

philosophy and economics

The literature on philosophy and economics has traditionally been divided into two areas: economic methodology, which connects economics and epistemology/philosophy of science, and the literature on economics and moral philosophy/ethics. Recent developments in both of these areas are discussed in detail.

The essential interdependency of philosophical and economic ideas was a prominent feature of classical economics. Adam Smith was the author of *The Theory of Moral Sentiments* as well as *Wealth of Nations*. John Stuart Mill was an extremely wide-ranging scholar, as well known as the author of *A System of Logic* as of *The Principles of Political Economy*. And of course Karl Marx's *Capital* also drew on intellectual resources from economics, philosophy and a number of other fields. Classical political economy was deeply influenced by philosophy – different philosophies for different economists, but influenced nonetheless – and ideas also flowed freely in the opposite direction: from political economy to various areas of philosophical inquiry.

This changed significantly in the first third of the 20th century. The abandonment of 'political economy' and the self-conscious development of 'scientific economics' coincided with a major change in the relationship between the two disciplines. Although philosophy never completely disappeared from economic theorizing, it systematically came to play a less and less obvious role. There are undoubtedly many reasons for this. Two of the more important include the overall professionalization of disciplinary economics and the general acceptance of a more narrow, positivist-inspired notion of legitimate 'scientific' inquiry. John Stuart Mill directed his arguments at the general educated public and wrote confidently about the 'moral sciences'; by the first half of the 20th century fewer economists were doing the former and almost no professional economist would be comfortable doing the latter.

Although there were different versions of positivism, one common theme was that 'meaningful' discourse comes in only two forms: the synthetic knowledge of empirical

science and the analytic knowledge of logic and mathematics. During the period of positivist dominance (roughly from the early 1930s through the 1950s), many, perhaps most, of the lines of inquiry that had previously travelled under the label of ‘philosophy’ – including, ethics, ontology, metaphysics, and aesthetics – were dismissed from the realm of meaningful discourse. Science ceased to be a generic category that included any rational, non-faith-based inquiry, and instead came to designate only the natural sciences (or modes of inquiry that follow the same scientific method). Economics clearly had scientific aspirations, and in such a regime fulfilling those aspirations required jettisoning the profession’s old philosophical ways. Many of the significant developments in economic theory during the first half of the 20th century can be understood in precisely these terms: as an attempt to systematically discard the old metaphysical and utilitarian baggage, and replace it with more appropriate scientific concepts. Moral philosophy, for example, might still make an appearance in discussions about economic theory, but it almost always played a disparaging role: either to indict another theory for retaining some ethical residuum, or to emphasize that one’s own theory was entirely free of such normative influences. Such an environment was certainly not conducive to forging new links between philosophy and economics, and for much of the 20th century very few were.

A particularly good example of the rejection of philosophy is the development of welfare economics during the second quarter of the 20th century. From the hedonism of many early neoclassicals to the so-called ‘material welfare school’ (Cooter and Rappoport, 1984) of Alfred Marshall and Arthur Pigou, welfare economics (and applied microeconomics in general) had traditionally been associated with utilitarianism: policy A was better than policy B if A increased total utility by more than B. During the 1930s, as a result of the work of Lionel Robbins (1952) and others, most economists came to view this type of ‘interpersonal’ utility comparison as unscientific and thus inappropriate for economic analysis. Moral values were simply raw, subjective or ‘emotive’ preferences that were not amenable to scientific analysis, and must therefore be kept out of economic science.

As economists moved away from the earlier utilitarian notions of ‘good’ economic policy, they increasingly turned to the Pareto criterion as an alternative evaluative standard. It was argued (and still is) that Pareto efficiency – an allocation of resources such that no one person can be made better off without making someone else worse off – does not require making interpersonal utility comparisons and is therefore an entirely appropriate standard for scientific economics. The most important theoretical results of modern welfare economics – the first and second fundamental theorems – are based on a direct application of the Pareto criterion to questions about the welfare implications of competitive equilibrium. Although the norm-free credentials of Pareto efficiency have repeatedly been challenged (Blaug, 1980; Hausman and McPherson, 2006; Robertson, 1952), the standard interpretation among practising economists remains that such judgements, and thus any policy recommendations based on them, are fundamentally value free. But it is not necessary to take sides in the debate over whether Pareto efficiency is or is not an ethical criterion in order to recognize that the entire discussion is couched in terms of whether moral concepts are properly kept out of economic science, and to note that such a discussion does not provide a very fertile environment for the cultivation of new relationships between economics and moral philosophy.

