, sec. 2).[9]

In contrast to these extreme methodological stances on the question of the relationship between structure and agency, where either one pole or the other is deemed to determine everything in the social cosmos, the methodological structurist approach favoured here occupies a middle ground between these two poles (Lloyd 1986). From the perspective of methodological structurism, although the social whole is given analytical primacy, this is done without totally disregarding the role of human agency, as in some extreme forms of methodological holism. The social is taken as a point of departure, and social entities assume an autonomous existence, independent from their individual members. This is so in two senses: first, the social whole is more than a mere aggregation of its individual parts (members), as methodological individualists would have it; and, second, the social whole significantly influences and conditions the behaviour or functioning of its parts, but does not totally determine them. At the same time, agency (both individual and collective) is not a passive responder to the structural imperatives but is actively involved in the shaping of these structures. This is how Lloyd (1986, p. 37) describes the principle of methodological structurism:[10]

> Action always takes place within structures of relations, rules, roles and classes. But structures are not agents in the way some functionalists and holists seem to believe. They do have powers of a *conditioning* kind, which set parameters for the exercising of human agential action, but they do not cause themselves to change. This means that humans are not pure agents because their power is limited and constrained both internally and externally and it also means that individual and collective action is the fundamental agent of history. This methodological structurism is not reductionist, holding that explanations of mechanisms have to be given on both the micro and macro levels.

In such a framework structures refer to objectively identified properties and positions within a social system. By 'objectively identified' we simply mean that a structural property does not depend on the ideas or actions of any single individual. Within our framework, a social structure refers to an abstract structural property possessed by a social system. It represents a set of relations between individuals that may be acknowledged or unacknowledged by the individuals involved, but are external to any given individual, although not external to all the individuals involved. Whilst a structure does not exist apart from all individuals comprising it, it may exist apart from any one individual (Hodgson 2004, pp. 12–16, 36). It is in this sense that a social structure is described as a set of locations or a set of empty spaces. This is more than a metaphor – it is an abstraction. It is, however, a real abstraction, in the sense that the nature and existence of a class does not depend on the identity of the agents comprising it (individual traits), but is independent of it. Much less so does it depend on behaviour of the individuals involved, which takes place at the level of social practices. This, however, does not make it any less real as Giddens (1979) seems to imply in several places, p. 63 for example. As Hodgson

(2004, p. 33) puts it, 'a relation is real, but it is an association, not a singular entity. Individuals may confront these structures, even if they do not have the memories, ideas or habits that are associated with them'. A social structure provides the template, and social practices in the form of the activities of individuals fill in its blanks.

Social systems, according to Giddens (1979, p. 73), in contrast to structures, 'are constituted by social practices'. More analytically, social systems (p. 66):

> involve regularised relations of interdependence between individuals or groups, that typically can be best analysed as recurrent social practices. Social systems are systems of social interaction; as such they involve the situated activities of human subjects, and exist syntagmatically in the flow of time. Systems in this terminology have structures, or more accurately have structural properties; they are not structures in themselves.

Giddens associates 'structure' with 'structural property', or more accurately, to 'structuring property', structuring properties providing the 'binding' of time and space in social systems' (p. 64). As such, 'structures are necessarily (logically) properties of systems and collectivities, and *are characterised by the absence of a subject*' (pp. 65–6). Agency, on the other hand, which involves 'conscious, goal directed activity' (Anderson 1980, p. 19), is synonymous with (individual or collective) action and, as such, it necessarily implies a subject. Only people, either individually or collectively, can become bearers of purposeful activity.

Since individual action never takes place in a social vacuum, it has to be located within its proper historical and social context from the outset. In this way, individual motivation becomes a function of structures and collective interests and the fact that individual behaviour is shaped by social factors is explicitly taken into account as a point of departure. In other words, structure takes precedence over agency at the level of the individual, and the social is incorporated into the analysis at the outset rather than emerging as a consequence of the actions of (asocial, ahistorical, rational) individuals. At the same time, structures cannot be treated simply as constraints on individual behaviour, but rather as positively shaping that behaviour. As Giddens (1979, p. 70) puts it:

> every process of action is a production of something new, a fresh act; but at the same time all action exists in continuity with the past, which supplies the means of its initiation. *Structure thus is not to be conceptualized as a barrier to action, but as essentially involved in its production.*

This does not mean that individual behaviour is totally determined by these properties of collectivities, only that individual action is necessarily *filtered through* and *conditioned by* these structural and social factors and institutions.

In such a framework the individual is no longer the asocial, ahistorical, rational individual of standard economic theory, but a social individual situated within a proper social and historical context. In other words, the *homo economicus* of neoclassical theory (with more or less occasional fits of non-rationality, institutional conformity and ideology) is replaced by '*homo socio-economicus*'.[11] Human subjects become bearers of specific histories, and are treated as members of particular classes, cultures and communities both in determining continuity and change, with structural factors assuming central importance. But this is not a one-way process. Agency itself acts upon, shapes and reshapes the structural framework, which provides its own context of action.[12] This is close to Giddens's (1979, p. 69) notion of structuration:

> The concept of structuration involves that of the *duality of structure*, which relates to the *fundamentally recursive character of social life, and expresses the mutual dependence of structure and agency*. By the duality of structure I mean that the structural properties of social systems are both the medium and the outcome of the practices that constitute those systems.

In other words social structure is both the 'unacknowledged condition' and the 'unintended consequence' of human action (p. 70). Human action in this respect involves both individual and collective agency.

Further, collectivities and collective action are either absent from most individualistic approaches or, to the extent that they are present, they are stripped of intrinsic collective character. They are treated as mere aggregations of their individual parts. Aggregating over thousands of individual acts, however, does not change their character as individual action. Simple aggregation cannot transform individual action into collective action. The latter implies coordinated action on the part of individual agents to achieve some common objective. For this, the identification of a collective agent is necessary. Such an agent is totally absent from both neoclassical and new institutionalist approaches. Granted this, it comes as no surprise that in Douglass North's framework approach to institutions, for example, evolution and change are seen as being mostly the result of individual action.

