



Massey University

DEPARTMENT OF APPLIED AND INTERNATIONAL ECONOMICS
DISCUSSION PAPER NO. 05.03
APRIL 2005

**OVERCOMING POSITIVISM IN ECONOMICS:
AMARTYA SEN'S PROJECT OF INFUSING
ETHICS INTO ECONOMICS**

James E. Alvey

Te Kunenga
ki Pūrehuroa



www.massey.ac.nz
0800 MASSEY (627 739)

This series contains work in progress at the **Department of Applied and International Economics, Massey University**. Comments and criticism are invited. Quotations may be made on explicit permission of the author(s).

Further copies may be obtained from:

The Secretary
Department of Applied and International Economics
Massey University
Private Bag 11222
Palmerston North
NEW ZEALAND
Phone: 06 350 5799 Extn 2679
Fax: 06 350 5660

Discussion Paper 05.03
ISSN.1174-2542
Price: \$10

OVERCOMING POSITIVISM IN ECONOMICS: AMARTYA SEN'S PROJECT OF INFUSING ETHICS INTO ECONOMICS

James E. Alvey¹
Department of Applied and International Economics
Massey University
Private Bag 11-222
Palmerston North
New Zealand
E-mail: J.E.Alvey@massey.ac.nz

and
International Christian University
Tokyo, Japan

ABSTRACT

Logical Positivism, which arose in philosophy early in the twentieth century, proclaimed the sharp distinction between facts and values. Despite objections at the time, positivism was imported into economics in the 1930s. Over time, objections lessened; economics was transformed and ethical considerations were driven out of its core. In the 1950s, debates about positivism arose within the discipline which had exported it. According to the American philosopher Hilary Putnam, the fact/value distinction is now discredited in philosophy. If that is so, the methodological foundations of contemporary economics are also discredited.

In this article I examine Amartya Sen's moral science of economics. First, I will present his historical account of the connections between economics and ethics. Sen claims that there was a close connection between the two until positivism was imported. Second, I will sketch some of Sen's ethical objections to modern economics, which is still suffering from positivism. Finally, I will lay out some of his ideas on how economics can be returned to an ethical path. Once the ground has been cleared of positivism, ethics can re-emerge in economics in various ways. One path has been marked out by Sen.

¹ Currently a Research Fellow, visiting at the Social Science Research Institute, International Christian University, Tokyo, Japan. The author wishes to thank Alan Duhs and two anonymous referees for helpful comments on an earlier version of this paper.

1. INTRODUCTION

Positivism, or at least those versions of it which start from a fact/value dichotomy, is widely accepted by economists today. This approach is regarded as fundamental to the project of building the “science” of economics. Mainstream economists see a “value free science” as the ideal. The immunization of economics from ethics dates from the 1930s (when Logical Positivism was introduced into the discipline) and has subsequently been entrenched. Hence, any attempt to reintroduce ethics into economics would be seen as a plot to sabotage its hard-won scientific status. Some important economists in the 1930s, and afterwards, nonetheless rejected the view that economics is incompatible with moral philosophy. Amartya Sen is one of those and his work will be the focus of this article.

Many mainstream economists see themselves as scientists. They often claim that the means to become scientific is 1) intellectual autonomy and 2) the adoption of the scientific methodology and techniques. These economists may be dimly aware that the separation of economics from “backward” disciplines like history, politics, moral philosophy and theology took much deliberate effort and considerable time (Alvey 2000, 1241-2). Nevertheless, the first of the previously mentioned means to the goal of becoming a science has now been achieved. Mainstream economists would also proudly state that since sophisticated theories and advanced statistical and mathematical techniques are now widely adopted in the discipline, the second means to becoming a science has also been satisfied. Having undertaken the required steps for “promotion,” economics has now purportedly evolved into a genuine science. Mainstream economists would also trumpet the creation in 1969 of a Nobel Prize in Economic Sciences as external recognition of their scientific status. Having finally achieved this elevation, the last thing that mainstream economists want is to become entangled with, and then dragged down by, retrograde disciplines like ethics. Nevertheless, this is proposed by two recent winners of the Nobel Prize in Economics, Gunnar Myrdal (1974), and Amartya Sen (1998).

The remainder of the article has three sections. Section 2 discusses positivism. Section 3 discusses Sen’s view of economics as a moral science. Section 4 provides a summary.

2. POSITIVISM

This section discusses various matters relating to “positivism.” I begin by presenting the various types of “positivism” which have existed, noting the extent to which each maintains a fact/value distinction. Then I turn to a more detailed discussion of Logical Positivism.

A thorough discussion of “positivism” cannot be undertaken here. Nevertheless, some background on the doctrine and its origins is necessary for what follows. “Positivism” is a term which has been used to describe a number of methodological views. To a considerable degree, the definition will also affect whether a certain individual is a “positivist” or not. Similarly, the history of “positivism” depends upon which definition is used. Different types of positivism arose over time and some commentators doubt whether the differences outweigh the commonalities. Nevertheless, it can be said that, in

general, positivism refers to a philosophy of science in which metaphysical notions are deemed to be unscientific.

Using a wide definition, Kolakowski claims that “positivism” can be traced back at least to the Medieval period but that David Hume, Adam Smith’s contemporary, was “the real father of positivist philosophy” (Kolakowski 1972, 43; see 20-1). In his account of the subsequent development of the doctrine, Kolakowski devotes a whole chapter to August Comte (1798-1857) partly because he “originated the term” positivism and he called himself a “positivist” (Kolakowski 1972, 60). Subsequently, Kolakowski mentions J.S. Mill, Mach and others who are also classified as positivists. In his penultimate chapter Kolakowski turns to Logical Positivism/Logical Empiricism. He included thinkers such as G.E. Moore, Wittgenstein, and the members of the Vienna Circle within this group but, unlike most commentators, he extended it to include Karl Popper (Kolakowski 1972, 203, 209).

Based on Kolakowski’s outline, I suggest that there are five types of positivism: the special version developed by Hume; an early, broad type developed by Comte, Mill and others; Logical Positivism; the less extreme successor of Logical Positivism called logical empiricism; and falsificationism originated by Popper.² I will comment on each but will focus on the third and fourth types.