Economic methodology has traditionally been the one exception to economists’ general rejection of philosophy. Although ethics and metaphysics were shunned by economists, epistemology and philosophy of science were often consulted for guidance regarding the proper scientific method. This said, even within methodology the use of philosophical resources varied greatly from economist to economist. Some of the classical works in economic methodology (Milton Friedman, 1953, for example) hardly mentioned philosophy at all; others (Robbins, 1952, and Hutchison, 1938, for example) drew on selected aspects of the philosophy of science, while still others (Blaug, 1980; Samuelson, 1963) tried to apply the arguments of particular philosophers of natural science directly to economics. Thus, even in methodology economists focused on only a relatively small portion of the philosophical literature and employed even those resources in a less than systematic way.

Although the traditional methodological literature is both extensive and ongoing, it is not the focus of the following discussion. There are at least two reasons for this. First, this literature has been effectively surveyed in a number of contemporary works (Blaug, 1980; Caldwell, 1994; Hands, 2001; Hausman, 1992) and second, things have again changed. Since the mid-1980s there has been a renaissance in the interaction between economics and philosophy. The traditional approach to economic methodology continues to produce viable research, but economics and philosophy are also interacting in many other, new and important ways. Philosophy of natural science is no longer the only relevant set of philosophical ideas – ethics and ontology have both returned to the scene – and the intellectual dynamic is now one of bilateral exchange rather than economists simply borrowing ideas from one corner of the philosophical shelf.

In addition to the revival of the interplay between economics and philosophy there has been an increase in the traffic between economics and a number of other fields that compete for some of the same intellectual space that philosophy has traditionally occupied. For example, resources from the sociology of science and science studies (Mirowski, 2002; Sent, 1998; Weintraub, 2002; Yonay, 1998), the rhetoric of science (McCloskey, 1998), postmodernism (Ruccio and Amariglio, 2003), feminism (Ferber and Nelson, 2003; Nelson, 1996), and variety of other fields have provided new tools for the examination of (and often confrontation with) modern economic theory. Although these works frequently overlap with the literature on philosophy and economics, they also involve ideas sufficiently removed from disciplinary philosophy that they fall outside of the work considered here.

The discussion is divided into two parts; the first examines recent developments in the relationship between economics and scientific philosophy. Some of this work has much in common with traditional economic methodology, while other contributions approach the relationship in entirely new ways. In the interest of brevity, only five of the many possible areas of significant research are examined. The second section examines the recent literature that combines economics and moral philosophy. Ethical questions are again back on the table, and an extensive literature has grown up relating various issues in moral philosophy to developments within economic theory. Some of this research

challenges the received view of the relationship between economics and ethics established during the first half of the 20th century, while other parts of the literature develop totally new connections. Again, as with the methodological literature, only a few examples are discussed. The final section briefly considers some points of convergence between contemporary work on economics and epistemology and that on economics and ethics. Throughout the discussion, the emphasis is on microeconomics and rational choice theory (rather than, say, macroeconomics or econometrics).

Economics, epistemology, and philosophy of science

The first area of research to be examined goes back to Terence Hutchison (1938); it is the literature relating the philosophical ideas of *Karl Popper* (1965; 1968) to economics. Popper is best known as an advocate of falsificationism, a philosophy that has two main theses: one demarcating science from non-science and the other characterizing the growth of scientific knowledge. For a theory to be scientific it must be at least potentially falsifiable by empirical evidence (in Popperian language, be falsifiable by at least one empirical basic statement). Scientific knowledge grows as the scientific community rejects falsified theories and retains those that have survived attempted falsifications (that is, by 'bold conjecture and severe test'). The body of accepted science at any point in time consists of all scientific theories that have survived such severe empirical tests. Elements of such a methodology were present in Hutchison (1938), and elaborated in more detail in his later work. The position has been most articulately defended in the methodological writings of Mark Blaug (1980). Although many economists continue to endorse a falsificationist approach to methodological questions, there is also an extensive critical literature on the subject (Caldwell, 1991; 1994; Hands, 1993; Hausman, 1988; 1992).

If the only research connecting the Popperian tradition to economics was the literature on falsificationism, then the subject would probably not be included in this discussion of recent developments. But that is not the case. During the last few decades the Popperian tradition has engaged economics on a number of different fronts, and currently consists of much more than just the literature defending (or criticizing)