Take the example of class. North (1981, p. 61), for example, defines class as a simple aggregation of individuals 'determined by commonality of interest'. The emphasis here is on commonality of interest among individual agents. What is lacking is the structural determination of these shared interests. This is because, as Callinicos (1987, p. 134) puts it, 'agents have shared interests by virtue of the structural capacities they derive from their position in the relations of production … [and] they draw their powers in part from structures … which divide them into classes with conflicting interests'. In similar fashion, the bases of collective action also 'comprise not just agents but the structures from which they derive the power to realise their ends'. Hence the identification of the structural determination of the 'commonality of interests' forms the basis of both class as a collective agent and of collective action itself. Social structures or the positions agents hold within a social system form the necessary conditions for class to become a collectivity. On their own, however, they do not suffice. In order for class to become a collectivity and for a collectivity to give rise to collective action, something more is needed at the level of social practices. What transforms class from a mere position within a social system (a structural property) into a collectivity, is what in the Marxist literature is known as class-consciousness or ideology.[13]

Collectivities, therefore, are closely intertwined with the concept of ideology. As Callinicos (1987, p. 137) argues, 'collectivities exist if and only if their members coordinate their actions in the light of the identity they believe themselves to share. This raises the issue of the beliefs agents have about society, in other words, the question of ideology'. Ideology, which can be defined as 'a set of widely held beliefs ... whose acceptance is socially caused' (p. 138), is an indispensable part of human agency and provides sufficient conditions for collective action. Whatever meaning one chooses to attach to it, ideology by its very nature implies a subject. As such, it is itself part of the social process through which objective determinations in the form of structural positions and properties are translated into subjective action. It becomes the mediator through which structure affects agency. It is a mediator, however, which ceases to be an exogenous, complementary factor to 'account for ... deviations from the individualistic rational calculus of neoclassical theory' (North 1981, p. 12). Instead of being yet another *deus ex machina* standing above and outside society, ideology now becomes an endogenous variable situated within society. The mystery of its existence within individualistic frameworks can now be transcended through the identification of its many social determinations and coordinates. What one learns from the literature on ideology is that, however widely cast, its origins, meanings and evolution cannot be found within the individual. Because ideology, although subjectively held by individuals through intellectual processes, is first and foremost socially constructed.[14] This is closely related to the notion of interests, as Callinicos (1987, p. 125) notes: 'The primary sense in which ideologies are socially caused is that they are articulations of interests. They are attempts to give conscious expression to the needs of agents occupying particular positions within the relations of production.'

The notion of interests brings forth the issue of power and conflict. Both of these concepts are noticeable for their absence from both neoclasscial and new institutionalist frameworks. This is a necessary consequence of the absence of true collectivities and collective action in these approaches. Individual interests are not simply derived internally or biologically endowed but arise '*by virtue of their membership of particular groups, communities, classes etc*' (Giddens 1979, p. 189). So, once again, at the first level of analysis, interests are objectively, structurally determined by the positions the actors hold in the social system.[15] Whether or not agents are able to realise their interests depends on the power they hold relative to other agents, and the particular outcomes of their actions. Power refers to the relative capacity of agents to achieve their aims, and is itself based on the position and control of resources different actors have within the social system. If the positions different actors hold are based on a 'structural asymmetry of resources' (e.g. ownership/non-ownership of the means of production) then these positions lead to contradictory interests, which form the basis of (class) conflict. So, although interests arise as a result of the structural properties of collectivities, their formation, and realisation or not, depends crucially on the transformative action of (collective) agents in relationship to other agents (p. 88).

In sum, methodological structurism certainly does not solve once and for all the problems associated with the relationship between structure and agency. But it does provide a more flexible framework and a more suitable basis for an interdisciplinary and multidimensional political economy, fully integrating the economic with the social and the historical. These abstract methodological principles, though, must be rooted in the material realities of contemporary society for which a political economy of capitalism is an essential starting point.

4 Concluding remarks

It would be foolish of us to attempt to trace out the prospects for the social sciences in anything other than partial and tentative terms, given their diversity in both substance and direction. What we have sought to do is to point to some common, if not universal features, and to highlight their relevance for the continuing relations with economics (and the economic). In this respect, there are some important differences between the dismal science and the other disciplines that will continue to mark their separate evolutions and, at the same time, how they relate to one another.

These elements go far beyond finessing the combination of the rational and the non-rational that traditionally marks the divide (Zavirowski 2000, 2001 and 2002), and how it is bridged. As highlighted in the previous section, quite apart from individualism versus holism, there are issues of (social) structure and agency. Our previous volume, Milonakis and Fine (2009), has placed some emphasis on the balance of deduction and induction, as well as the historical and social versus the universal. The next chapter considers the extent to which the meaning of categories of analysis, and their social and historical content, should occupy a significant and conscious role within social science, especially in light of the retreat from postmodernism (and neoliberalism and subjectivism) highlighted in Section 2 above. These, and other questions of method and of substantive content, continue to mark the separate paths taken by separate disciplines in a mixed and far from pre-determined fashion (as well as the emergence of new disciplines or fields).

Not surprisingly, our focus is on the role that economic analysis plays in these processes (and vice-versa). Throughout this and the companion volume, Milonakis and Fine (2009), we have revealed the extraordinary richness that marks the social, historical and methodological content of political economy, not least through consideration of the relations between economics and (or even within) other social science. That richness has not been lost for it continues to survive in the history of economic thought, in the evolving debates around methodology for economics or otherwise, and across contemporary social science. The latter is apparent in the intense controversy that has accompanied the shift from modernism to post-modernism and beyond, as well as the continuing perceived salience of social structure and agency for social theory.

To the extent that economics and the other social sciences are increasingly bound together, so are their fates across a much wider terrain than the economic alone. The project of economics imperialism has, often consciously and especially in its earlier versions, been acutely aware of this, albeit from a position of crude ignorance of what it was seeking to stamp out and dominate. Whilst the latest phase of economics imperialism is more nuanced and even accepting of the sensibilities of the other disciplines, it is no less dogmatically attached to its own. In this light, the future prospects for political economy across the social sciences are of extreme importance not only in combating economics orthodoxy and economics imperialism but for the broader fate of the social sciences themselves.

