## IS A VALUE-FREE ECONOMICS POSSIBLE OR DESIRABLE?

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<u>Abstract</u>: It appears that the majority of mainstream economists hold the view that the only kind of research that counts in economics must concern numbers and measurement involving empirical data. One reason for this view is that it is supposed to be the only, or main, kind of research that results in a contribution to objective knowledge. However, the relationship between science and values has in the last decade or so become the subject of renewed methodological discussion. The results of this discussion lead towards the conclusion that limiting research to 'facts' and supposedly excluding values not only impoverishes the research, but arbitrarily limits its scope by excluding a whole realm of our 'ordinary' language in which facts and values are inextricably interrelated.

Key words: positive-normative distinction, fact-value dichotomy, positivism, naturalism, entanglement

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It appears that the majority of mainstream economists hold the view that the only kind of research that counts in economics must revolve around numbers and measurement. Other kinds of research represent no more than knowledge of 'a meagre and unsatisfactory kind'. Research involving numbers and measurement concerns research involving empirical data. One reason that such research counts is the positivist view that objective scientific knowledge is to be gained by working only with analytic statements (numbers) and with synthetic statements (observation statements).

It may be that this view reflects the vestiges of the influence of logical positivism on mainstream economists. This is the argument of Putnam and Walsh (2012). It may be that this view reflects the influence of contemporary scientism. Or it may be that this view reflects the influence of the rise of naturalism in the philosophy of science. Whatever the case, perhaps the most deeply held conviction of mainstream economists is that, so long as they uphold the positive-normative distinction and eschew normative issues, the results of their quantitative analysis of empirical data sets will reflect objective knowledge i.e. it may be mistaken on technical grounds but it will definitely represent value-free research.

Until relatively recently, apart from the lone figures of Hutchison (1964), Amartya Sen (1970), and Blaug (1980), reluctance to discuss the issues of ethics, values and ideological bias in economics appeared to reflect the case that these had become a taboo subject. However, in the last decade or so, following Hausman and McPherson (1993, 2006), the relationship between science and ethics, values and

ideological bias has become the subject of renewed methodological discussion. The paper draws on this literature, and the issues it raises, in attempting to question the dominant view that 'it only counts if you can measure it'.

Accordingly, the first section begins by considering some of the historically better-known claims for and against the mainstream view of economics as a value-free science. It then looks briefly at the generally accepted position in economic methodology today. This position accepts that value judgments are present in economics but is not clear on the extent to which this poses significant difficulties for the practice of positive economics. Likewise the literature emerging from post-Quinean naturalism also accepts value judgments are present and furthermore appears to suggest that there are no problems at all with this situation since such normative evaluations can be expressed, or reduced to, natural terms. The third section, following Mongin (2006), argues that both the extreme views -- that economics is completely value-free or completely value-laden -- are claims that are difficult to sustain. Instead it is more reasonable to accept that value judgments do enter into economics but that this does not have particularly serious consequences for the value-free scientific status of economics.

The final section questions this seemingly reasonable conclusion. One of its underlying assumptions is that it is possible to distinguish facts from values. However, if we accept the argument (e.g. of Putnam and Walsh), that judgments of fact are entangled with judgments of value, then this implies that an essentially value-free scientific economics is neither possible nor desirable.

# 1. Economics as a value-free science: the historical background of today's consensus amongst economists versus today's consensus amongst economic methodologists

The standard view amongst most economists today is that 'economics is a positive, value-free science with no place for value judgments of any kind . . . economics operates as a value-free science, and society then decides what value judgments to apply to its results (Boumans and Davis 2010, pp. 169-70). In an article examining the role of the positive-normative distinction in economics, Hands (2009, p. 18) concludes that economists generally consider it to be a strict dichotomy and support Robbins's (1932, 1935) view that 'the normative had no place in, and should be prohibited from, economic science'.

The history of how this standard view came about involved much controversy amongst economists. While the history of claims, for and against, economics as a value-free science stretch back to the early 19<sup>th</sup> century, perhaps the most influential claim for economics as a value-free science was that of Robbins (1932). It is generally supposed that Robbins's claim arose as a response to then recent conclusion of the

old material welfare school of Marshall and Pigou (1920, 1932) that redistribution of income would raise the overall welfare of society.

However, Backhouse (2009) has argued that Robbins was responding rather to the increasing pressure from the growing British Labour Party for socialist alternatives. For example, the more radical socialist welfare economics originating from the Oxford Movement attempted to achieve their socialist aims by getting economists to become more directly involved with politics. By contrast the material welfare school of Marshall wanted to achieve certain milder 'social welfare' aims by distancing the subject of political economy from politics. Hence Marshall used the new term 'economics' rather than the older expression of political economy.