falsificationism (Caldwell, 1991). At least three other developments should be noted. The first involves Popper's own brief discussion of economic methodology (Popper, 1994). This work is controversial because Popper's statements about economics – and social science more generally – differ from what he said about the (falsificationist) methodology of natural science. The second concerns the so-called 'critical rationalist' interpretation of Popper's overall philosophical programme: an interpretation that goes back in the economics literature to Kurt Klappholz and Joseph Agassi (1959), but has its best contemporary representation in the work of Lawrence Boland (1997). Supporters of critical rationalism argue that Popper's main philosophical contribution was not (empirical) falsificationism but rather a more general view of the growth of knowledge through open debate and rational criticism – of which falsification by empirical evidence is simply one, albeit a very important, special case. Although the discussion of critical rationalism has remained primarily an in-house debate among Popperians, it has much broader implications because it opens the door to characterizing the growth of knowledge as a product of particular social institutions rather than as the result of following fixed methodological rules, a view that has become increasingly important in general philosophy of science. Finally, there has been an extensive discussion of the work of Popper's student Imre Lakatos (1970) and his 'methodology of scientific research programs' (Backhouse, 1997; Blaug and De Marchi, 1991; Latsis, 1976). Economists have focused on two different aspects of Lakatos's work: his historical framework for understanding the evolution of economic research programmes (his concepts of hard core, protective belt, and so on) and his specific methodological framework for appraising scientific research programmes as progressive or degenerating. Even though there exists a critical literature on both of these issues, the Lakatosian framework has produced important case studies and also encouraged a re-examination of the general relationship between economic methodology and the history of economic thought.

The second area to consider involves the revival of interest in *ontology* and *metaphysics* in the philosophy of economics. There now exists a burgeoning literature on 'economics and ontology' (Mäki, 2001), something that would have been next-to-impossible only a few decades ago. During the heyday of positivism any mention of such

(occult) notions as essential natures, underlying causal powers, or ontological necessity all but disappeared from academic discussions about economics. Ontological discussion continued to some extent within certain heterodox, particularly Marxist, research programmes, but among mainstream economists, even philosophically informed ones, such concepts had no place in professional discourse. Although many things have contributed to this revival, three issues seem to be particularly important.

One factor contributing to this ontological renewal has clearly been the development of the ‘critical realist’ research programme, an anti-empiricist approach to the philosophy of social science that focuses on uncovering the hidden underlying causal mechanisms at work in social life. The most prolific defender of critical realism within economics has been Tony Lawson (2003), and his writings have generated an extensive secondary literature. A second factor involves changes that have taken place within the philosophy of natural science. Although there were many reasons for the decline of positivist-inspired philosophy of science, one of the most important was the perception that serious problems had developed within the Humean-inspired ‘empiricist’ component of the programme. Although debate continues about whether the founders of positivism were actually as empiricist as the standard view suggests (Michael Friedman, 1999), it is certainly clear that the programme was perceived that way by both critics and supporters, and that it was this aspect of the programme that was most effectively targeted by the criticism that descended upon it in the last quarter of the 20th century. Some of the efforts to reconfigure our reigning philosophical conceptions in light of these developments – particularly about scientific laws (Cartwright, 1989) and causality (Hoover, 2001) – draw directly on insights from economics. Finally, the literature on economics and ontology has benefited from recent changes that have taken place within the discipline of economics itself. A discipline that is more willing to entertain theoretical pluralism is more likely to be willing to entertain philosophical, even ontological, pluralism as well. The bottom line is that ontology and metaphysics are back and they are opening up a number of new (and renewed) lines of inquiry relevant to the philosophy of economics.

The third set of changes to consider involves border crossings between economics and certain other scientific fields – *cognitive science*, *neuroscience*, and related

disciplines – that have influenced the recent literature on the philosophy of mind. This literature is relatively new and rapidly growing, so much so that no appellative convention has emerged. Until such a consensus has been reached it is perhaps best to be inclusive and simply call it the literature on ‘the mind, the brain, rationality, agency and economics’. Examples would include such disparate works as Davis (2003), Glimcher (2003), Mirowski (2002), and Ross (2005). Although the arguments of the various contributors are quite different, there is some agreement about the main issues, as well as about the requirements for any adequate approach to these issues. These requirements concern consistency with recent developments in fields such as cognitive science, neurophysiology and artificial intelligence. The common concern is the core rational choice framework of modern economics: explaining economic behaviour as the outcome of rational constrained optimization of well-ordered preferences. Consumer choice theory is the paradigm case of such an explanatory strategy, but it is standard throughout economics (traditionally microeconomics, but increasingly macroeconomics as well).

Such rational choice explanations have recently been subject to a variety of criticisms. Some of these relate to the abundance of contrary empirical evidence that has appeared in the experimental literature – in both economics and psychology (Kahneman and Tversky, 2000) – and some of it has to do with the well-known philosophical problems associated with ‘intentional’ or ‘folk psychological’ (belief-desire-action) explanations (Rosenberg, 1992). Although much of the impetus comes from critiques of rational choice theory, this does not mean that all of the resulting literature advocates doing away with it. Some authors clearly do, but others interpret these recent theoretical developments as a way of defending standard practice. In either case, whether its authors defend or attack rational choice theory, the literature embodies a fundamental change in the rules of engagement. It is too early to know how it will develop, or the various turns it might take along the way, but it is clear that both in its use of resources from other disciplines and in its overall mode of argumentation it has moved economics and philosophy in a substantially different direction.