Notes

1 See de Sousa Santos (2006) for a useful discussion of globalisation in terms of four themes: is it new or not; is it monolithic; is it homogenising; and what are its effects.
2 Note that Cullenberg, *et al.* (2001) identify four elements of postmodernism – the historical (as the latest phase of capitalism); the existential (how we live); style (concerned with discourse and meaning); and critique (of modernism). In this light, it is hardly surprising that the presence of economics should be negligible.
3 Although there has been something of a revival of interest, in relative terms, in economic methodology.
4 See Deraniyagala and Fine (2001 and 2006) on the tensions between new (market imperfect) trade theory and new (open) trade policy, for example.
5 See, for example, the almost total absence of globalisation in Chang's (2001) collection of Stiglitz's papers. The same, other than in nominal terms, remains true of Stiglitz's (2002b) best seller.
6 An interesting parallel can be drawn with British attitudes towards free trade a century ago. As Trentmann (1998) argues, broad popular support had little to do with laissez-faire economics and more to do with the culture of a nation of free consumers. Much the same is broadly true in its own way of today's responses to globalisation, both popular and academic. It has to do with understandings of contemporary capitalism and the position of citizen and nation-state within it, as opposed to the esoterica of contemporary economics – future historians of (popular) economic thought please note.
7 For a comprehensive critical account of social capital, see Fine (2001). See also Harriss (2001) and Bebbington, *et al.* (2004) for a revealing account of how social capital came to the World Bank and for an attempt to rationalise its use as part of a strategy to reform World Bank economists, and Fine (2008a) for a critique. See also Chapter 6 in this volume.
8 This section draws heavily on Milonakis and Fine (2007).
9 See Rutherford (1994, ch. 3) for a comprehensive discussion of the different forms of methodological individualism and methodological holism.
10 In this passage we would substitute the words 'limited and constrained' with the words 'filtered through and conditioned by', since we consider social structures as not simply constraining, but also enabling and conditioning of human behaviour (see also below).
11 We use the term homo socio-economicus, rather than homo sociologicus, in order to stress that rationality is an integral part of human action, but that this is not the asocial and ahistorical instrumental rationality presumed to govern homo economicus. It is a socially, culturally and historically conditioned rationality, what for short might be called social rationality.
12 As Marx (1972, p. 120) has said, 'men make their own history, but they do not make it just as they please; they do not make it under circumstances chosen by themselves, but under circumstances directly encountered, given and transmitted from the past'.
13 Again what is involved here is a distinction between class as a structural element of a social system, and class as a collectivity at the level of 'recurrent social practices', what Marx called class in itself and class for itself. In dealing with classes as social

structures, we abstract from the specific identity and actions (individual traits) of the agents comprising them, in order to concentrate on their common attributes. Identifying the criterion of what should constitute the basis of this commonality has been a matter of debate within social science. Marx's answer is that since the first act of human existence has always been production, then this common criterion should be searched for in the production process of each social system. In this way, he came down to the relation individuals have with the means of production and to labour-power as the basic criterion in identifying social classes at the level of social structure.

14 As such, ideology is subject to the 6 Cs: it is constructed, construed, chaotic, contradictory, contextual and contested (see Fine 2002c in the context of consumption).

15 Here it is perhaps necessary to clarify further the concept of interests by making a distinction between 'interests' and 'wants'. Wants are subjective attributes of subjects and as such cannot exist outside and independently of the subject's consciousness. Interests on the other hand, are objectively defined as the structural properties of collectivities. In this way, the concept of objective interests is linked with with the notion of 'collective interests'. The problem with this conception is that it breaks the relation between interests and wants, the two being now seemingly unrelated. One way around this problem suggested by Giddens (1979, p. 189) is to conceive interests as a means to achieve given wants:

> Interests presume wants, but the concept of interest concerns not the wants as such but the possible modes of their realisation in social analysis; and these can be determined as objectively as anything in social science.

In this way interests become a. objectively determined, b. related to, but, c. not identical with wants. Again only individual agents can have interests (even if they are not aware of them), but this is the result of their membership of particular social groups. So although only people have interests, these can be shared with other people belonging to the same group, class etc. (Callinicos 1987, p. 129). Interests in this conception refer to objectively identified courses of action in order to achieve given wants. These courses of action are a function of the agent's position in the social system and his/her membership of particular social entities within the social system.

10 Whither political economy?

> For practical purposes, political economy is inseparably intertwined with many other branches of social philosophy.
>
> John Stuart Mill, cited in Riley (1994, p. xvi)

> In the succession of economic categories, as in any other historical, social science, it must not be forgotten that their subject – here, modern bourgeois society – is always what is given, in the head as well as in reality, and that these categories therefore express the forms of being, the characteristics of existence … of this specific society.
>
> Karl Marx (1973, p. 106)

1 Introduction

In this chapter we turn our attention to the alternatives within economics that continue to engage socially and historically. In Section 2 it is argued that the nature of heterodoxy within economics has, not surprisingly, been heavily influenced both by its relationship to the mainstream and the more general intellectual environment. It has necessarily struggled against being marginalised by the mainstream within economics, both in terms of presence and weight of professional recognition, and also against an antipathy to economics (and even the economic) from the other social sciences. The result has been either to drive heterodoxy to mimic the technicism of orthodoxy or for it to engage socially and historically without the benefit of an appropriately constituted value theory, proceeding as if all value theory must be unduly deductive and insufficiently social and historical. This is an unfortunate analytical weakness, especially in addressing the political economy of capitalism, one that might have further weakened the status and significance of heterodoxy in its influence within economics and across the social sciences more generally.

The precarious position of heterodox economics is further examined in Section 3, although some, incorrectly, believe that the intellectual fragility of the mainstream, and marginal adjustments around its frontiers, are signs of its imminent or immanent collapse. Rather than waiting upon this dubious prospect, the case is made for the renewal of political economy in the classical tradition involving interdisciplinarity, combining structural factors and human agency, and offering a dynamic analysis based on forces endogenous to the system, together with an appropriate value theory, in order to address the economic problems posed by capitalism.

In short, as suggested in the concluding remarks, the task is one of moving beyond what is wrong with the mainstream to offering alternatives that are liable to have an impact on the study of the economy. This intellectual case is reinforced by strategic considerations around the potentially bright prospects for political economy within the other social sciences as opposed to its slow death in or around the margins of economics.

2 Historical and social economics versus value theory?

The evolution of mainstream economic theory is one in which this year's accepted reservations – on the grounds of their (lack of) social and historical content or otherwise – are next year's source of contempt for their lack of science or rigour, the by-words for conformity to the orthodoxy's methods, theory and technical apparatus. As emphasised more than once already, the result has been for critical commentary and alternatives not to be so much intellectually defeated, as is commonly supposed, as simply set aside. History of economic thought and alternatives to the mainstream are notable for their absence within the discipline currently. Each is at most acknowledged as an imperfect path or contribution to the current state of superior knowledge. More generally, as it were, what we cannot model or understand as such cannot be of importance. Nonetheless, the mainstream does not absolutely preclude alternatives, raising the issues of what survives in and around the discipline and with what dynamics of its own.