Whatever the case, Robbins attacked the basis for the material welfare school's conclusion that a redistribution of income was desirable. Their conclusion stemmed from the law of diminishing marginal utility (of money income) and interpersonal comparisons of such utility. Robbins argued that he satisfactions enjoyed by different people could not be compared since they were unobservable and so involved subjective value judgments. Such a comparison involves an 'element of conventional valuation. Hence it is essentially normative. It has no place in pure science' (1935, p. 139). Interpersonal comparisons of utility were thereby held by Robbins to be scientifically illegitimate. It was only a 'pretence that judgments of value are judgments of scientific fact' (p. 142 n).

Economics deals with ascertainable facts; ethics with valuations and obligations. The two fields of enquiry are not on the same plane of discourse. Between the generalisations of positive and normative studies there is a logical gulf fixed which no ingenuity can disguise and no juxtaposition of space or time can bridge over (p. 148).

Friedman (1953) famously reinforced Robbins's view that economics dealt with positive, and not normative, issues. Positive economics, he declared, is in principle independent of any particular ethical position or normative judgments. . . . positive economics is, or can be, an 'objective' science, in precisely the same sense as any of the physical sciences' . . . differences about economic policy . . . derive predominantly from different predictions about the economic consequences of taking action -- differences that in principle can be eliminated by the progress of positive economics -- rather than from fundamental differences in basic values, differences about which men can ultimately only fight (1953, pp. 4-5).

Perhaps the most well-known claim that economics was not a value-free science was that of Myrdal who argued that it is 'naïve self-deception' to believe or claim that there could be a positive economics if one

only tried to keep economics free of normative issues. 'There is no way of studying social reality other than from the viewpoint of human ideals. A "disinterested social science" has never existed, and for logical reasons, cannot exist. The value connotation of our main concepts represents our interest in a matter, gives directions to our thoughts and significance to our inferences' (Myrdal, quoted in Hutchison 1964, p. 48). 'Our very concepts are value-loaded . . . they cannot be defined except in terms of political valuations' (Myrdal 1958, p. 1).

Throughout this book there lurks the idea that when all metaphysical elements are radically cut away, a healthy body of positive economic theory will remain, which is altogether independent of valuations.... This implicit belief in the existence of a body of scientific knowledge acquired independently of all valuations is, as I now see it, naïve empiricism (Myrdal 1953, p. vii).

Likewise, according to Coats (1960, p. 40): 'Even the purest of theories is based on certain logical (philosophical) assumptions about the nature and purpose of economic activity, and these assumptions predispose the theorist towards certain types of political action'. From a 'Marxist' viewpoint, mainstream economics was far from an objective science:

Some [economists] would state that their task was to collect and collate facts and to reason from them, and that in doing this they were uninfluenced by value-judgments. But such people are the most potent apologists.... The claim to be uninfluenced by value-judgments is a sham one. It is not possible to play about with social facts, whether they be historical or contemporary, without allowing bias to count for something. One cannot even select facts without bias.... Objectivity in the social sciences is an illusion (Allen 1960, p. 60).

Yet, in contrast to economists most economic methodologists accept that the standard view of economics as a value-free science 'does not stand up to any reasonable examination' (Boumans and Davis 2010, p. 170). Indeed Boumans and Davis (2010, pp. 170 ff.) examine the ways in which value judgments enter into economics. The question of value judgments in economics concerns the role of normative issues in economics. Normative issues involve evaluative statements ('We had a great holiday') and prescriptions ('You should engage first gear up a steep hill') without ethical content, as well as evaluative statements (It's morally wrong to cheat') and prescriptions ('You should not cheat') with ethical content.

While modern economic views can arguably be traced to Knight (1935) and Sen (1970, 1980), among the earliest attempts to systematically examine the relation between economics and moral philosophy were Walsh (1987) and Hausman & McPherson (1993, 2006). They seek to address the common view that competing moral claims concerning what ought to be done cannot be rationally resolved since they can't

be empirically tested. In particular, their 'book is a response to the [Robbinsian] view that ethics and economics have (and should have) nothing to do with each other' (2006, p. 9). However, rather than simply criticizing the 'engineering' vision which sees economics as entirely value neutral, the major concern of their book is not so much to show that facts and values are 'entangled' thereby invalidating the fact-value dichotomy as to show that this entanglement 'helps one to do economics and policy evaluation better' (p. 3). They acknowledge that they borrow the term 'entangled' in this connection from Putnam (2002). An implication of the argument that facts and values are entangled is that facts can no longer be considered as standing independently of values (Hausman and McPherson 2006, p. 9).