Hume rejected metaphysics and pronounced that one cannot derive an “ought” from an “is” statement (Hume 1978, 469-70; Putnam 2002, 14-9). The tradition begun by Hume holds that ethical statements do not express factual claims and therefore are neither true nor false. Hume’s version of positivism won little support at the time but became very influential with later empiricists, notably with the Logical Positivists.

The second category of positivism had only loose affinities with Hume. Comte rejected metaphysics, emphasized empirical observation and did claim for “positivism” the “objectivity characteristic of the natural sciences” (Gordon 1991, 55). On the other hand, he included “morals” within the sciences (Kolakowski 1972, 73). Comte and early French positivism was “infused with value judgments and untestable speculation” and so “they cannot be seriously named as exemplars of positivist methodology, as social scientists now understand it” (Gordon 1991, 55; see Kolakowski 1972, 60). Even so, this sort of loose positivism had a considerable impact. Indeed, Kolakowski refers to the period roughly corresponding to the third quarter of the nineteenth century as the “Positivist Triumph”; “[p]ositivism dominated the spirit of the age” (1972, 90, 122). Empiricism and this type of positivism were virtually indistinguishable. Because of the looseness of this type of positivism, John Stuart Mill, could be both a positivist and a utilitarian (Kolakowski 1972, 96). Overall, the second group of positivists focussed on empirical observation but in many areas they were eclectic; they did not maintain any hard fact/value distinction. This post-Humean, loose sort of positivism is *not* what people have in mind when they refer to “positivism” these days.

² One referee also recommended discussion of Max Weber, who advocated a *Wertfreiheit* view in the social sciences (Weber 1949, 50-113). Nevertheless, Weber’s eclecticism means that his overall doctrine is very different from modern positivist views.

Next, I will comment on the classification of Popper as a positivist (Kolakowski 1972, 209, 222). One of Popper's main contributions to the philosophy of science was to pronounce that science concerns itself with falsifiable statements. Although he maintained a fact/value distinction within science, unlike the Logical Positivists he still regarded ethics as a branch of knowledge. Popper frequently explicitly criticized the Logical Positivists. Contrary to Kolakowski, most commentators consider falsificationism as an *alternative* to "positivism" (Caldwell 1994, 236). These days, when "positivism" is mentioned, what people have in mind is Logical Positivism or logical empiricism, its successor. Therefore, I will not discuss Popper or falsificationists further.³

Logical Positivism itself began in Austria and Germany in the 1920s. The leading figure was Rudolf Carnap, who was part of the Vienna Circle of philosophers. Logical Positivism is based on the language of physics (Putnam 2002, 25) and it was a *radical break* with the earlier, loose version of positivism. It holds that there is a fundamental dichotomy between facts and values; most logical positivists claim that only "facts" are subject to rational discussion. Logical Positivism can be seen as a sort of radical empiricism whereas the older positivism was a looser empiricism.

As the Logical Positivists conceived it, science was concerned only with *verifiable* statements: "Meaning, or 'cognitive significance,'" required empirical testing (Walsh 1987, 862). For Carnap: "All statements belonging to Metaphysics, [and] regulative Ethics, ... are in fact unverifiable and, therefore, unscientific. In the Viennese Circle, we ... describe such statements as nonsense" (Carnap 1995, 26 quoted in Putnam 2002, 18). According to Putnam, the "real target [of the Logical Positivists] is the supposed ... rationality of ethics ... Carnap's purpose [unlike Hume's] was to expel ethics from the domain of knowledge" (Putnam 2002, 19-20). The Logical Positivists "were the most influential marketers of the fact/value dichotomy," and they helped to make this dichotomy the orthodoxy (Putnam 2002, 23).

Logical Positivism was modified and by the 1950s it reached its mature form called "logical empiricism" (Caldwell 1987, 922). In the early 1950s the "positivist" orthodoxy came under attack by Quine. In essence, Quine argued that "facts" and "conventions" cannot be neatly separated: "The lore of our fathers is a fabric of sentences.... It is a pale grey lore, black with fact and white with convention. But I have found no substantial reasons for concluding that there are any quite black threads in it, or any white ones" (Quine 1963, 406). Although Quine went too far with this analogy, he was correct in claiming that the distinction between fact and non-fact is actually fuzzy.

³ One referee claimed that falsificationism in general, and Popper's work in particular, was a category of "positivism" and it required serious attention. If falsificationism is adopted as the relevant definition of positivism, my statement below about the demise of "positivism" will be invalidated. A second consequence is that doubt would arise as to whether the actual practice of mainstream economics is consistent with this type of positivism. Some have claimed that economics contains many non-falsifiable statements (see Caldwell 1987, 923). By contrast, Mark Blaug, who adopts the falsificationist methodology, claims that economists have always sought "to produce accurate and interesting predictions that were, in principle at least, capable of being empirically falsified. In practice, they frequently lost sight of this scientific objective" (1985, 697).

Recently, Putnam and Walsh, who have actively campaigned against this type of positivism, have presented good accounts showing how the philosophical debates developed in the period after Quine's initial attack (Putnam 2002, 7-27; Walsh 1987, 861-3; Walsh 2003, 321-41). Quine, Putnam, and probably Walsh, were heavily influenced by the American philosophical school of pragmatism founded by John Dewey. In essence, Putnam and Walsh claim that a new consensus emerged in which it was accepted that facts and values are frequently *entangled* (Putnam 2002, 28-45; Walsh 2003, 330-2). Gradually, the advocates of "positivism" also shifted ground, grudgingly accepting that there were "thick ethical concepts" which had both descriptive and prescriptive components (Putnam 2002, 38). Even this was found to be untenable and the old fact/value distinction was gradually abandoned (Putnam 2002, 21-3). The destruction of "positivism" may lead some to nihilism or relativism; for Putnam and Walsh, however, there is a middle ground between the extremes.

In summary, various types of "positivism" have arisen. Our interest is in Logical Positivism which emerged in the 1920s, peaked by the 1950s and then faded in the 1970s. Despite the decline of Logical Positivism (hereafter references merely to "positivism" are to this version) amongst philosophers, its impact remains in the general public (Putnam 2002, 1) and within disciplines which imported it, such as economics.