Inevitably, heterodoxy has been characterised by a unity of opposition to the mainstream. But it is a unity of diversity, for the mainstream is so extreme that it can offend by virtue of its method, theory and substantive content or lack of it. Two broad approaches can be identified although mixtures across them are possible. One is to accept the deductive approach of the mainstream, not least in reliance upon mathematical modelling, but to question aspects of its method or theory, not least reliance upon methodological individualism (although analytical Marxism is an exception in this respect). In a sense, there is a historical precedent within the mainstream itself in the form of Keynesian macroeconomics as it was to become, especially through the universally adopted IS/LM framework. It has itself given rise to a post-Keynesian School of thought that emphasises systemic aspects of capitalism such as the endogeneity of the money supply, the monopolised structure of the economy, and the distributional struggle between capital and labour. And these can be formally modelled.

From a professional point of view, such initiatives have some status by virtue of their formalism and, possibly, ready translation into the empirical and policy arena. And they certainly offer an alternative perspective on the functioning of the economy in those respects listed and others. But, by the same token, the impact on orthodoxy is liable to be limited for two closely related reasons. First, even if motivated and modelled by appeal to macro-factors, similar if not identical results can be achieved by embedding the theory within the optimising behaviour of imperfectly informed individuals and/or imperfectly working markets. Second, such models do tend themselves to have equilibrium as an outcome, one that is at most a deviation from that of perfect competition. In short, the break with orthodoxy is limited. It is as if the motivation has been to offer an alternative model of equilibrium, and especially of prices and quantities, in order to challenge orthodoxy on its own accepted analytical terrain.

This means that the more radical breach with orthodoxy rejects its deductive method for a more informal approach, although this leads orthodoxy to dismiss it for lacking the rigour and science that is required for it to make a legitimate contribution to the discipline. This is apparent from the contributions of the Historical Schools and American institutionalism onwards, and is marked currently, for example, by the critical realist approach to economics with its single-minded opposition to deductivism within economics.[1] Such approaches are both more secure in their independence from the mainstream and more vulnerable to being dismissed by it, often erroneously, for lack of theory. It's just not of the right type for the orthodoxy to acknowledge, let alone dispute.

In this respect, however, heterodoxy is not entirely innocent. Emphasis upon social and historical variability and specificity in relation to the universal deductivism of marginalism is warranted. It is entirely arbitrary to select one form of individual economic behaviour as the basis, in the form of equilibrium of supply and demand, on which to construct market, and other, outcomes. These can be swamped by other forms of behaviour and socially and historically evolved customs and institutions, by movements in population, technology and taxation (and the role of the state more generally), and quite apart from the devastating consequences of war and conflict.

Yet, whilst commendably empirically, socially and historically grounded, such insights in relation to neoclassical value theory remain too aloof from value theory more generally. Value does not have to serve as an equilibrium theory of prices or be the consequence of an internally driven technical logic. Rather, it can reflect the economic and social structures and processes attached to (capitalist) commodity production. In this vein, the weakness of the Historical School lies in its failure to get to grips with value theory and, to a large extent, with classical and Marxist political economy which combines social and historical content with value theory. There is a paradox in this in so far as commitment to the social and historical can be so deeply ingrained that there is a failure to recognise the possibility of value theory for the historically specific stage of development in which capitalism dominates. There is a big difference between rejecting marginalism and its value theory, ultimately general equilibrium, and failing to address the need for value theory altogether.

In this respect, there is a distorted sense in which the orthodox critique of much heterodoxy is valid. The latter often does not offer an analysis of the most fundamental and obvious aspect of modern society, quantitative market relations. Whilst it does, unlike the orthodoxy, seek to penetrate beneath those relations to those that make them possible, the more abstract analysis is rarely attached to the more concrete and complex. And, if it is, it is more likely to be descriptive narrative with limited applicability beyond specific case study other than as mode of investigation. To propose that the state, institutions, etc. are important, and should not be neglected is correct but, on its own, it does not get us very far.

It is a moot point whether the failure to broach value theory has been an important element in the decline of the historical approach to economics as opposed to the intolerance of the orthodoxy to any value theory other than its own. And this account is far too sweeping and over-generalised. Nonetheless, the issues raised can be more specifically illustrated by reference to the article 'What Is an Institution?' (2005) by the philosopher J. R. Searle chosen to lead the first issue of the newly established *Journal of Institutional Economics*. He makes the very important point that institutions, however they may be defined, require language as a prerequisite: 'if you presuppose language, you have already presupposed institutions' (p. 2). For this reason, he takes 'language as the fundamental social institution' and indeed correctly observes that 'you can have language without money, property, government, or marriage, but you cannot have money, property, government, or marriage without language' (pp. 12–13). Further, he points to 'the constitutive role of language … [it] does not just describe a pre-existing institutional reality but is partly constitutive of that reality' (p. 13). Our understanding and use of money for example depends upon the use of language as does, of course, economic calculation.[2]

There is, though, nothing specific to the (capitalist) economy in these arguments, as is apparent in Searle's indiscriminate reference to economic as well as non-economic institutions. This failure to address the specifically economic is paramount in his concluding definition: 'An institution is any collectively accepted system of rules (procedures, practices) that enable us to create institutional facts … the collective assignment of a status function' (pp. 21–2). Searle does, though, make the point that within economics (and also other social sciences, if not so strongly language-blind) this role of language is taken for granted alongside other institutional preconditions, as in Lionel Robbins's definition of economics as the allocation of scarce resources to competing ends. There is no allocation without the language by which, in part, to do it, unless it be 'two dogs fighting over a bone or two schoolboys fighting over a ball' (p. 1). Although Searle does not make the point explicitly,[3] this represents a very powerful argument against the methodological individualism of mainstream economics. For, whilst it can amend preferences and/or circumstances in order to reduce everything to the tautological rationale of aggregated individual optimisation, it will always need to presume the presence of the social institution represented by language. Otherwise, how does the individual understand, let alone embark upon, utility maximisation? In other words, the chicken and egg problem in terms of which comes first, the social or the individual, can be resolved in favour of the social despite an apparent symmetry in the co-existence of the two.[4]