Most economic methodologists today accept that 'the normative is involved (ethically and otherwise) in economic theorizing', that the fact-value distinction is a relic of the hegemony of positivist philosophical ideas and that it should have disappeared along with the other rigid dichotomies of the positivist era (meaningful-meaningless, theory-observation, analytic-synthetic, etc.) (Hands 2009, p. 19).

In the final section we will detail Putnam's (2002) explanation of why the fact-value distinction is a such a relic and importantly, how work by economists needs to change in order to take account of, what Putnam refers to as, the collapse of the fact/value dichotomy.

#### 2. The implications of post-Quinean naturalized epistemology for a value-free economics

Concerning naturalism, we can distinguish between its ontological and epistemological aspects. Ontological naturalism is the metaphysical view that there is nothing but natural elements of the kind studied by the natural sciences. Its opposite is idealism which views minds or mental states as the only things that really exist (Quinton 1977, p. 297). Epistemological naturalism is the view that the theory of knowledge is not a priori but a part of empirical science (Mautner 1999, p. 373). That is, there is no place for an (abstract) 'first philosophy' concerning methodological principles since these are instead 'to be explained and tested by reference to natural causes and events' alone.

While we can distinguish between the ontological and epistemological aspects of naturalism, according to Koons (1998, p. 1) both aspects are related to scientism. The term was used by Hayek and Popper to describe what Sorell (1994, p. 1) argues is the mistake of 'putting too high a value on natural science in comparison to other branches of learning or culture'. Feyerabend's (1975, viii) comment captures much the same sentiment: 'science should be taught as one view among many and not as the one and only road to truth and reality'. According to Quinton (1977, p. 561) scientism is the view that the 'inductive methods of the natural sciences are the only source of genuine factual knowledge and, in particular, that they alone can yield true knowledge about man and society'. For Outhwaite (2009, p. 22) it is a view that

implies that all knowledge can be reduced to only that which is measurable. For Koons (1998, p. 1) it is the view that 'science is supposed to provide us with a picture of the world so much more reliable and well-supported than that provided by any non-scientific source of information that we are entitled, perhaps even obliged, to withhold belief in anything that is not an intrinsic part of our best scientific picture of the world'.

Defences of naturalism usually appeal to the authority of science. Scientism is argued to support naturalism since 'our best scientific picture of the world is an essentially materialistic one, with no reference to causal agencies other than those that can be located within space and time . . . [that is] the world of space and time is causally closed (Koons 1998, p. 1). But such support for naturalism assumes that science provides us with the objective truth about reality. If science does not do this, then it has no authority to pronounce on metaphysical matters.

In order to understand Quinean (1969) naturalized epistemology, one needs to first understand (Quinean) naturalism. That naturalized epistemology has a very nuanced meaning is indicated in Hands (2001, p. 129) remark that it needs to be distinguished from 'methodological monism' which is the view that the social sciences should follow in the methodological footsteps of the natural sciences. Accordingly we will attempt to briefly summarize Kitcher (1992) to get a deeper idea of modern naturalism and its origins.

According to Kitcher (1992) 'a disturbingly large number of contemporary intellectuals' view logical positivism/empiricism and, more widely, analytical philosophy (i.e. the writings of Frege, Wittgenstein and Carnap plus Russell and Schlick) as having 'collapsed' and conclude that this is the 'death of philosophy' and with it the death of normative epistemology. In view of the revival, a century after Frege, of (Quinean) naturalism, Kitcher aims to save the project of normative epistemology by arguing that it can be carried out in terms of, what he calls, 'traditional naturalism' (p. 114).

Kitcher (1992) distinguishes traditional from radical naturalism (or eliminative materialism). The latter seeks to eliminate epistemology and with it, the normative project of epistemology. Knowledge has traditionally been defined as justified true belief, i.e. a special kind of belief. Eliminativists argue that 'beliefs simply do not exist so that all talk of beliefs should be eliminated from scientific discourse and replaced by talk about that which does exist: neurophysiological processes in the brain' (Hands 2001, p. 165). Eliminativists are therefore strictly physicalist or materialist (p. 167). This rules out all explanations couched in intentional terms i.e. the beliefs and desires of the individuals involved and therefore explanations of microeconomic behavior in terms of desires regarding utility and beliefs regarding constraints (p. 166).

In contrast, Kitcher's (1992) traditional naturalism seeks to retain a role for the normative epistemological project of Bacon and Descartes. He outlines two presuppositions of traditional naturalism. First, following Quine's (1953) attack on analyticity, any statement (including a methodological one) is revisable in the light of experience. Knowledge is embedded in the history of human knowledge (p. 72). Likewise Kitcher interprets Kuhn as saying that we must look to the reasoning scientists actually employ rather than the deliverances the **a priori** methodological prescriptions since this implies knowledge that could not be undermined by any experience (p. 77n). These must therefore be grounded in 'empirical findings' i.e. the deliverances of the sciences (p. 84). In addition, Kitcher argues, the whole notion of studying the attainment of knowledge solely from the viewpoint of isolated individuals must be given up. This is because the strategies for individuals to follow 'cannot be identified without considering the communities to which they belong' (p. 83).