3. AMARTYA SEN'S VIEW OF ECONOMICS AS A MORAL SCIENCE

This section focuses on Sen's work on the relationships between economics and ethics. It comprises three sub-sections. First, I discuss Sen's view of the historical connection between economics and ethics. Second, I present *some* of his critiques of positivism and utilitarianism and his corresponding ethical criticisms of modern economics. Third, I sketch *some* of Sen's constructive contributions to a moral science of economics.

(a) Sen's History of Economic Thought (from an Ethical Perspective)

In various places Sen sketches the history of the linkage between economics and ethics. In this sub-section I begin by presenting Sen's views on the ethical origins of economics. Then I sketch his view of the way that economics handled ethical issues up until the time when he published *On Ethics and Economics*, his last major statement on the topic.

Sen refers to "the historical evolution of modern economics largely as an offshoot of ethics" (1987, 2). The "ethics-related tradition," can be traced back at least to Aristotle; for him, wealth is only a means to some other end and it must be viewed within the larger ethical/political context (Sen 1987, 3; see Aristotle 1980, 7). The ethical tradition has two components which are particularly relevant for our theme, both of which can be found in Aristotle: "the ethics-related view of motivation" and the ethical view of "social achievement" (Sen 1987, 4). In the motivation case, how one should/should not act is closely connected to larger questions such as "How should one live?" (Aristotle 1980, 1-2 cited in Sen 1987, 3). In this approach, "ethical deliberations" do affect "actual human behaviour" (Sen 1987, 4). Second, Sen cites Aristotle's view that achieving social ends is desirable. Social achievement refers to an evaluation of "the good" which is broader and "more fully ethical" than just efficiency (Sen 1987, 4; see

Aristotle 1980, 1-7). Later, Sen implies that social success includes distributive justice (1987, 33).

In addition to ethics, Sen admits that there is a second origin of economics: “what might be called ‘engineering’” (Sen 1987, 3). This approach also has a long history. In the engineering approach, ends are assumed to be *given* and it is concerned with logistical issues of means. “Ethical considerations ... are not given much role” in its analysis of human motivation (Sen 1987, 6).

For Sen, both origins “have some cogency of their own” (1987, 6). Engineering contributions, such as general equilibrium theory, are praised, despite their limitations, for showing “the nature of social interdependence” (1987, 8). There is a legitimate role for inquiries into both means and ends. The two approaches are not mutually exclusive and can be combined in “varying proportions” (1987, 6).

Let us now turn to Sen’s view of how these two approaches fared over time. Adam Smith is clearly a favourite of Sen’s, as he frequently discusses him (see 1987, 21-8, 87-8; 2000 throughout). Sen regards Smith as one of the “exponents of the ethical approach” to economics who was “deeply concerned with engineering issues as well” (1987, 2, 7). According to Sen, many economists mistakenly regard Smith as holding that humans are motivated exclusively by self-interest and that self-interested behaviour produces efficient outcomes (1987, 21). By contrast, Sen says that “there is little evidence that he believed in either proposition” (1987, 21).

Sen also discusses the trends in modern economics after Smith. He points out that “economics used to be taught at Cambridge until fairly recently [1903] as a part of ‘the Moral Science Tripos,’” suggesting that economics and ethics continued to be closely associated for a long period (1987, 2). The link seemed to be maintained in the nineteenth century and early in the twentieth century through the “hallowed position of utilitarianism” in economics (Sen 1987, 38; see 30; Robbins 1935, 141). At least in this context, Sen is not disturbed by the loose sort of positivism found in classical economics.

The 1930s, however, marked a turning point for the ethical approach to economics. The cause of the decline of the latter Sen frequently traces to the methodological views of Lionel Robbins. According to Robbins, “it does not seem logically possible to associate the two studies [economics and ethics] in any form but mere juxtaposition” (1935, 148 quoted in Sen 1987, 2). Robbins’s methodological views soon won acceptance, despite opposition at the time and subsequently. Elsewhere, Sen calls Robbins a positivist, that is, a Logical Positivist (Sen 2000, 67). The effect of the adoption of this type of positivism, via Robbins, was the shunning of “normative analysis” and also “ethical considerations which affect actual human behaviour,” which are “primarily matters of fact” (Sen 1987, 7).

Sen’s claims warrant elaboration. Robbins set about the “debunking of welfare economics,” the normative branch of economics which had utilitarian foundations (Sen 1980a, 363). Actually this was only the intermediate goal; the larger Logical Positivist goal was the *eradication* of utilitarianism from economics and the proximate means was to attack the validity of interpersonal comparison of utilities which (along with the

cardinality of utility) had underpinned welfare economics. Hicks and Allen soon gave an ordinal account of choice which revolutionized consumer theory and welfare economics. According to Sen, the traditional utilitarian “ethical analysis” was “straight and narrow” but it was “narrowed even further, as interpersonal comparisons of utility came under fire in the 1930s, led by Lionel Robbins” (1987, 30 citing Robbins 1935 and 1938). Once interpersonal comparison of utilities was excluded, many concluded that “utilitarianism ... [was] unworkable” (Sen 1985b, 174; 2002, 71). With its decline in popularity, one may have expected an ethical alternative to emerge. The Logical Positivistic atmosphere, however, prohibited this. Indeed, up to 1950 there was an oxymoronic search for a “value-free welfare economics” (Sen 1970, 56; see 57).

Welfare economics became confined to a “narrow box, separated from the rest of economics,” according to Sen; “Pareto optimality” became “the only criterion of judgement, and self-seeking behaviour” became “the only basis of economic choice” (1987, 29, 34).⁴ The two fundamental welfare theorems emerged in this period but “the ethical content” of these was “rather modest” (1987, 35).⁵ Outside of welfare economics, human action was also assumed to be “based on self-interest only” (1987, 29; see 30).

Partly because of Arrow’s impossibility theorem, and partly because of the continuation of the trends mentioned above, Sen claimed that by 1970 welfare economics had virtually collapsed (Sen 1970, 58; see Arrow 1951a). By the late 1980s, when he published *On Ethics and Economics*, Sen claimed that “the importance of the ethical approach has rather substantially weakened as modern economics has evolved”; indeed Robbins’s view that ethics was juxtaposed to economics “was quite unfashionable then [in the 1930s], though extremely fashionable now” (Sen 1987, 2, 7). Further, “the assumption of purely self-interested behaviour remains the standard one in economics” (1987, 17 n.; 1977, 319-21). Thus Sen refers to “the self-consciously ‘non-ethical’ character of modern economics” (1987, 2).