Significantly, Ferraro, *et al.* (2005) correctly argue that economics language and economic assumptions can be mutually supportive and (to some degree) self-fulfilling – for them through the institutionalisation of ideas, the creation of social norms, and their expression and comprehension through language. But such a view sheds no light on which ideas, let alone institutions, norms and expressions, come to be adopted and whether they are mutually consistent given the tensions and contradications expressed within them.[5] Thus, they weakly (and incorrectly) conclude that economic theories 'become dominant when their language is widely and mindlessly used … and leaders can become trapped in unproductive or harmful cycles of behavior that are almost impossible to change' (p. 21). One wonders what has happened to the economy itself in all of this mindless economics. There is, then, in addition, a big and crucial difference between deploying the logic of the necessity for language in establishing the primacy of the social (or the institutional) over the individual *and* arguing that language is the appropriate starting point for corresponding social analysis. This is so much and obviously so that social theorists have long been satisfied with taking the social as starting point without appeal to language, something that Searle seems to deplore and that explains for him why there has not previously been developed a satisfactory theory of institutions (Searle 2005, p. 2). On the contrary, language can be taken as given (and used) in constructing a theory of capitalism. For the latter has core common properties whether it is Anglo-Saxon, French, or Japanese capitalism, just as profit is the same whether calculated in sterling, dollars, francs or yen. Indeed, to understand the difference that language (and corresponding culture) makes to capitalism requires that a language-neutral approach be adopted in the first instance, whilst remembering that this involves abstraction from the historical and social variability in the meaning of categories of analysis. And, for specific institutions, theory must be appropriate to the particular institutions under consideration. Consequently, for capitalism, attention needs to be directed, first and foremost, at what are the institutions of capitalism, for which the first port of analytical call should be its social relations, including the value relations that it generates through the production and circulation of commodities, and production for profit. In short, whatever its validity and purchase as a general theory of institutions embedded in the prerequisite of language, Searle's contribution is symptomatic of the failure of the institutional approach to economics to engage directly with the value relations of capitalism. And much the same remains true of its current counterpart in new institutional economics and even its more radical critics.

3 What is to be done?

By way of summary and strategic posturing, a number of points can now be posited.[6] First, as a discipline, mainstream economics is increasingly subject to an esoteric and intellectually inextricable technicism that is absolutely intolerant of alternatives and only allows for them to survive on its margins. Despite its considerable and long-standing methodological and theoretical fragilities, there is no sign that this situation is liable to change as a result of internally or externally generated critique. Second, and paradoxically, the influence of economics on other social sciences is stronger than at any other time in the postwar period as a result of the latest phase of market imperfections economics imperialism. Third, the depth, extent and nature of this influence by topic and discipline are diverse, not least in light of continuing traditions and content of the other social sciences. Fourth, the openness of the other social sciences to economic arguments also reflects the current intellectual retreat across the social sciences from the excesses of both postmodernism and neoliberalism, although their presence and continuing influence occasionally remain strong.

Fifth, the main analytical basis for the current influence of mainstream economics arises out of the new information-theoretic economics through which both the economic and the social (treated as mutually exclusive opposites) are perceived as the response to market, especially informational, imperfections. Sixth, this involves, on the one hand, an extraordinary reductionism of the social to informational or market imperfections while, on the other, considerable scope for addressing the social by plunder of concepts and insights from other social sciences (ranging from trust and customs to institutions, etc.). Seventh, in the realm of methodology, the social sciences remain generally hostile to the methods and postures of mainstream economics, when they are explicitly confronted rather than informally incorporated. Nevertheless, rational choice adherents have made much headway in sociology, political science, history, and elsewhere. Eighth, within mainstream economics, despite the absolute dominance of methodological individualism in its current form and the widespread belief in the harmonious, if at times flawed, properties of free market capitalism, there is no unified ideology comparable to postwar Keynesianism or mid-nineteenth-century Ricardianism. Rather, orthodoxy is more a matter of adhering to technique and adopting a certain approach in resolving theoretical and empirical problems. As a result, both in popular and academic discourse, the diffuse nature of the new orthodoxy – its postures are contingent on the incidence and nature of market imperfections – makes challenges to it more difficult and less influential (unlike potential for opposition to the challenge of neoliberalism). Tenth and last, the diffuse nature of the policy perspectives of the new economic orthodoxy (how to make the market work) has its counterpart in a weakened appeal as far as other disciplines are concerned when the social and the systemic are genuinely taken as starting points, as in attention to relations, structures, conflict and power.

This leads directly, as an alternative to economics imperialism in developing an economics or political economy for the social sciences, to the following questions, traditional within political economy if confronted with the contemporary world. First, what is the appropriate value theory by which the issues of power and conflict can be comprehended in the context of capital accumulation? Second, what is the relationship between classes, and other strata and social movements, and the state and how do they relate to and sustain the capitalist system? Third, what is the relationship between the financial and industrial systems in the processes of the capitalist economy? Fourth, what determines national differences in systems of capitalist development and their effects? Fifth, why are sustained periods of economic growth punctuated by crises? Sixth, what is the relationship between economic and political systems and how can they be addressed by a genuinely interdisciplinary approach? Seventh, what is the relationship between economic and cultural factors? Eighth, what is an appropriate approach to the economics of non-capitalist societies? Ninth, what is the relationship between capitalist and non-capitalist economic systems? Tenth, how do the new world order, US hegemony, and the factors associated with 'globalisation' impact upon the prospects for growth and development?

It is in the light of this assessment of the social sciences and the intellectual problems that they confront that we view the changing relationship between economic theory and its social and historical content. But there are also strategic issues. For because language, for example, is an unavoidably social aspect of all theory, this does not necessarily make it the most appropriate starting point and successful element either in criticising the orthodoxy or in constructing an alternative. So the most devastating *intellectual* weaknesses of neoclassical economics, and they are legion, do not suffice in and of themselves in offering and persuading what direction to take with political economy. Indeed, this can be seen throughout the history of economic thought as compromises have been made, genuine and intended or otherwise, in order to persuade, with Alfred Marshall and John Maynard Keynes as leading examples.

But nor can the intellectual and strategic questions be kept separate. Our own assessment of orthodoxy suggests that it has become a discipline with core dependence on its core technical apparatus, utility and production functions most notably. Such an assessment is not always accepted, however, since critical realism in economics, for example, perceives orthodoxy in terms of its deficient ontology, emphasising closed deductivism as its foremost feature. As argued elsewhere, irrespective of the merits of its own alternative, both interpretatively and strategically this is to engage insufficiently, if at all, with economic *theory*. Further, Lawson (2006) has drawn upon Colander, *et al.* (2004) to pinpoint methodology as the defining and unchanging feature of orthodoxy because the latter has varied across a range of non-standard methods such as evolutionary, behavioural and experimental economics, as well as game theory and even neuroeconomics. These are confessed to be at the margins of the discipline but thereby projected to the prospective frontier, and then new core, with the mainstream disintegrating into pluralism (see also Davis 2006a and 2007c).[7]

In contrast, in interpretation here these new methods generally rely upon an otherwise unchanged core technical apparatus and, in any case, that they should become the new orthodoxy is purely speculative with little or no justification on the basis of current status and past experience. Ruccio and Amariglio (2007, p. 227) are appropriately unconvinced that:

> modernism in economics is on the wane … the evacuation of the strong concept of the utility-maximizing agent as a universal form of economic subjectivity/identity and its replacement by a rule-driven, habit-inflected, institutionally affected, 'local', processual individual does nothing, in itself, to counter economics as a 'process with a subject' … neither game theory nor the new

> behavioural economics dispenses with a modernist conception of the subject, and in any event, it is still the case … that hundreds of thousands of students worldwide begin their training in academic economics using introductory textbooks that codify over and over and over again rational choice and utility maximization (and, for the 'self' of the firm, profit maximization).