Second, instead of specifying logical principles or ideals far from the human cognitive predicament, we need to take into account the **psychological** processes that causally generate states of belief (p. 60). 'In Goldman's (1986) original version, a process that confers justification is reliable in the sense of belonging to a type that generates true beliefs with high frequency' (p. 65). The a priori principles of deductive logic can be understood as specifying norms for belief formation. However, psychological study might reveal that people cannot reason in the preferred ways or that these ways are not the ways in which people adjust beliefs (p. 83). Naturalists should avoid the sceptics demand for synchronic reconstruction of belief formation (p. 90). Instead belief formation is better understood in diachronic terms: 'each of us absorbs information from our predecessors, and, through our own interactions with nature and with one another, we modify our collective picture of the world and of the proper ways to investigate it' (p. 90).

Kitcher goes on to argue that preservation of the normative project of epistemology requires a conception of cognitive value e.g. the truth about nature. True beliefs about nature should be seen as vehicles for obtaining practical ends (p. 102). However an adequate account of cognitive virtue should not be simply pragmatic. This is because goals of science are not simply prediction and control, but, include in addition understanding nature. This might involve adopting a realist approach to explanation (p. 104). The arguments here are too detailed to summarise briefly.

With the above brief introduction to naturalized epistemology, we are now in a position to understand the implications of Post-Quinean naturalized epistemology for a value-free economics. That is, we are better able to understand the naturalistic approach to the question of values in the social sciences. Ethical naturalism holds that ethical terms are definable in non-ethical, natural terms (Crisp 1995, p. 606).

Evaluative moral sentences are genuine propositions capable of being verified as true or false in terms of ordinary empirical facts (rather than those of a supernatural character). (This stance then is quite different to the emotivism of logical positivists such as Ayer and C. L. Stevenson for whom ethical sentences merely serve to express emotions, that is, expressions of approval or disapproval (Wikipedia, Meta-ethics). In terms of ethical naturalism there are objective moral properties which are reducible or stand in some relation to entirely non-ethical properties (Wikipedia, Meta-ethics). 'The criterion of right action is some empirical feature of the natural world such as the happiness of sentient beings' (Quinton 1977, p. 411). Such a viewpoint fits in which utilitarianism. In terms of ethical naturalism the only way of finding out what conduct is right is by empirical inquiry (Mautner 1999, p. 373).

In contrast to ethical naturalism, G E Moore (1903) argued that these objective moral properties were not reducible to entirely non-ethical properties and that we sometimes have intuitive or otherwise a priori awareness of moral properties or moral truths (Wikipedia, Meta-ethics). In the same way as personal affection and aesthetic enjoyment (Mautner 1999, p. 375), Moore argued that ethical properties such as 'good' could not be defined in terms of ordinary empirical expressions such as 'pleasant' or 'satisfying desire' or 'maximizing happiness' or, indeed, in terms of 'any definition intended to elucidate (analyze) its meaning' (Quinton 1977, p. 412), or in supernatural terms (Mautner 1999, p. 374). Any attempt to pin down its meaning is the 'naturalistic fallacy' as is any inference that purports to derive a normative conclusion (i.e. a value judgment) from purely factual premises i.e. any passage in reasoning from 'is' to 'ought' (p. 412).

It would seem then that for naturalism (ontological, epistemological and ethical) the issue of values entering into economics presents no problem for economics as a science. This is because these values supposedly can be reduced to or re-stated in non-ethical, natural terms. However, there is one value that defies 'redirection': the over-valuation of naturalism of 'science' or its 'totalizing view of science as if it were capable of describing all reality and knowledge, or as if it were the only true way to acquire knowledge about reality and the nature of things' (Wikipedia, Scientism). While ontological and epistemological naturalism are clearly logically separate, whether they remain so in practice is of course a different matter. We will see how ethical naturalism relates to the argument of Putnam (1992) described in section 4 below.

This background allows us to better evaluate Ross's (2012) attempt to rebut the claim by 'antieconomists' that economics cannot be purged of ideology and so cannot be scientific. Ross defines 'economics' ostensively (rather than analytically) as the establishment economics that uses a standard curriculum (micro, macro, metrics) and which has efficiency as its primary interest. 'Ideology' simplifies models of causal relationships with a view to coordinating, for political purposes, the meanings of terms such as liberty, justice etc., when in fact such terms are permanently contestable. He takes on this rebuttal whilst fully acknowledging that both economics and ideology have long been 'locked in a close dance'. This is because economics investigates the social distribution of resources while ideology concerns norms for regulating the flows of resources (p. 7).