The fourth area to consider overlaps substantially with previous section on minds, brains, cognitive science, and such. It concerns the tendency towards ‘*naturalism*’ in

epistemology and philosophy of science. The standard interpretation of both positivist and falsificationist philosophy of science puts ‘philosophy before science’ in the sense that philosophers first decide what scientists must do to produce theories that are cognitively significant – constitute legitimate scientific ‘knowledge’ – and then evaluate specific scientific practices on the basis of this philosophical analysis. Naturalism – and there are many specific versions, but here we consider its most generic form – reverses this relationship. Instead of starting with a priori philosophical analysis about what scientific knowledge must be, naturalism starts with science, that is, the best current scientific practice, and uses this best practice to inform our epistemological inquiries about knowledge in general. Much of the philosophical literature discussed in the previous section – the literature that employs contemporary cognitive science and neuroscience in the investigation of knowledge in general – is naturalist in this sense. Such naturalism raises a host of questions, particularly questions about how it is possible to have a ‘normative’ philosophy of science, one that explains what ought to be done in science, when the ‘philosophy’ in question is based on descriptions of scientific practice. Such questions are the subject of much current debate and do not have easy or simple answers. Fortunately, such answers are not required for a discussion of how naturalism has affected research in the philosophy of economics.

Much of the recent research in the history and philosophy of economics is broadly naturalist in spirit. Naturalism informs some of the work on traditional methodological questions (Hausman, 1992) as well as research in general philosophy of science that draws heavily on economics (Cartwright, 1989). It also provides the backdrop for a number of recent studies on specific research programmes within economics, including the role of models (Morgan, 1999; 2001), the practice of empirical macroeconomics (Hoover, 2001), and the development of experimental economics (Guala, 2005). Although the boundary that separates such naturalist-inspired research from similar work informed by science studies is somewhat blurred, it is often possible to categorize a particular piece of work as primarily one or the other. If the main question is the philosophical justification of the particular economic tool or theory – even if the standards for such justification are naturalistically or historically grounded – then the

research is in the spirit of naturalistic philosophy; but if the explanation of the acceptance or rejection of particular economic tools or theories is based primarily on the influence of social, political, or individual (non-epistemic) interests, then it falls more into science studies.

The final category of literature to be considered, the *economics of scientific knowledge*, reverses the standard relationship between a particular social science like economics and the philosophy of natural science. As discussed above, the traditional relationship between philosophy of science and economics has been that philosophy comes first (laying the foundations for knowledge), economic methodology then translates those philosophical ideas into the context of economic science, and finally particular economic theories are appraised on the basis of the methodological rules so acquired. In the economics of scientific knowledge this process is reversed. Certain areas of economic theory – for example, industrial organization (IO) economics – examine how the institutional organization of a particular industry contributes to economic efficiency. Shifting this type of reasoning from the production of goods and services to the production of scientific knowledge is the basis for one way of thinking about the economics of scientific knowledge. The scientific community has a particular institutional structure; if the goal of this scientific ‘industry’ is the production of (reliable, justified, ...) scientific knowledge, then an obvious question is the degree to which the industrial organization contributes to the growth of knowledge (that is, epistemic efficiency). Since the goal is the growth of knowledge within the community, it might be the case that all of the individual scientists following the same methodological rule may not be the optimal way to arrange the available epistemic resources; perhaps the greatest production of scientific knowledge comes about as the result of a ‘cognitive division of labor’ (Kitcher, 1993) rather than methodological homogeneity. It is easy to see how such an approach opens up new ways of thinking about the growth of scientific knowledge, and does so by employing economic theory as a resource (in the spirit of naturalism) to address general questions about the growth of knowledge and the optimal design of scientific institutions.

It can be argued that such research on the economics of scientific knowledge goes back to Charles Sanders Peirce in 1879 (Wible, 1998), but regardless of its origins it has expanded rapidly during the last few years, with contributions coming from both economists and philosophers (Dasgupta and David, 1994; Goldman and Shaked, 1991; Kitcher, 1993; Wible, 1998). As one might expect, the literature has also generated a variety of critical responses (Hands, 1997; Mirowski, 2004). In addition, many other contributions to the economics of scientific knowledge are quite different from the version of epistemic IO discussed above (Mirowski and Sent, 2002). But in all of its various forms this work clearly represents a significant change in the interaction between economics and philosophy of science.