There are two further arguments why the disintegration of economics from within should be doubted (and that innovation on the margins is exactly that and no more). First, as highlighted by Amadae (2003), and discussed in Chapter 8 in this volume, economists have eschewed the opportunity to deploy these techniques and methods in the past, not least because their own technical apparatus would have been rendered insecure as a result. It is only now that these innovations are being entertained because they are so much *less* capable of undermining use of the technical apparatus, not that they are undermining it. It is significant that those who project the new margins of economics to the frontier of a new orthodoxy simply overlook the alternative offered by freakonomics in which bits and pieces are inconsistently added on to the core and smoothed over by econometrics for empirical study or simulation for the pure theory (see below). Interestingly, going back even further and in retrospect, Simon (1999, p. 113) suggests of the 1930s that he offered economics two gifts, 'organizational identification' and 'bounded rationality'. He bemoans the fact that, 'The gifts were not received with enthusiasm. Most economists did not see their relevance to anything they were doing, and they mostly ignored them and went on counting the angels on the heads of neoclassical pins'.[8] It has to be doubted whether the pins, the angels and the counting have now been discarded, or are liable to be torn asunder, simply because a few more items of haberdashery have been added to the sewing kit.

The second argument is that the innovations to which Colander, Davis and others refer have already been around for some time within economics. The time-scale for the creation of a new orthodoxy to emerge is notably vague in their accounts, although our own contribution here indicates how quickly change can occur. For, in what might be thought to be a manifesto for this internal disintegration of neoclassical orthodoxy, the Preface to Durlauf and Young (eds) (2001, p. ix) opens:

> A striking feature of the social sciences over the last decade has been a breaking down of traditional barriers between disciplines. More often than not, this has entailed the transference of economic methodology to other social sciences … At the same time, however, striking changes are at work within economics itself … the traditional model of *homo economicus* needs to be invested with greater social and psychological realism.

This is because, Durlauf and Young continue, 'role models, peer groups, and family environment' and 'methodological advances in economic theory … [offer] the incorporation of richer conceptions of human behavior into the formalism with which economics is conducted'. Hence the use of interactions-based models with heterogeneous populations and direct, rather than market-mediated, interdependencies. In short, 'a new social economics paradigm has begun to emerge' (p. x). This is all part of a book series edited by Ken Binmore called *Economic Learning and Social Evolution*. Its Foreword refers to 'widespread renewal of interest in the dynamics of human interaction … with a sense of common purpose so strong that traditional interdisciplinary boundaries have begun to melt away' (p. vii). There are 'two unifying features … rejection of the outmoded notion that what happens away from equilibrium can safely be ignored …[and] recognition that it is no longer enough to speak in vague terms of bounded rationality and spontaneous order'.

As Durlauf and Young make clear in their opening chapter, the idea is how to translate the more complex forms of individual behaviour into social outcomes with feedback effects. The analogy used is of reds and blues moving house to be able to live next to one another but, with the addition of extra variables, the analysis becomes too complex and long-term properties can only be examined through computer simulation. The second chapter in the volume, by Blume and Durlauf (2001, p. 15) commends interactions-based modelling because 'a common general structure underlies such apparently different problems as the level of out-of-wedlock births, the agglomeration of firms in particular regions and the diffusion of technologies'. For them, 'What is important about interactions-based approaches is that the reasoning … provides a way to explicitly understand the emergence of collective properties in an economy' (p. 20), and, it should be added, society more generally from wedlock to technological diffusion. Significantly general equilibrium theory is seen 'as an overarching organizing framework for economics' (p. 29), but does not incorporate sufficient endogenously generated restrictions at the aggregate level (systematic heterogeneity across otherwise homogenous groups of agents). What they seek is 'well-specified decision rules and relatively simple interaction structures', and hence they are 'fully consistent with methodological individualism' (p. 33). Nonetheless, as Axtell, *et al.* (2001, p. 205) argue in a further chapter:

> that various kinds of social orders – including segregated, discriminatory, and class systems – can also arise through the decentralized interactions of many agents in which accidents of history become reinforced over time. In these path-dependent dynamics, society may self-organize around distinctions that are quite arbitrary from an a priori standpoint.

By chance, the blue-eyed get more than others in the past, and so this becomes a self-reinforcing norm of beliefs.

If this sort of analysis is at the frontier of the new orthodoxy, it does not break fundamentally with the old, protestations to the contrary, and not least in its methodology, techniques, and lack of genuine engagement with the social, the historical, interdisciplinarity and the history of economic thought. It is dirty economics imperialism and not the disintegration of the mainstream from within. And it has striking parallels with the contested goals of rational choice and interventionism immediately after the Second World War, the difference being that communism is no longer the common enemy but neoliberalism. This is worthy but sorely inadequate.

But what these new developments on the frontiers/margins of economics do highlight is the intellectual fragility of the orthodoxy once it is confronted by the narrowness of its methodology and its chaotic conceptual content with limited substance. But this is hardly new as far as orthodoxy is concerned. Exactly what is striking is how the process of bringing back in what has been left out is reduced and filtered through its compatibility, not its consistency, with the technical apparatus, with imperfect information being the most notable recent example. This has been stunningly demonstrated by Mirowski (2007a and b) in his account of the economics of information. For the latter to have been incorporated at all has required a total collapse of the nature of knowledge so that it can be more or less treated like any other good, albeit with special properties. But the same applies to endogeneity, for example, of preferences and technology quite apart from more long-standing technical assumptions around increasing returns to scale and externalities.