Anti-economists are those who actively hate economics for pretending to be a science when in actual fact it either promotes, or is, an ideology that benefits the powerful. Anti-economists fear and dislike markets institutions promoted by economists. Economists promote markets by showing how market mechanisms can work better and promoting the belief that market-focused societies are more likely to be more efficient than other sorts of societies and 'therefore tend to produce higher per capita welfare that leaves even poorer citizens materially better off than they otherwise would be' (p. 8). However, the scope of economics is not restricted to markets because it is 'the science that studies relative efficiency in response to scarcity' (p. 15). Ross examines the extent to which economic theory has in fact promoted market expansion. Such a policy measure involves a normative premise that welfare efficiency is desirable. 'No argument for policy measures such as market expansion can follow only from premises reporting scientific discoveries' (p. 18). The anti-economist is likely to argue that 'welfare' (or liberty or democracy) are terms that cannot be interpreted independently of ideology (p. 34).

Ross now distinguishes between ideological endorsement and ideological promotion. Economists, he argues, should admit, following Binmore (1994, 1998) and Dasgupta (2005), to endorsing 'the ideology of modernity and liberal democracy' (p. 35). Such a concession is not inconsistent with denying the antieconomists' charge that economics promotes, or is, an ideology. Economics being 'ideological' in only the philosophical sense is consistent with it being scientific (p. 40). This is because 'the economic attitude is consistent with policies drawn from anywhere on the left-right spectrum that acknowledge scarcity' and that is concerned with means rather than ends (p. 39). The liberal-democratic modernist project is concerned with practical means rather than with 'aspirational yearning to transcend scarcity and materiality altogether, that is, it is 'the antithesis of political ideology' (p. 39). That incentives (more broadly market structures) are important to this project 'seems very clearly to be a fact, not an ideological construction' (p. 41). If there are facts which confirm or refute the way in which this project can be achieved, then study of the contributions of markets to liberty and democracy can be a science rather than (political) ideology. Ross concludes that his paper refutes the claims of anti-economists 'that economics cannot be fully purged of ideological elements' (p. 1). To the extent that Ross (2012) follows a version of naturalism, the entry of values into economic science would seem to present no real problem as these values supposedly can be reduced to or re-stated in nonethical, natural terms. I have said 'would seem to present no real problem' since, as we saw above, Ross explicitly points out that 'no argument for [normative] policy measures can follow only from premises reporting scientific discoveries. This would seem to imply that premises from scientific discoveries would involve no normative content? This point is important for many reasons. For instance, Ross lays great emphasis on the first interest of economics as being efficiency. Long ago Frank Knight pointed out that efficiency is a value concept.

Whatever Ross's position on values being present in premises reporting scientific discoveries, insofar as he follows a naturalist line, his analysis is subject to the criticisms of naturalism described above. Apart from this, there are a number of other criticisms. Ross claims that economics 'uniquely among the social sciences can claim to have a clearly dominant set of rigorous theoretical foundations' superior to that of a sociologist (p. 2). Two points arise here. First, Ross appears to conflate this 'dominant' set with 'economics'. That is, he seems to rule out of court all other sets of theoretical foundations. Long-established schools of economics, other than the mainstream, appear to fall into the category of 'anti-economics'. Second, he appears to view economists as superior to other social scientists. If this is so, then a response to the views expounded by Fourcade et al (2015) would appear appropriate. Ross appears to place significance on distinguishing between 'facts and ideological constructions' and on the need for facts to confirm or refute the claims of economics. Here he is at odds with Putnam (2002), and seemingly also with ethical naturalists, who argue against there being any significant division between 'facts' and 'norms'.

Ross appears to use the distinction between means and ends as if it is clear-cut. However Hutchison (1964, pp. 108-116), for example, demonstrates the difficulties involved in this distinction. Finally, it is not clear in what sense Ross uses the term 'scarcity'. He seems to refer only to to scarcity of physical resources: 'economics', through improving the market society, can leave 'poorer citizens materially better off' than they would be in other types of society. Yet his use of the term seems to stem from Robbins (1932, 1935). In this sense it is not restricted to physical resources. Parkin, Powell and Matthews (2005, p. 4) well demonstrate this sense when they argue that 'scarcity is the inability to satisfy all our wants . . . [so that] the poor and the rich alike face scarcity'. Finally, Ross gives the term 'anti-economists' a pejorative interpretation: 'the intellectual standards of most anti-economists . . . are shoddy' (p. 12). It is not clear that he is then able to provide an unbiased account of their supposed case against 'economics'.