Thus far I have commented on the influence of Logical Positivism on neoclassical economists but it is necessary also to refer to its affect on those seeking to revive classical economics such as Sraffa, Robinson, Garegnani and Pasinetti. Sen had contact with a number of these – notably Joan Robinson, who served as his PhD supervisor – when he moved to Cambridge in 1953. Reflecting on his Cambridge student days, Sen has stated that, as well as his thesis on capital theory, he became interested in welfare economics “which she [Robinson] thought was all nonsense. She took a naively [Logical] positivist view of ethics, and was bored by discussion on well-being, social judgments and normative evaluations. She wanted to get me away from all the ‘ethical rubbish’” (quoted in Klamer 1989, 139). Thus, like their neoclassical opponents, the new classical economists were infected by positivism (see Walsh 2003, 319). For Walsh, Robinson’s adoption of “positivism seriously impaired the consistency of her” advocacy of “social justice” (2003, 319).

⁴ Pareto optimality is a social state in which no one’s utility can be raised without reducing someone else’s.

⁵ The two theorems are: (1) every competitive equilibrium is Pareto optimal; and (2) any Pareto optimal allocation of resources is also a competitive equilibrium (Sen 1987, 34-5; see Arrow 1951b and Debreu 1959).

Let us review what we have seen. For Sen, of the two branches of economics, the ethical one withered for various reasons, including the rise of Logical Positivism and the attack on utilitarianism. The weakening of an ethical standard led to a narrowing of welfare economics and its measures of social achievement; after the 1930s welfare economics became ethically arid. Further, the rest of economics isolated itself from welfare economics and divorced itself from any residual ethical issues: “anti-ethicalism” developed (1987, 31). Thus self-interest was adopted as the only motivation for human action; this narrow behavioural view dominated all branches of economics. For Sen, however, economics must “find an important place” for the old “ethics-related view of motivation and social achievement” as well as the engineering approach (1987, 6). He concludes that “the distancing of economics from ethics has impoverished welfare economics, and also weakened the basis of a good deal of descriptive and predictive economics” (Sen 1987, 78; see 7). Contrary to the mainstream of modern economics, Sen presents himself as part of the ethical tradition in economics stretching back to Aristotle.

(b) Sen’s Critiques of Positivism and Utilitarianism and the Ethical Foundations of Modern Economics

Let us now turn to the two tiers of Sen’s negative contributions. The first tier is his critique of Logical Positivism and his associated ethical criticisms of modern economics with its Robbinsian methodological foundations. The second tier is Sen’s critique of utilitarianism (and hence early positivism) and the types of economics which advocated it. We will begin with his first critique.

Strange as it now appears, in an early philosophical paper Sen worked largely within Hare’s non-cognitive (neo-positivist) framework, supplementing it with a distinction between “basic” and “non-basic” value judgments. “A value judgment can be called ‘basic’ to a person if no conceivable revision of factual assumptions can make him revise the judgment”; when revisions are possible, it is non-basic to him (Sen 1967, 50). Most, positivists, such as Ayer, assume that all value judgments are “basic” and therefore no rational support for such judgments is possible (see Putnam 2002, 76-7). Sen rejects Ayer’s positivism as “misleading,” noting that one could “have a scientific discussion” on some value judgments “by examining the scientific truth of the underlying factual premise” (1967, 52; see Putnam 2002, 76). For Putnam, by showing that rational discussion of value judgements is possible, “Sen has refuted Ayer” (2002, 77).

In the same paper discussed above, Sen also scrutinizes Robbins. Recall that, for Robbins, economics and ethics are clearly separated: “Economics deals with ascertainable facts; ethics with valuation and obligations” (Robbins 1932, p. 132 quoted in Sen 1967, 53). For Sen, such a contrast is valid *only if* “ethics dealt only with basic value judgments” (Sen 1967, 53). He then quotes Robbins at length:

If we disagree about ends it is a case of thy blood or mine—or live or let live according to the importance of the difference, or the relative strength of our opponents. But, if we disagree about means, then scientific analysis can often help us to resolve our differences. If we disagree about the morality of the

taking of interest ... then there is no room for argument. (Robbins 1932, p. 134 quoted in Sen 1967, 53)

Sen examines this view further using his basic/non-basic dichotomy. He concludes that “some value judgments are demonstrably non-basic, but no value judgment is demonstrably basic” (Sen 1967, 53). Putnam says that Sen is claiming that it “is unverifiable that any value judgment is basic” (Putnam 2002, 77). By this stage in his intellectual development, Sen had understood that facts are relevant to value disagreements without fully grasping the consequences of this (see Putnam 2002, 69-78). As Sen matured, however, he developed a deeper critique of positivism.

In 1970 Sen again attacked Robbins, using as an example the aggregate welfare consequences of “Rome being burnt while Nero played the fiddle” (1970, 99). Sen suggests that one might still confidently conclude “that the sum total of welfare went down as a consequence,” *even without* full comparability of individual evaluations of the two welfare situations, and *even allowing* for considerable variation in the actual valuations (1970, 99). For Sen, Robbins had oversimplified by not distinguishing “between some comparability and total comparability of units” (Sen 1970, 99-100). Sen provided formal proofs of the viability of partial comparability and frequently used this approach subsequently.

During the 1970s Sen’s attacks on Robbins and positivism continued. In 1973 he implies that Robbins had essentially ruled out the possibility of making *any* policy recommendations (Sen 1973a, 81-3; cf. 1979, 184n.). In 1978 he claimed that inequality was neither a purely descriptive nor a purely prescriptive term: it was an *entangled* concept (Sen 1978). Shortly afterwards, in the context of another attack on Robbins, he argued that “both descriptive and normative interpretations of interpersonal comparisons are possible” and that various types of each are viable (1979, 184).