More generally, the reductionism of economics to its core technical apparatus and conceptual framework is so impoverished that there is an unimaginable wealth of opportunities by which to criticise what is there, and not there, and to believe that addressing any of these deficiencies or absences will suffice to bring the orthodoxy crashing down. Consciously or otherwise, this has encouraged critical attention to what are not necessarily the most decisive areas to address in undermining the orthodoxy and in offering alternatives. Thus, Nightingale (2003) offers a brilliant account of how the orthodox (if often heterodox) distinction between tacit and codified knowledge is invalid by drawing upon Searle, and exploring 'neurological causal processes, subjective mental state and speech acts' (p. 149).[9] Thus, both Mirowski and Nightingale establish that knowledge, information or whatever cannot be the way it is being interpreted, even at the supposed frontiers of orthodoxy. The point, though, is not to be dug deeper into this detailed individualism at the expense of an account of the social and historical processes that underpin them.

Further, and paradoxically, despite its continuing intellectual fragility on these and other scores, the strength of the orthodoxy professionally within the discipline borders on the absolute and, in the phase of economics imperialism based on accepting that the 'social' matters, has strengthened its status across other social sciences however fully and unevenly given continuing intimidation by, and yet antipathy to, its mathematical and statistical methods and conceptual impoverishment. The orthodox hold over the discipline is reflected in the dual movement of inventively appropriating any heterodoxy that it can and otherwise dismissing it. The same applies to the history of economic thought, economic methodology, and applied inductive work (with econometrics as its deficient surrogate).

This has placed heterodoxy in a highly vulnerable position, questioning its very survival within economics as a discipline. Of course, heterodoxy covers a wide range of approaches and content, with opposition to orthodoxy the only common denominator. And the absolute intolerance of the orthodoxy has forced or encouraged heterodoxy to locate itself outside economics altogether in order to create a niche or two for itself, and otherwise to rely upon more or less formal organisations and journals. Otherwise, as Dasgupta (2002, p. 57, 61) cynically observes, the modern economist has no time for philosophy or methodology, or the history of economic thought, while it is common even for established economists not to have ever read any of the classics, on whom, however, they feel free to pronounce, usually very harsh, judgements. That the situation is dire is also evidenced by testimony of the heterodoxy as opposing force. For Blaug (2001, p. 145), in opening:

> It is no secret that the study of the history of economic thought is held in low esteem by mainstream economists and sometimes openly disparaged as a type of antiquarianism. There is nothing new in this. Practically every commentator on the role of history of economic thought in modern economics in the last 30 years has lamented the steady decline of interest in the area since the end of World War II and its virtual disappearance from university curricula, not just at the graduate but sometimes even at the undergraduate level. The trend is more pronounced in the United States than in Europe but it is manifest just about everywhere.

Consequently, 'history of economic thought is a haven for heterodoxy' (p. 147).

But it is a haven not a heaven. For Kurz (2006, p. 2), for example, 'Historians of economic thought are an endangered species and their natural habitat – faculties of economics – are becoming less and less hospitable. The marginalization of the subject has been going on for quite some time'. He advises a strategy for survival through combining history of economic thought (HET) with contribution around current theoretical concerns – although this raises issues of how to compromise with the currency without being totally devalued. Weintraub (2006) offers an even bleaker picture. For him, the 'science war' engaged by HET with current economic theory is over 'Because historians and methodologists of economics are not seen as any "threat" to mainstream economists … and we historians of economics have lost' (p. 13). He advises that HET seek sanctuary in the more general milieu of the history of science, as does Schabas (2002). Although he offers some small and questionable comfort in the tendency for academic economists to take an interest in history of economic thought as they age, and for it to be found in disciplines other than economics, Backhouse (2002b, pp. 93–4) suggests of the UK:

> The age profile of HET staff raises the possibility that when the current generation currently in its fifties retires, the number of staff available to teach the subject will plummet, and the subject will be in danger of dying out altogether. The supply of new Ph.Ds in HET is tiny, and even if there were more of them, universities would favor those working in the mainstream fields.

Bateman (2002) offers some optimism for HET through liberal arts colleges in the United States. But, for Gayer (2002, p. 57), survey results in the US 'suggest that most current Ph.D. students are not exposed to HET. This is particularly true among the top Ph.D. programs, which more frequently place their Ph.D. students in tenure-track jobs in Ph.D.-granting programs'.

The situation elsewhere with HET is uneven, as indicated across the other articles covering the non-Anglo-Saxon world in the special issue of *History of Political Economy*, vol. 34, no. 4, Annual Supplement, 2002, devoted to its prospects. But Deleplace (2002, p. 122) captures the general trend: 'a *consensus about tools* has been established in economics at the international level ... More profoundly, it is not only the existence of the consensus in economics that marginalizes HET, but also its content'. Similar stories can be told of economic methodology, as it too is exiled from within the discipline, and for the survival of heterodoxy in general as revealed by Lee's (2006) introduction to the special issue of *Review of Radical Political Economics* devoted to how it can be sustained – Stilwell's (2006) contribution to that issue is particularly poignant given the subsequent (essentially unsuccessful) threats of closure of the Department of Political Economy at the University of Sydney.

Such perspectives on prospects for history of economic thought and heterodoxy more generally are grimly realistic but arguably too narrow in their assessment and in their ambition. To some extent this is because of an understandable, if far from universal, psychological predisposition to seek survival by waiting upon an orthodoxy's willingness to engage – a sort of syndrome in which the crumbs of comfort that fall from the mainstream feast are heavily outweighed by the vicious kicks under the table. The goal is one of patiently persuading orthodoxy of the narrowness and limitations of its approach and substance by reference to methodology, history of economic thought, empirical regularities and/or alternative approaches and considerations. Irrespective of the futility or otherwise of such a response to orthodoxy's current and strengthening intolerance and narrowness, insufficient account is taken of the broader intellectual climate across the social sciences and the opportunities and responsibilities that this offers for political economy.

4 Concluding remarks

As previously emphasised, currently the social sciences are marked by a renewal of interest in systemic understanding of the nature of contemporary capitalism, and not least with the rise of 'globalisation' as the single most important marker of this broad intellectual trend over the last two decades. Economics, having been immune to postmodernism in the first place, has only participated in the dual retreat on one leg, with market imperfection economics as the form in which neoliberalism has been rejected and milder and less extensive forms of Keynesianism and state intervention restored. The other social sciences have, however, inevitably been drawn to political economy in order to confront the globalisation for which mainstream economics offers little by way of systemic analysis incorporating power, conflict, class, context and dynamics – the traditional categories of the other social sciences.