### 3. Mongin's four-way classification of theses about value neutrality in economics

We have so far encountered opposing views concerning the question of value neutrality in economics. On one side are those who insist that economics is a value-free science: Robbins, Friedman, the 'standard view amongst most economists today' and more recently, it seems, supporters of naturalized epistemology such as Ross. On the other side are those who insist that economics is value laden: Knight, Hutchison, Myrdal, 'Marxists', Sen, the 'standard view amongst most economic methodologists today', and most recently, Walsh and Putnam. However, within each camp, there are different types and variations of these views. In this regard, Mongin (2006) has performed an invaluable service in setting out a clarifying classificatory framework. Here we will briefly outline his four-fold classification.

#### The strong neutrality thesis

The strong neutrality thesis is that economists can and should avoid making value judgments i.e. the view is of economics as an entirely neutral science. According to Mongin (2006, p. 274), it relies on Hume's 'is-ought' thesis and the (crude) positivist outlawing of value judgments from science. Scarantino (2009) refers to this thesis as the 'naïve positivist view'.

While the argument needs to be properly substantiated in a later paper, I argue that, not only positivistinspired economists - possibly Friedman (1953) - fall into this category, but also representatives of the old dominant orthodox methodology in the Ricardo-Senior-Robbins tradition. Robbins famously claimed that economics should be separate from ethics. Mongin (2006) rejects this claim since it omits non-ethical evaluations, relying on a false dichotomy between economics and 'ethics'. ('Bizarrely, Robbins recognized that that an agent's ordinary preferences were evaluations of a non-ethical sort' p. 275). As Hands (2009, p. 4) points out, while J N Keynes distinguished between positive and normative economics he viewed these as 'different kinds of sciences', so allowing for the legitimacy of the welfare economics of the MWS. By contrast Robbins went much further, not only reiterating the positive-normative distinction, but declaring the normative to be scientifically 'illegitimate'. In addition it would seem that followers of a naturalized epistemology such as Ross (2012) also falls within Mongin's category of following the strong neutrality thesis.

#### The weak neutrality thesis

The weak neutrality thesis accepts that there are occasions when economists make value judgments, but that these value judgments are limited e.g. 'that [Pareto] optimization is an essential part of rationality' (p. 260) and very generally accepted. For the most part, however, the strong neutrality thesis is applicable. The weak neutrality view underlay the stance adopted by the new welfare economics as well as the development of the social welfare function approach. In terms of this approach economists view

themselves as engaged in the positive empirical analysis of detailing the technical means that would most efficiently secure society's goals, where these goals are determined from outside economics by the political institutions of the particular society being studied. The results of their analysis are available for non-economists to use in their policy deliberations. Blaug (1980, p. 149) has termed this view as that of 'the economist as a technocrat'. One of the problems with this view is that it relies on a false dualism between means and ends, as explained by Hutchison in the previous section.

The weak neutrality thesis appears to correspond with, what Scarantino (2009) has called the 'separatist view' and with Hutchison's pre-scientific stage in which Scarantino's (2009, p. 465) 'bordering activities' are involved. That is, all kinds of normative statements (both ethical and non-ethical) are accepted to enter in this stage. In terms of Scarantino's (2009) terminology, both epistemic and non-epistemic value judgments enter. Epistemic values (c.f. Blaug's methodological judgments) concern choice of subject matter, methods of investigation and standards of validity (cf. Boumans and Davis 2010, p. 171). Non-epistemic values refer to all other values e.g. ethical, political, social. In the separatist view non-epistemic values are confined to the pre-scientific stage or bordering activities. Scarantino (2009, p. 466) argues that Robbins subscribed to this separatist view i.e. to an ideal of science as free from non-epistemic values'.

#### The strong non-neutrality thesis

The strong non-neutrality thesis (held by Myrdal (1958), neo-Marxist and some heterodox economists) is that the social scientist cannot and should not avoid making value judgments. Economics is seen as a thoroughly normative discipline. Scarantino's non-separatist view appears to apply to both the strong and the weak versions of Mongin's non-neutrality theses. In terms of this view, non-epistemic values enter into the scientific stage itself, or what Scarantino (2009) describes as the internal activities of scientific economists i.e. the core activities of formulating and testing economic hypotheses (p. 466).

A well-known representative of this view is Myrdal (1958). According to Mongin (2006), Myrdal's main argument is that 'value judgments and judgments of facts cannot be separated logically' (p. 261). Mongin dismisses this argument by showing that this is not necessarily the case.