From his 1979 Tanner Lecture, Sen began to develop his own alternative to mainstream economics, called the capability approach (1980b). This new approach is only possible because Sen transcended his early non-cognitivist framework; as Putnam points out, “Just about every one of the terms that Sen” uses when he talks “about capabilities ... is an entangled term” (2002, 62-3; see 73). While his attacks on positivism continued in works such as *On Ethics and Economics*, Sen became more interested in promoting his new approach (1987, 31; see 1980b; 1982, 29-31; 1985; 1990; 1995; 1999; and the references at 1987, 46 n.).

Let us now turn to some of Sen’s criticism of the mainstream economics, focussing on its view of human motivation. Sen says that modern economics discusses behaviour, motivation and rationality in ways which eschew or neglect ethical components. “Human beings are assumed to behave rationally” (Sen 1987, 11). In addition, two further processes are involved: “(1) identifying actual behaviour with rational behaviour; and (2) specifying the nature of rational behaviour in rather narrow terms” (Sen 1987, 12). Thus the definition of rationality becomes crucial. For Sen, in mainstream economic theory there are two dominant approaches to the definition of rational behaviour: “internal consistency of choice” and the “maximization of self-interest” (Sen 1985a, 109; 1987, 12). Sen has discussed both in detail and rejects them.

Consistency of choice can be specified in various ways but Sen says that regardless of this, the approach is wrong. In a famous paper Sen says that consistency requires an extreme type of reductionism: “A person is given one set of preference ordering, and ... when the need arises this is supposed to reflect his interests, represent his welfare, summarize his idea of what should be done, and describe his actual choices and behaviour” (1977, 335). If the person “has no use for these distinctions,” he “may be ‘rational’ in the ... sense of revealing no inconsistencies” but “he must be a bit of a fool. The purely economic man is ... close to being a social moron” (Sen 1977, 336). Once the distinctions mentioned earlier are admitted, inconsistencies will appear. In an extreme paper Sen claimed that even the notion of a purely internal standard of consistency “is essentially confused”: choice always requires some context (1993, 495; see 1987, 14).

Throughout his career, Sen also attacked the view of rationality as “self-interest maximization” (1987, 15). Despite its orthodoxy, Sen raises several problems. First, by ruling out any “role of ethics in actual decision taking,” it denies the validity of the “ethics-related view of motivation” discussed previously (Sen 1987, 15). Second, he says that such a view of human motivation is “spectacularly narrow” (Sen 1987, 1). In the case of the rational fool seen earlier, reductionism omits many complexities of actual human existence. In that famous article Sen discusses “commitment,” the “non-egoistic” version of social concern (1977, 326). Whereas “traditional economic theory relies on the identity” of personal choice and personal welfare, “commitment ... drives a wedge” between them (Sen 1977, 329). Commitment is important in a number of areas, including work motivation (Sen 1977, 333-5). More generally, Sen says that group loyalties to one’s family, community, or class “provide the focus of many actions”; such loyalties involve a mix of motivations (Sen 1977, 344; see 318; 1987, 18, 20, 80-3). Finally, a brief discussion of the fundamental welfare theorems is required. One of the two theorems claims to show that self-interested behaviour leads to a socially optimal result. Sen repeatedly shows that the link does not hold (1966; 1973b, 249-52; 1974; 1977, 340-1).

Before concluding the discussion of motivation, let me refer to one other matter. Could one incorporate ethical motives in human behaviour and at the same time adopt positivism? Sen refers to “ethical considerations which affect actual human behaviour” and adds that “from the point of view of the economist studying such behaviour, [these ethical considerations] are primarily matters of fact” (Sen 1987, 7). Thus, *in principle*, one could have an empirical science which included the study of ethical motives and Sen clearly thinks that scope exists for such work. Nevertheless, as he presents it, the actual *effect* of Logical Positivism within economics has been to shun such investigations.

Let us now turn to the second tier of Sen’s critique, namely, his critique of utilitarianism. In his writings Sen provides lengthy criticisms of utilitarianism: it focuses on well-being and ignores commitment, or what he later calls “agency”; it judges only through “the metric of happiness,” overlooking the different efficiencies in producing utilities caused by privilege or deprivation; and it overlooks rights and freedom (1978, 41, 45; see 38-51, 61-2; 1980b, 203-4). This second critique effectively undermines much of what remained after the first critique.

Sen applies the second critique to social achievement. In what follows, we focus on Pareto optimality and the standard national accounting aggregates. Pareto optimality is a withered type of utilitarianism (Sen 1987, 38; see 1970, 89-104) and it is all that remained of ethics after the 1930s. The same deficiencies that Sen found in utilitarianism also apply to Pareto optimality. Neither the withered nor the healthy version of utilitarianism is concerned with distributive justice (Sen 1970, 22; 1973a, 15-8; 1978, 85; 1980b, 201-5). Finally, I turn to the standard national accounting aggregates. These measures of social achievement focus on the production of commodities and real income; Sen says that such a focus is often associated with the confusion between ends and means (Sen 1990, 41-2). Even many utilitarians consider GNP, GDP, and real income to be inadequate measures of the standard of living or well-being. Sen goes further, using his capabilities approach, to promote alternative measures (see below).

During his lifetime, Sen increasingly opposed Logical Positivism and its impact on economics. This critique focussed on the economics produced after 1930. Second, he also developed a critique of utilitarianism. By extending his ethical critique in this way, he effectively rejected early positivism and much of the economics produced before 1930. The combined effect of these critiques is seen in Sen's views of rationality and social achievement. He presents both mainstream approaches to rationality, motivation and behaviour as wrong; their views are too narrow. Similarly, Sen says that the mainstream approaches to social achievement are inadequate or misleading.

(c) Sen's Constructive Contributions to Economics as a Moral Science

After providing critiques of Logical Positivism and utilitarianism in the 1960s and 1970s, one may wonder if Sen had anything constructive to offer. In this period Sen became increasingly disenchanted with mainstream economics. Where some in the 1960s accepted nihilism, Sen sought to develop viable alternatives. In this sub-section we will discuss some of Sen's constructive contributions to economics.

According to one account, Sen has made contributions to sixteen fields in economics and philosophy (see *Scandinavian Journal of Economics* 1999). Although these fields have areas of overlap, as shown in many of Sen's early works, this connectedness changed dramatically when he developed the capability approach; the latter is a sort of revolutionary concept with broad applicability to a vast range of fields and we focus on it below.