Economics and moral philosophy

One of the many changes that have taken place in the relationship between economics and moral philosophy has been a re-examination of economists' traditional stance on the 'positive–normative dichotomy'. This change is sufficiently complex that it is examined in two parts. First, there has been a substantive reconsideration of the general place of 'the normative' within the science of economics (where 'normative' does not necessarily concern ethics), and second, ethical norms are increasingly being considered in the causal explanation of economic phenomena.

Enforcing the prohibition against value judgements in economics requires maintaining a strict dichotomy between positive statements about what 'is' and normative statements about what 'ought to be'. These two issues – dichotomization and prohibition – are certainly related, but they can also be separated. The first asserts that a dichotomy should be maintained – 'ought' should be kept separate (and cannot be derived) from 'is' – while the second asserts that separate is not equal – things on the normative/ought side of the dichotomy have no place within scientific economics. Although the first (dichotomy) is necessary for the second (prohibition), it is clearly not sufficient; one could argue, as, say, Mill and Marshall did, that there is a difference between positive and normative economics, and yet also leave room for a version of normative economic science.

Debate over the strict dichotomy and the prohibition against deriving ‘ought’ from ‘is’ has a long history. It was popularized by David Hume in the 18th century, labelled the ‘naturalistic fallacy’ by G. E. Moore early in the 20th century, and is the subject of a long and contentious debate within philosophy (Putnam, 2002). Although many economists have been concerned with these issues, the one who probably played the most important role in the profession’s ultimate establishment of the principle of strict separation was Lionel Robbins. Robbins (1952, p. 149) endorsed a strict dichotomy – ‘Propositions involving the verb “ought” are different in kind from propositions involving the verb “is”’ – but he went beyond mere separation to prohibition, advocating complete exclusion of normative analysis from scientific economics. In particular, he criticized the normative welfare economics of the Marshallian school because it relied on ‘interpersonal’ utility comparisons. For Robbins, the normative economics resulting from such analysis was ‘illegitimate’ and ‘lacking in scientific foundation’ (1952, p. 141).

By and large Robbins’s position on these matters has become the conventional wisdom among practising economists as well as among most contributors to the methodological literature. Where methodological commentators often differ is not over whether normative concerns should be kept out of scientific economics but rather on the factual question of whether most practising economists have actually done so. For example, well-known contributors to economic methodology, Mark Blaug (1980) and Milton Friedman (1953), both endorse the dichotomy and prohibition, but differ on the question of whether the economics profession has in fact been successful at keeping normative propositions out of its scientific practice.

The core of standard microeconomics continues to be rational choice theory; economic agents are assumed to have well-ordered preferences and make optimal choices given those preferences and the various constraints they face. Such rational choice explanations involve two parts: preferences (goals/ends) are assumed to be rational (that is, well-ordered, satisfying conditions such as transitivity and completeness) and the agent is presumed to act in the most efficient way to achieve those given ends (that is, to act in an instrumentally rational way). Philosophers have traditionally called such rationality ‘practical rationality’ to distinguish it from ‘theoretical’ or ‘epistemic’

rationality. In general practical rationality involves what it is rational to do, or at least intend to do, while theoretical or epistemic rationality involves what it is rational to believe.

The literature on practical rationality *leads to a very different characterization of the positive–normative dichotomy than the one standard in economics*. Although most practising economists continue to view rational choice theory as a positive theory about the behaviour of economic agents (at least under ideal conditions), most philosophers writing on the subject consider it a normative theory in the sense that it involves norms and obligations. Practical rationality, and thus rational choice theory as a particular instantiation of it, is a normative theory because it tells agents what they ‘ought’ to do in order to act rationally. In the contemporary philosophical literature this view is often associated with the work of Donald Davidson (2001), but it has a long history and continues to be debated (Searle, 2001). Philosophers have certainly not closed the book on the question of how a theory of practical rationality could be a descriptive theory, or how, if it is normative, it might relate to associated descriptive theories. The point is simply that it is increasingly the case, in both philosophy and economics, that the discussion of rational choice theory starts from the presumption that it is a particular instantiation of the theory of normative rationality, and as a result, the description of actual economic agents – whether in the laboratory or in ‘the wild’ – is coming to be seen as something to be compared with, or reconciled with, this theory of normative rationality. It is still possible to discuss the ways in which rational choice theory is or is not an adequate scientific theory, but the starting point of the discussion has changed substantially (Hausman and McPherson, 2006; Mongin, 2006; Ross, 2005).