With economics imperialism, however, economics has increasingly incorporated such considerations, or not, on its own terms. This reflects a disciplinary schizophrenia (Mavroudeas 2006). On the one hand, within the discipline, there is an absolute confidence in the technical apparatus and in its capacity to address economic and other problems. On the other hand, there is an increasing and widening recognition within economics that the economy cannot itself be understood on the basis of economic variables alone. This has meant that economics imperialism has not only sought to appropriate the subject matter of other disciplines on their own terrain but also to incorporate it into economic analysis. Some have seen this as a potential source of crisis for the discipline as the implications of incorporating the non-economic has the methodological, conceptual and theoretical potential to undermine the technical apparatus and its standard applications. But, as already argued, there is little evidence from the past that such conundrums as do arise, and are acknowledged, prompt anything other than to allow for continuing intellectual fragility and inconsistency as opposed to prompting major change to address them. Inner problems with economics in and of themselves do not lead to radical reassessment. Thus, to warm again to the theme of this chapter's second section, language and meaning are important to economic functioning. Merely to raise them sensibly has the effect of bringing mainstream economics to its knees – at least in principle. But, in practice, they will be ignored or incorporated less than sensibly.

The opening up of economics in this way is part of a much broader and genuine opening up of the position of economics, or political economy, within the other social sciences. In this respect, and more generally, the dual retreat from neoliberalism and postmodernism means that the direction and dynamic across disciplines and topics is difficult to anticipate. To some degree it will depend upon the response to economics imperialism and, where it is negative, whether this leads to a retreat from economic considerations altogether (in some new form of post-Xism) or to the incorporation of alternatives rooted in political economy, history of economic thought, and systemic methodologies and concepts. It is precisely here that political economy has an indispensable role to play, not by retreating into its separate and, to some extent, esoteric and marginalised concerns, but through forging a more or less conscious collective enterprise of sustaining critique of orthodoxy, in relation both to its economic and its non-economic analysis, and offering systemic alternatives, especially where of appeal to interdisciplinarity.[10] A new and truly interdisciplinary political economy, then, is necessary, focusing on the economic but fully and consciously incorporating the social and the historical from the outset. Such a political economy will bring economic science closer to other social sciences where it will find an increasingly welcome reception. It offers the prospect of intellectual integrity, genuine reflection upon the economy and, for those still engaged with mainstream economics, the opportunity to sow both dissent and alternatives from a position of analytical, if not necessarily professional, strength.

Notes

1 On the Historical Schools, see Milonakis and Fine (2009, chs 5, 6 and 8), and Hodgson (2001, chs 4–9). On American institutionalism see Milonakis and Fine (2009, chs 9 and 10), and Hodgson (2004). See also Lawson (1999) for the case for critical realism in economics, in the special issue of the *Journal of Post Keynesian Economics* he edits on whether post-Keynesianism should become subsumed within it or not, and Lewis (ed) (2004) for various views on critical realism in relation to economics. For critical realism in the context of economics imperialism, see Fine (2004a and 2006a).

2 This is not to go to the extreme of suggesting that calculation (of which language is a part) is itself the process of making the economy, as in actor-network theory (see Fine 2003d for a critique of Callon, *et al.* 2002).

3 Searle does devote the penultimate section of his piece to methodological individualism, assigning it what might be thought to be a minimal role (p. 21):

> The sense in which my views are methodological individualist is that all observer-independent mental reality must exist in the minds of individual human beings.

4 Goldstein (1956) appropriately argues that the critique of methodological individualism need not depend upon holism as alternative since 'intermediate' categories also present problems, such as kinship. He also observes the problem of how to handle diachronic as opposed to synchronic analysis within methodological individualism, something that remains unaddressed in Watkins's (1958, p. 395) spirited response in favour of methodological individualism, in which he concludes that, 'I do not see how someone can abandon the idea that individuals (together with their material resources) are the only moving agents in history without introducing the idea that there are other, superhuman or subhuman, agencies at work in history'. And we thought neoclassical economics was extreme! For a brief account of our own views on the relationship between structure and agency, see the previous chapter in this volume.

5 See Rotheim (2006) for the argument that language is important to the formation of economic vision, for the understanding of the individual (and free choice) and the market (as an aggregate of individual supplies and demands), thereby avoiding the relational aspects that are their preconditions and results.

6 What follows draws directly on the conclusions of Fine (2003c, 2004b and 2007c).

7 See also Lawson (2007) for the idea that there is no substantive core theoretical content to economics, and Colander (2005b) for the view that the frontiers are still waiting in the wings as older professionals retire, that heterodox becomes the new unsung orthodoxy, and that small (3 per cent) contributions at the margins represent a potential critical mass to tip over the profession to something new. This even leads Colander (2005a, pp. 197–8) to close, 'My critique of economics now is not about economics, but about pedagogy … core courses should focus on creativity and economic reasoning and not technique'.

8 See Crowther-Heyck (2007) for a discussion of Simon and emphasis on the different elements in his thought, ranging over system and structure; bounded rationality; a logic both of individual choice and social control; homo economicus, administrativus, and adaptivus; and the institutionalised individual. He observes that Simon's genuine interdisciplinary endeavours tend to degenerate into separate components within disciplines, most notably for economics.

9 See Camerer, *et al.* (2005, p. 9) for a survey of 'neuroeconomics' in which, significantly, 'the brain is the ultimate "black box"'. But this has now been opened by neuroscience so that we know how the brain works, and it is different from exclusive reliance upon utility maximisation (since other stimuli operate faster than self-interest and reason). Accordingly, 'How can the new findings of neuroscience, and the theories they have spawned, inform an economic theory that developed so impressively in their absence?'

(p. 10). Once again, it is as if we are able to find the key to society in, literally within, the individual. Note that for them, neuroscience questions the narrowness of the individualism of the orthodoxy, not its individualism as such, 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). In contrast, there is another school of neuroeconomics that seeks to reduce neuroscience to a confirmation of utility maximisation (it learns to take account of its own weaknesses). 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.

For an excellent critique, see Cavallero, *et al.* (2007), for whom neuroeconomics is reductionist to the processes of the brain and hence so 'mired in underdetermination issues that its search for theoretical parsimony and predictive power combined with its relegation of the social domain exacerbates'. Note that this is all part and parcel of a much more general bringing back in of psychology (Bruni and Sugden 2007, Earl 2005 and Sent 2004). 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' (16 February 2008, p. 10).

10 It is necessary to be mindful that the current generations of heterodox economists, trained in but rejecting the orthodoxy, are liable to be reproduced in the future in ever dwindling numbers from within the discipline. They are already predominantly white, middle-aged males, and disgruntled. Are they going to go out with a big bang of political economy or with a marginalised whimper on the deserted borders of the mainstream?

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