Beginning with his 1979 Tanner Lecture, Sen began to develop a new ethical philosophy: the capability approach (Sen 1980b). Every "ethical theory of social arrangements," Sen claims requires "equality," in some sense (1995, 130; see ix, 3, 12). Utilitarianism assigns equal weight to the interest of each individual in social welfare calculations but its conception of well-being is "narrow and inadequate" (Sen 1987, 58; see 1995, 14). In the Lecture mentioned above, Sen declared "basic capability equality" (such as "the capability to be adequately nourished") to be his new notion of equality (1980b, 218; 1982, 30-1). This brief insight into his new philosophy was elaborated and frequently applied by Sen subsequently. Indeed, as it has been developed by Sen, along with collaborators (such as Nussbaum) and others, it has evolved into a type of ideology.

Let us now turn to why Sen feels that a new philosophy is needed. Sen refers to various approaches to social achievement: utility; opulence; the “basic needs” approach in development economics advanced by Streeton and others; and Rawls’s “primary goods.” The utility approach is “misleading” in the case of the deprived; they “tend to come to terms with their ... predicaments,” taking “pleasure in small mercies” and thus the “metric of utility” fails “to reflect a person’s real deprivation” (1990, 45; 1999, 14-5). By contrast, the other three approaches tend to suffer from “commodity fetishism,” confusing means and ends (Sen 1999, 19 citing Marx 1954; see Sen 1980b, 218-9; 1990, 47). Nevertheless, Sen admits that both opulence and utility have some role in well-being: the former has a “causal importance” and the latter has “evidential importance ... such as happiness” (1999, ix).

Sen’s goal is to faithfully represent well-being, which lies between commodities and utility. His approach can be presented as a chain: “Commodities→Characteristics→Functionings→Utility” (adapted from Sen 1982, 30). A commodity such as a bicycle has the property of providing transport (its characteristic); by *using* that property the owner can move (its functioning). The “characteristics” approach was originated by Gorman and Lancaster and is “close to Rawls’s ... approach”; “functionings” was formulated by Sen, using insights from Aristotle, Smith and Marx (Sen 1982, 30; see 1990, 43-4).

For Sen, functionings are “what the person succeeds in doing with the commodities and characteristics”; he also calls them well-being achievements (1999, 6). We have seen already his reference to “basic” capabilities but elsewhere Sen distinguishes between (1) “elementary functionings” such as “escaping morbidity and mortality ... [and] undertaking usual movements” and (2) “complex functionings such as achieving self-respect, taking part in the life of the community and appearing in public without shame” (1980b, 219; 1990, 44). Some of the basic or elementary items have analogues in the presentations by Streeton, Rawls and others. Second, Sen says that consideration also must be given to agency and freedom. Agency cannot be merely reduced to personal achievement. Freedom is treated as only an instrumental good in the utilitarian tradition; Sen says that it has to be seen as a right. Thus Sen calls his approach, the “capability to function” approach (1999, ix), or simply the capabilities approach. He says that capability to function “comes closest to the notion of standard of living” (Sen 1983, 160).

Sen opposes the reductionism of everything to a single quality such as utility; in his approach freedom, agency, and the many functionings are *qualitatively* different. Plurality of evaluation is required, unlike the “monist” mainstream approach (1987, 62). In addition, there will be inconsistencies and gaps in preferences. This does not lead Sen to despair. Contrary to the old utilitarians who required a full ordering of utilities obtained by various goods and services for all individuals, and contrary to those influenced by positivism who deny that one can make any interpersonal comparisons, Sen says that one can make partial orderings (Sen 1999, 22-5). His work on partial orderings has been useful in collective decision-making (social choice) theory.

Let us now turn to Sen’s use of the capability approach. In the 1980s, as Sen developed this approach, he saw implications for it in a wide variety of fields. Thus he applied it in his writings to welfare economics, the assessment of the standard of living, poverty,

inequality, sexual divisions and social justice (see below and the references at Sen 1987, 46 n.). A few examples will have to suffice.

The assessment of the standard of living has been a major area to which Sen has applied his approach. Recall that social achievement was one of the areas in which the ethical approach to economics applied. In *Commodities and Capabilities*, Sen compared his capability approach to the usual approach to the standard of living. India, China and Sri Lanka had similar figures in terms of GNP per head. Nevertheless,

the capabilities of the Indian masses are enormously inferior to those of the masses in China and Sri Lanka in terms of the ability to live long, the ability to avoid mortality during infancy and childhood, the ability to read and write, and the ability to benefit from sustained schooling. (Sen 1999, 48)

The superiority of measuring the functionings themselves seems clear. Sen has provided a theoretical case for developing new measures of social achievement. He also provided practical input into the development of actual measures, such as the Human Development Index which is used by the United Nations Development Programme. The creation and wider acceptance of such measures can be attributed in large part to Sen (Anand and Ravallion 1993).

Inequality, poverty, and famine have also been frequent topics in Sen's writings both before and after he developed the capability approach. His 1979 Tanner Lecture was called "Equality of What?" His brief answer mentioned above led him towards a wide application of the capability concept in inequality, poverty and famine (see Mukhopadhaya and Chatterjee 2000). Sen, however, was never content to simply analyze these issues, develop tools and concepts, and apply them to certain countries and situations. He was also an activist advocating public action (see Dreze and Sen 1989).

Next, let me briefly comment on some problems with the capability approach. First, it is rather vague. Sen does mention some examples of elementary and complex functionings but no list is provided for either set (Sen 1990, 44; 1980b, 218; 1982, 30). He admits, however, that the "range of functionings and capabilities ... can be very wide indeed" (Sen 1990, 57 n.19; see 1985b). Sen seems happy to claim that it is "more important to be vaguely right than precisely wrong" (1990, 45; see 1980b, 219). Nussbaum sees Sen's vagueness as a deficiency and provides a list of ten capabilities (Nussbaum 2000, 78-80).