The second change to be examined requires us to step back from the previous discussion of normative rationality. Suppose we use ‘normative’ to mean ‘ethically normative’, and view rational choice theory as a strictly positive, not a normative, theory; then *there are still a number of arguments for increasing the normative content of positive economic science*. Although these arguments are less of a challenge to the conventional wisdom, they still constitute a potentially significant change in the relationship between economics and moral philosophy.

Many of the arguments for increasing the (ethically) normative content of economic science come from the experimental literature, either experimental economics or experimental psychology. Researchers in these fields often reach similar conclusions about the behaviour of the agents they study, although they differ regarding experimental protocols (particularly the role of cash payments) and how such results are to be interpreted (as a critique of rational choice theory or as a critique of the standard assumptions of rational choice theory). One of the systematic results of the literature has been that moral beliefs matter to decision making in experimental environments, and are sufficiently important that such morality often provides better empirical predictions than self-interested rational choice. For example, one of the earliest counter-intuitive experimental results was the tendency for individuals to over-contribute to (that is, not free ride on) public goods (Isaac, Walker and Thomas, 1984). One explanation for this over-contribution is an ethical 'taste for fairness'. Another example involves the 'ultimatum game', a game where a self-interested rational agent should offer the smallest possible amount to the other player. The experimental evidence indicates that individuals do not generally behave as rational choice theory suggests, but rather give the other player a more 'fair' distribution. Since rational choice theory allows for the possibility of 'moral' (or otherwise non-self-interested) preferences, these results do not constitute a direct falsification of the core theory of rational choice (Guala, 2005), but they certainly do challenge the profession's traditional view of the positive and the normative. Instead of ethical norms interfering with the scientific investigation, these are cases where including ethical beliefs in the analysis improves the theory's descriptive accuracy.

The next two developments shift attention away from the positive–normative dichotomy but still challenge key features of the view passed down from Robbins and the ordinal revolution. According to the standard history of demand/choice theory, three (good) things happened as the theory of consumer choice progressed from the hedonistic cardinalism of the late 19th century, through the ordinal revolution of the 1930s, and on to the revealed preference/consistency interpretation in contemporary textbooks. First, all vestiges of hedonistic psychology were finally abandoned; second, all interpersonal

comparisons of utility were eliminated; and finally, these changes brought about a steady improvement in the scientific foundations of the theory.

In recent years there has been serious reconsideration of at least two of these aspects of choice theory: hedonism and the impossibility of interpersonal utility comparisons. There have, of course, always been critics of the move away from hedonism and interpersonal utility comparisons (Harsanyi, 1955; Robertson, 1952), but the goal of such criticism has traditionally been to defend utilitarian ethics as the normative basis for economic policy. Appeals on such grounds certainly continue, but in recent years support for a return to hedonism and interpersonal utility comparisons has come from a number of new directions. Although these two topics are closely related, it is useful to discuss them separately.

Hedonism in rational choice theory is the idea that an agent's preference for a particular bundle of goods is based on the psychological feeling of satisfaction the agent receives when the bundle is purchased or consumed. This is clearly the notion of utility present in 19th century utilitarianism, and, even though it has been replaced by a non-hedonistic notion of preference in modern economics, it is still heard in casual conversation and in the classroom. One criticism of the move away from such psychological hedonism – a criticism from an earlier generation as well (Little, 1957; Robertson, 1952) – is that the move enervated the theory's ability to provide any real explanation of observed behaviour. Although this criticism has been a theme in a number of important recent studies (Davis, 2003; Giocoli, 2003; Mandler, 1999), these authors do not generally recommend returning to a version of the earlier hedonist doctrine. On the other hand, some recent research does reach such neo-hedonist conclusions.

One research programme that endorses a return to hedonism is the work of the 2002 Nobel Prize winner in economics, the experimental psychologist Daniel Kahneman (Kahneman and Tversky, 2000). Although the research of Kahneman and his associates is wide-ranging, and perhaps not every participant would support this particular aspect of the programme, the argument for a return to hedonism – what is called 'experienced utility' – has been a key aspect of Kahneman's approach (Kahneman, 1994; 1999; Kahneman, Wakker and Sarin, 1997). There are two main parts to the argument for

experienced utility, one philosophical and the other based on recent changes in our scientific tools. The philosophical argument is simply that weakening the positivist grip on experimental practice has opened the door to a number of new and fruitful possibilities; the more practical argument is that new tools for measuring experienced utility are becoming, and will continue to become, more available over time.