#### The weak non-neutrality thesis

The weak non-neutrality thesis (supported by Mongin) contradicts the strong neutrality thesis by arguing that occasions do in fact arise in which economists might make (or not make) value judgments depending on the circumstances. Contrary, however, to the weak neutrality thesis, it contends that value judgments 'are neither easy to spot, nor few in number, nor always separable – practically and even logically – form judgments of fact' (p. 261). In order to support his weak non-neutrality thesis, Mongin develops a

philosophical analysis indicating the conditions under which judgments of facts can be separated from judgments of values. In the process he shows that the positive-normative distinction must be founded on an analysis of value judgments, not on Hume's 'is-ought' guillotine. That is to say, contrary to Robbins, the value neutrality problem was not solved by Hume (p. 274).

Mongin's (2006) framework provides a perspective from which both the strong neutrality (Robbins) and strong non-neutrality (Myrdal) theses appear as extreme versions, and hence, on the face of it, more difficult to defend. The weakness of the weak neutrality thesis is that, while it accepts that value judgments enter into economics, this fact does not seem to imply that economists need to take value judgments into account in arriving at their predicitions i.e. they can still practice economics as 'technocrats' (Blaug 1980, p. 149).

This leaves the weak non-neutrality thesis the most promising position. It fits in with the position adopted by most economic methodologists. In particular his view, contrary to that of Robbins, that Hume did not solve the value neutrality problem agrees with the main thrust of the arguments of Putnam and Walsh that we need to abandon both Hume's 'is-ought' and the positivist 'fact-value' dichotomies in order to deal with the reality of the material with which both the social and natural sciences deal, namely, that in this material the 'areas' of fact and value overlap and interpenetrate each other. To deal with them as if they occur in separate compartments is to limit oneself to a kind of Procrustean bed.

## 4. Putnam and the collapse of the fact/value dichotomy

This section is still 'under construction': it is largely a paraphrasing of Putnam's (2002) argument and still mostly in his own words.

According to Putnam and Walsh (2012a, p. 1), 'few philosophical movements have had anything like as great an influence on the mainstream economics profession as that of logical positivism from the 1930s until quite recently. The main idea that took root amongst economists was the 'claim that a science answered questions about what *is*, but was utterly silent as to what *ought* to be' (p. 1). Thus economists came to accept the validity and indispensability of sharply separating facts and values (Putnam 2002, p. 28).

While it is doubtful that Robbins (1932, 1935) knew much about logical positivism, his dismissal of interpersonal comparisons of welfare on the grounds that they were value judgments fitted in with the logical positivist view that value judgments were meaningless and therefore to be excluded from the language of science (Putnam and Walsh 2012a, p. 2). The political implication of dismissing interpersonal comparisons of welfare were equally if not more significant. The dismissal was meant to challenge the

intellectual legitimacy of claims by Pigou and the old Marshallian welfare school that redistribution of income would increase welfare (Putnam 2012, p. 111).

But, apart from science, in virtually any discussion of policy or politics one might hear someone challenge a statement by asking if it is a value judgment (p. 111). The implication is that, if it is a value judgment then it is simply 'subjective', and a further implication being that if it is 'subjective' then 'my value judgments are just as good as yours' -- 'that is the whole notion of better or worse reasons does not apply' (p. 111). This way of thinking was explicitly endorsed by Robbins (1932, p. 53): 'If we disagree about ends it is a case of thy blood or mine . . . But if we disagree about means, then scientific analysis can often help us resolve our differences'. It is significant that Sen's (1967) very first philosophical publication disputed this claim of Robbins by arguing that there is indeed room for rational argument about value claims (p. 112).

In place of the fact/value dichotomy Putnam proposes the idea of the 'entanglement' of fact and value. This entanglement is most easily seen in certain facts that only come into view through the lenses of an evaluative outlook e.g. 'brave', 'cruel'. These have been called 'thick' ethical concepts because they simultaneously describe and evaluate (Murdoch 1970) (p. 112). However, Putnam argues that it is impossible to divide these up into a purely descriptive and purely evaluative part. The world we inhabit, particularly our human world, is not describable in 'value-neutral' terms. 'Not without throwing away the most significant facts along with the value judgments' (p. 112).

In rejecting the fact/value dichotomy Putnam is not saying that 'there is no difference between facts and values'. This is because, in the first place, this very posing of the logical positivist dichotomy between 'facts' and 'values' involves conceptions of 'facts' as sense-impressions and 'values' as expressions of subjective feelings. In terms of these conceptions denial of a difference would be illogical. But the conceptions are fatally misconceived (pp. 114-6). On a deeper level, Putnam says that the real problem is that the fact/value dichotomy is not a distinction at all but a <u>thesis</u>: the thesis that 'no value judgment states a fact'.