Second, such a vague concept is difficult to operationalize (Srinivasan 1994, 239-40 c.f. Sugden 1993). Sen says that the *list* of functionings used in the particular analysis will vary depending on the *purpose* for which it is used (1990, 46). More importantly, the *potential list* itself seems to be "culture-dependent" and thus the various functions and freedom will need to be assigned weights in *each* society (1980b, 219). There must be reflection and "some kind of reasoned 'consensus' on weights" which are to be used in welfare calculations (Sen 2000, 78). Sen adds that "it requires public discussion and a democratic understanding and acceptance" (2000, 78-9). Thus, contrary to the Logical Positivists, *ethical matters can be discussed rationally* and indeed this is needed for

“social choice” according to Sen. Nevertheless, this type of exercise presents considerable operational difficulties.

Before closing this account of Sen’s work, one final issue should be mentioned. Sen’s contributions to economics have been highly controversial (see Kula 1990). This is especially so with respect to the capability approach. Sen has actively promoted interventionist public policies and has praised various socialist and communist governments for their relative success in enhancing the capabilities of the masses. Although he has received considerable recognition for his work, Sen’s own association with various radical causes has fostered hostility. The opposition to Sen’s constructive agenda may divert attention from his more palatable critique of Logical Positivism. It is possible to accept this tier of his critique without necessarily being committed to his constructive programme (this would be the case for utilitarians for example).

In this section I presented Sen’s views on the genesis of economics and how the discipline evolved over time. Sen blames Logical Positivism for the detachment of economics from ethics. He provides trenchant criticisms of it and its impact on mainstream economics. A reconstructed economics, for Sen, needs both engineering and ethical traditions to be healthy. Therefore, the centre of gravity has to move back towards the ethical tradition (Sen 1987, 9). Sen, like Marshall, accepts that economics can be both a mathematical/engineering science *and* a moral science (Alvey 2000, 1244). In addition, he provides a critique of utilitarianism. He developed his capability approach as an alternative to the latter; Sen’s approach, however, has yet to achieve wide acceptance.

4. A PATH FORWARD?

Many mainstream economists would complain that reintroducing ethics into economics would lead them back to a dark, unscientific past; economics would become more like the humanities rather than a social science. The critique of Logical Positivism provided by Putnam, Walsh, Myrdal, Sen, and others, suggests that there is something fundamentally wrong with a “value-free” economics. This does not mean that one is reduced to ideology, moral platitudes or waffle. Sen suggests that science and ethics can be combined.

Further, professional philosophers, such as Putnam, have claimed that Logical Positivism has fallen out of fashion and that philosophers have gradually abandoned the fact/value dichotomy. “Yet even today economists whose philosophical ancestry is logical empiricist still write as if the old positivist fact/value distinction were beyond challenge” (Walsh 1987, 862). Having imported a doctrine from philosophy, economists refuse to adapt to the changes which have taken place in the exporting discipline. In short, economics remains wedded to superseded philosophical views.

The focus in this article has been on the work of Sen. He provides a useful critique of positivism and mainstream economics. In addition, Sen has constructed a new path, if economists wish to move economics forward in an ethical direction. Sen’s is not the only path forward. Thus, I am not necessarily advocating the adoption of Sen’s constructive programme, including the capabilities approach. Nevertheless, I do urge

mainstream economists to study the critique of positivism provided by Sen, and others. Further, if they are persuaded, I would urge them to consider alternative paths for the future development of the discipline (including Sen's and Myrdal's) which bring ethics back into its core.

REFERENCES

- Alvey, J. (2000), "An Introduction to Economics as a Moral Science" *International Journal of Social Economics*, 27(12), pp. 1231-51.
- Anand, S. and Ravallion, M. (1993), "Human Development in Poor Countries: On the Role of Private Incomes and Public Services" *Journal of Economic Perspectives* Winter, pp. 133-50.
- Aristotle. (1980 [1925]) *Nicomachean Ethics* Trans. with an introduction Ross, D. Revised Ackril, J. and Urmson, J. World Classics reprint. Oxford, Oxford University Press.
- Arrow, K. (1951a) *Social Choice and Individual Values* New York, Wiley.
- Arrow, K. (1951b) "An Extension of the Basic Theorems of Classical Welfare Economics" in Neyman, J. (ed) *Proceedings of the Second Berkeley Symposium on Mathematical Statistics and Probability* Los Angeles, University of California Press.
- Blaug, M. (1985) *Economic Theory in Retrospect* Fourth ed. Cambridge, Cambridge University Press.
- Caldwell, B. (1987) "Positivism" in Eatwell, J., Milgate, M. and Newman, P. (eds) *The New Palgrave: A Dictionary of Economics* Vol 3, London, Macmillan.
- Caldwell, B. (1994) *Beyond Positivism* Revised ed., London, Routledge.
- Carnap, R. (1995 [1934]) *The Unity of Science* trans. with an introduction Black, M. Bristol, Thoemmes.
- Debreu, G. (1959) *Theory of Value* New York, Wiley.
- Drèze, J. and Sen, A. (1989) *Hunger and Public Action* Oxford, Clarendon Press.
- Gordon, S. (1991) *The History and Philosophy of Social Science* London, Routledge.
- Hume, D. (1978 [1739-40]) *A Treatise of Human Nature* Selby-Bigge, L. and Nidditch, P. (eds), Oxford, Clarendon Press.
- Klamer, A. (1989) "A Conversation with Amartya Sen" *Journal of Economic Perspectives* Winter, pp. 135-50.
- Kolakowski, L. (1972 [1966]) *Positivist Philosophy* Trans. Guterman, N. Revised by the author. Harmondsworth, Penguin.
- Kula, E. (1990), "Author's Reply" *Food Policy* June, pp. 259-61.