The methodological strictures against a hedonistic notion of utility are a relic of an earlier period in which a behavioristic philosophy of science held sway. Subjective states are now legitimate topic of study, and hedonic experiences such as pleasure, pain, satisfaction or discomfort are considered open to useful forms of measurement. (Kahneman, 1994, p. 20)

Paralleling such neo-hedonist arguments from experimental psychology are similar arguments from economics, particularly the literature endorsing ‘happiness research’ as a source of useful, and measurable, data for applied economic theory (Frey and Stutzer, 2002). Economists appear to be more willing than psychologists to accept measures of happiness based on survey data, but the hedonistic themes are very much the same. Finally, there is a literature on the relationship between economic rationality and evolutionary biology that also suggests a hedonistic characterization of utility is scientifically appropriate (Robson, 2001). It does not seem, as yet, that these newer interdisciplinary arguments defending hedonism have been integrated into the more traditional defence of utilitarian-based ethics as the basis for economic policy, but it is an obvious next step and is therefore extremely important for the relationship between economics and moral philosophy.

To turn from hedonism to a fourth change in the recent economics and ethics literature, there are similar (and often overlapping) arguments endorsing the revival of *interpersonal utility comparisons* in economics. Although the two issues – hedonism and interpersonal comparisons – are closely related, it is important to keep them separate. Hedonism is about feelings of pleasure and pain, and interpersonal comparisons are about

having a common unit of comparison between the preferences of different agents (Mandler, 1999). One can compare the current running through two different electrical appliances, but it is reasonable to conclude that such appliances do not ‘feel’ anything; similarly, two individuals could possess subjective, even cardinal, feelings about various goods and yet there would exist no way for a third party to measure or compare those feelings.

As in the case of hedonism, there have been consistent defenders of the legitimacy of interpersonal comparisons within economics, even when it was out of favour with most of the profession; many of these defenders came from the Marshallian tradition (Pigou, 1920), but that is not exclusively the case (Harsanyi, 1955; 1982). Often the argument was simply that economists should start with the observable facts of everyday life, and the fact is that humans make interpersonal comparisons all the time (Little, 1957). Such defences continue, but in addition – again, as in the hedonism case – a number of new arguments are being made that draw on a range of interdisciplinary resources.

One source of evidence for interpersonal utility comparisons comes from recent research on neuroeconomics, part of the literature on ‘the mind, the brain, rationality, agency and economics’ discussed above. Neuroeconomics is a research programme that combines contemporary neuroscience and economics in the investigation of the micro-foundations of decision making (Glimcher, 2003). Imaging studies from neuroeconomic research suggest that humans have the capacity to both represent the mental states of others and to empathize, that is, share the feelings of others. These abilities, it is argued, were selected for in human evolution because they ‘enable people to predict others’ behavior and, therefore, help them meet their individual goals’ (Singer and Fehr, 2005, p. 343). Neuroeconomics is not the only source of such arguments for the reliability, and survivability, of interpersonal utility comparisons. Similar arguments have also been made in the literature on the philosophy of mind. For example Alvin Goldman (1995) combines a reliabilist approach to the philosophy of science with various arguments from cognitive psychology to make the case for individuals having the ability to mirror, or simulate, the mental states of others in a reliable way, including interpersonal utility

comparisons. In addition to the obvious support such research provides for moral theorizing within the utilitarian tradition, it also seems to provide a naturalistic explanation for the sympathy that played such an important role in Adam Smith's moral theory. At the very least, moral, economic and cognitive theorizing are simply different parts of a single intellectual exercise – as they were for Smith and Mill – rather than being hermetically isolated, as they were for most of the 20th century.

The fifth and final research to examine carries us outside the boundaries of the previous topics. Whether one is considering rational choice theory as normative theory, using moral preferences to explain observed behaviour in experimental economics, or defending hedonistic psychology and interpersonal utility comparisons, the discussion continues to be broadly within the research programme that identifies welfare with the satisfaction (or feelings received from the satisfaction) of individual preferences. In all of these cases, regardless of how much the recent literature conflicts with the mainstream view on such matters, the bottom line is still that individuals have preferences (hedonistic or not) and the individual 'good' is to have those preferences satisfied. But not all moral and political philosophy, even all that involves economics, follows this tradition.

John Rawls's *A Theory of Justice* (1971) is arguably one of the most important books on moral philosophy of the 20th century; it, and the philosophical discussion surrounding it, set the stage for many of the changes discussed above. Although Rawls's theory of justice falls squarely within the contractarian tradition – defining 'justice' as a property of the social contract that would emerge from the interaction of rational self-interested agents – he imposed strong restrictions on the context in which such contractual bargaining takes place; the decisions must be made in 'the original position' behind a 'veil of ignorance'. The principles of justice are those that would emerge from the bargaining of rational agents if those agents did not have any information about the position they would ultimately occupy (professional, class, gender, level of health, ...) within the society governed by the contract, or even about what their preferences would be. Rawls goes on to argue for specific rules of justice that would emerge from such a context – including the much-debated 'difference principle' – but it is possible to separate his general approach to the question of justice from his specific distributional answers.

Although it is impossible to discuss the extensive literature surrounding Rawls's work in the space available here, it is important to consider the related contribution of one economist. The economist is Amartya Sen, the 1998 winner of the Nobel Prize in Economics. Sen has long been a critic of standard rational choice theory (Sen, 1977), but his critical writings have come to be overshadowed by his own *capabilities* approach to social welfare and related issues (Sen, 1985; 2002). The core idea of the capabilities approach to social welfare is to focus on the capabilities that people have, that is, on the things that people are effectively able to do or be – the functionings they are free to achieve – rather than on the satisfaction of individual preferences. Such capabilities are obviously multifaceted; they depend on the person's mental and physical characteristics as well as his or her social context and opportunities. One may have the capability to ride a bike, to find meaningful work, to express oneself artistically, or to participate in the governance of one's society; alternatively, one may have none, or only a few, of these capabilities. For Sen, such capabilities should be the proper focus for both the analysis of social welfare and the theory of economic development. The point of both welfare and development is to increase the capabilities of the population – to give them the freedom and opportunity to be better able to live the kind of life they find valuable. This, of course, does not rule out increasing the quantity of goods and services they have available, but it is at best only part of the story. In this sense Sen's approach actually moves us farther away from the traditional preference-based notion of social welfare than Rawls. Rawls's concept of justice is still based on the notion of a distribution of preference-satisfying goods (albeit primary social goods), while Sen shifts the focus away from individual preferences towards freedom and functioning.

Needless to say, Sen's approach has many critics, but his work has also generated an extensive supporting, extending and implementing literature. An important example of support and extension is Martha Nussbaum's (2000) research on women and development, which provides a specific list of the most important 'central human capabilities'; an example of implementation is the United Nations Development Program's Human Development Index, which builds on Sen's capabilities approach. Undoubtedly the capabilities literature will continue to evolve, but, regardless of the

eventual shape it takes, it is an important contribution that has substantially changed the discourse on economics and moral philosophy.

Convergences

In closing, it is important to note the change that has taken place in the general way that various questions in philosophy and economics are approached in the recent literature compared with the way they were approached, at least by economists, for most of the 20th century. The traditional view considered ‘the philosophical’, whether it be epistemology or ethics, as something ‘out there’ with respect to economics. In the case of epistemology it was appropriate to seek methodological advice from philosophers about the character and practice of science, but the border crossing remained sporadic and one-way. In the case of ethics, the traditional view was simply to be aware of such ideas in order to prevent them from influencing the discipline’s scientific practice.

Things have indeed changed. This is not to say that there is any consensus about specifics in the contemporary literature on either economics–epistemology or economics–ethics – in fact there has been an explosion of diversity and debate, and as such there is far less consensus on such matters than among economists in the past – but rather that the style of discussion has changed in both fields, and in a sense converged. Although a much longer list could be constructed, there seem to be three features of the debates in philosophy and economics discussed above that were effectively absent from the previous discussions: the interdisciplinarity, the naturalism, and the two-way relationship involved. The literatures discussed above all draw on a wide range of resources: economics and disciplinary philosophy certainly, but also cognitive psychology, neuroscience, the history and sociology of science, ideas from evolutionary biology, and a host of others. They are also broadly naturalist in focus in the sense that the relevant philosophical questions – whether epistemological or ethical – are on equal footing with the science, social or natural, that is employed in, and constrains, the philosophical discussion. Finally, and perhaps most obviously, work in philosophy and economics is much more of a two-way street. It is not simply that a shelf of scientific philosophy is ‘applied’ to economic methodology, or that a shelf of moral philosophy is used to cull

normative concepts from economic science, but rather that economic notions of agency, choice, efficiency and equilibrium now condition the discussions in philosophy in the same way that alternative philosophical ideas, and ‘normativity’ more broadly, are increasingly involved in discussions within economic theory. On the one hand, these are substantive changes; on the other hand, such interconnections were present in the work of Smith, Mill and others. Perhaps these changes in the relationship between philosophy and economics are not so new after all; perhaps what needs explanation is not recent developments but the aberration of the 20th century.

D. Wade Hands

See also conventionalism; epistemic foundations of solution concepts; ethics and economics; experimental economics (the science of economics); explanation; falsificationism; happiness, economics of; instrumentalism and operationalism; interpersonal utility comparisons (recent developments); Methodenstreit; methodology of economics; positivism; rational choice and philosophy; realism and ontology; social epistemology; theory appraisal; value judgements

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