- Marx, K. (1954 [1867]) *Capital* Vol I. First English ed. 1887, Moscow, Progress Publishers.
- Mukhopadhyaya, P. and Chatterjee, S. (2000), “Unfashionable Economics. Selected contributions of Amartya K. Sen: 1998 economics Nobel laureate” *New Zealand Economic Papers* June, pp. 25-52.
- Nussbaum, M. (2000) *Women and Human Development* Cambridge, Mass., Cambridge University Press.
- Putnam, H. (2002) *The Collapse of the Fact/Value Dichotomy and Other Essays* Cambridge, Mass., Harvard University Press.
- Quine, W. (1963) “Carnap and Logical Truth” in Schlipp, P. (ed) *The Philosophy of Rudolf Carnap* La Salle, Ill., Open Court.
- Robbins, L. (1932) *An Essay on the Nature and Significance of Economic Science*, 1st ed. London, Macmillan.
- Robbins, L. (1935) *An Essay on the Nature and Significance of Economic Science*, 2nd ed. London, Macmillan.
- Robbins, L. (1938), “Interpersonal Comparisons of Utility: A Comment” *Economic Journal*, December, pp. 635-41.
- Scandinavian Journal of Economics* (1999), “Bibliography of Amartya K. Sen’s Publications, 1957-1998” *Scandinavian Journal of Economics* 101(2), pp. 191-203.
- Sen, A. (1966), “Labour Allocation in a Cooperative Enterprise” *Review of Economic Studies* October, pp. 361-71.
- Sen, A. (1967), “The Nature and Classes of Prescriptive Judgments” *Philosophical Quarterly* January, pp. 46-62.
- Sen, A. (1970) *Collective Choice and Social Welfare* San Francisco, Holden-Day.
- Sen, A. (1973a) *On Economic Inequality* Oxford, Clarendon Press.
- Sen, A. (1973b), “Behaviour and the Concept of Preference” *Economica* August, pp. 241-59.
- Sen, A. (1974) “Choice, Orderings and Morality” in Korner, S. (ed) *Practical Reason* Oxford, Basil Blackwell.
- Sen, A. (1977), “Rational Fools: A Critique of the Behavioral Foundations of Economic Theory” *Philosophy and Public Affairs* Summer, pp. 317-44.
- Sen, A. (1978) “Ethical Measurement of Inequality: Some Difficulties” in Krelle, W. and Shorrocks, A. (eds) *Personal Income Distribution* Amsterdam, North-Holland.

- Sen, A. (1979) "Interpersonal Comparisons of Welfare" in Boskin, M. (ed) *Economics and Human Welfare* New York, Academic Press.
- Sen, A. (1980a), "Description as Choice" *Oxford Economic Papers* November, pp. 353-69.
- Sen, A. (1980b) "Equality of What?" in *The Tanner Lectures on Human Values* Vol. I, McMurrin, S. (ed) Salt Lake City, University of Utah Press.
- Sen, A. (1982) *Choice, Welfare and Measurement* Oxford, Basil Blackwell.
- Sen, A. (1983), "Poor, Relatively Speaking" *Oxford Economic Papers* July, pp. 153-69.
- Sen, A. (1985a), "Rationality and Uncertainty" *Theory and Decision* March, pp. 109-27.
- Sen, A. (1985b), "Well-being, Agency and Freedom: The Dewey Lectures 1984" *Journal of Philosophy* April, pp. 169-221.
- Sen, A. (1987) *On Ethics and Economics* Malden, Mass., Blackwell.
- Sen, A. (1990) "Development as Capability Expansion" in Griffin, K. and Knight, J. (eds) *Human Development and the International Development Strategy for the 1990s* London, Macmillan.
- Sen, A. (1993), "Internal Consistency of Choice" *Econometrica* May, pp. 495-521.
- Sen, A. (1995 [1992]) *Inequality Reexamined* Harvard University Press paperback ed., Cambridge, Mass., Harvard University Press.
- Sen, A. (1999 [1985]) *Commodities and Capabilities* Oxford India paperback, New Delhi, Oxford University Press.
- Sen, A. (2000 [1999]) *Development as Freedom* New York, Anchor Books.
- Sen, A. (2002) *Rationality and Freedom* Cambridge, Mass., Belknap Press.
- Srinivasan, T. (1994), "Human Development: A new paradigm or reinvention of the wheel?" *American Economic Review* May, pp. 238-43.
- Sugden, R. (1993), "Welfare, Resources, and Capabilities: A review of *Inequality Reexamined* by Amartya Sen" *Journal of Economic Literature* December, pp. 1947-62.
- Walsh, V. (1987) "Philosophy and Economics" in Eatwell, J., Milgate, M. and Newman, P. (eds) *The New Palgrave: A Dictionary of Economics* Vol. 3, London, Macmillan.
- Walsh, V. (2003), "Sen After Putnam" *Review of Political Economy* July, pp. 315-94.

Weber, M. (1949) *The Methodology of the Social Sciences* trans. and ed. Shils, E. and Finch, H. Foreword Shils, E. New York, Free Press.

LIST OF RECENT DISCUSSION PAPERS

- 04.01 *Context and its relevance for Adam Smith's theological and teleological views, the foundation of his system of thought*, J. E. Alvey, January 2004.
- 04.02 *The theological foundation of Adam Smith's work*, J. E. Alvey, January 2004.
- 04.03 *The "new, optimistic, theistic view" of Adam Smith and problem of Smith's "pessimistic" view of history*, J. E. Alvey, March 2004.
- 04.04 *Tariffs, quotas and the corrupt purchasing of inappropriate technology*, N. A. Campbell, May 2004.
- 04.05 *Information and communication technology and New Zealand's productivity malaise: An industry-level study*, H.-J. Engelbrecht and V. Xayavong, June 2004.
- 04.06 *The role of teleology in Adam Smith's Wealth of Nations: A belated reply to Kleer*, J. E. Alvey, July 2004.
- 04.07 *Stochastic frontier analysis of New Zealand's manufacturing industries: Some empirical results*, R. Gounder & V. Xayavong, July 2004.
- 04.08 *A critical review of Lisa Hill's view of Adam Smith's 'hidden theology'*, J. E. Alvey, September 2004.
- 04.09 *John Locke after 300 years*, J. E. Alvey, October 2004.
- 04.10 *A road ahead from Cancun? Weighing up some give-and-take scenarios in a DDA spirit*, S. Shakur, A. N. Rae, S. Chatterjee, October 2004.
- 04.11 *The GATT/WTO has promoted trade, but only in capital-intensive commodities!* H.-J. Engelbrecht and C. Pearce, November 2004.
- 05.01 *Theoretical analysis of foreign aid, policies and state institutions*, V. Xayavong, R. Gounder and J. Obben, January 2005.
- 05.02 *Dimensions of conflict and the role of foreign aid in Fiji*, R. Gounder, March 2005.