## The logical positivist argument for the fact/value dichotomy

Putnam (2002) argues that the logical positivist fact/value dichotomy had its origins in Hume's doctrine that one can't infer an 'ought' from an 'is' (p. 14). This famous dictum reflected his less well-known distinction between 'matters of fact' and 'relations of ideas' (e.g. an 'ought'). But this distinction, Putnam argues, presupposes a substantial metaphysics. Hume did not view his 'no ought from is' claim as one about formal inference but rather as one which assumed a metaphysical dichotomy between 'matters of

fact' and 'relations of ideas'. For Hume, a 'fact' is simply something of which one could have a sense 'impression' (a complex of sense qualities) (p. 40). However, Hume's criterion for 'matters of fact' presupposed 'pictorial semantics' (p. 15). Concepts are a kind of 'idea' and 'ideas' are themselves pictorial: the only way they can represent a 'matter of fact' is by resembling it.

Hume therefore does not just tell us that one cannot infer an 'ought' from an 'is'; he claims, more broadly, that there is no 'matter of fact' about other 'oughts' such as 'right' or 'virtue' since their properties are not picturable 'in the way that the property of being an apple is picturable' (p. 15). According to Putnam, we can enlarge the class of 'oughts' beyond 'right' and 'virtue' to include that of all value, including ethical, judgments (p. 16). Putnam argues therefore that Hume's distinction was essentially a metaphysical thesis, 'namely, the thesis that "ethics" is not about "matters of fact" (p. 19).

Putnam's argument is that the fact/value dichotomy was defended on the basis of the positivist notion of a fact which followed that of Hume: a fact is something of which one could have a sensible impression. The logical positivist confidence that ethical sentences could not be factual 'derived from their confidence that they knew exactly what a fact was' (p. 21). For the early logical positivists, a 'fact' was something (a Humean sense-impression) that could be certified by mere observation. According to their early verifiability principle of meaning, each individual meaningful statement is required to have its own "method of verification" (Putnam 2012, p. 114).

For the early Carnap, only observation terms and logical terms counted as the language of science (pp. 22-23). Since this excluded statements in the revolutionary science of the early 20<sup>th</sup> century about bacteria and atoms, Carnap (1938) dropped the requirement that a meaningful factual predicate must be an observation predicate. Instead, as long as the 'system' (science as reconstructed in a formalized language) as a whole enables more successful predictions of phenomena, its predicates are 'cognitively meaningful' (Putnam 2012, p. 114). In this way cognitively meaningful language, he said, could contain not only observation terms but also 'theoretical terms' i.e. terms referring to unobservables (bacteria, atoms) and introduced by the assumptions of a theory (p. 29).

Putnam argues that with Carnap's abandonment of the picture of 'factual' sentences as individually capable of confrontation with sense experience, the positivists destroyed their basis for the fact/value dichotomy (pp. 30, 21). First of all, a fact no longer corresponded to an individual (observation) statement: it was only the <u>system</u> of scientific statements as a whole that had factual content (p. 24). Secondly, the system as a whole gained this factual content only through its better predictions. But to predict means to deduce observation sentences from a theory (p. 29). And deduction involves both

analytic (factually empty) and synthetic (factual) statements. Therefore defining the factual (system) now depended, following Carnap, crucially on the analytic-synthetic distinction (p. 29).

Quine (1953) is generally accepted to have demolished the (metaphysically inflated – it included mathematics) positivist notion of the 'analytic' (p. 29). Quine showed that the system of scientific knowledge depends on both conventions and on empirical descriptions without there being a single scientific sentence that is true <u>simply</u> by convention or any single scientific sentence that is true <u>simply</u> in terms of experience (Putnam 2012, p. 114). Quine's insight was that there are large ranges of statements that are neither statements of analytic truths nor of observable facts (p. 13). In a famous metaphor, he argued that the lore of our fathers (inherited knowledge) is a pale grey fabric of sentences black with fact and white with convention but with no quite black or white threads in it (p. 12). In other words, there is no sense in distinguishing between analytic and synthetic statements. Since the notion of the factual depended on the analytic/synthetic dichotomy, Quine's intervention also demolished the positivist basis of a <u>clear</u> notion of fact and thereby the fact/value dichotomy. (As Walsh (1987) has reasoned, if a theory is black with fact and white with convention, it might well be red with values. 'Since for [logical positivists] confirmation or falsification had to be a property of a theory as a whole, they had no way of unraveling this whole cloth' (p. 30).)

Apart from Quine's intervention, the logical positivists' belief that their 'language of science' (observation, logical and theoretical terms) encompassed all 'cognitively meaningful' language was selfrefuting: terms related to their famous verifiability principle of meaning (the meaning of a proposition consists in the method of its verification) such as 'cognitively meaningful' and 'nonsense' are terms which would not be admitted to their 'language of science'.

# Putnam's argument for the entanglement of fact and value

Despite widespread acceptance of Quine's demolition of the analytic/synthetic dichotomy, and despite the fact that hardly any philosophers subscribe to Carnap's verifiability criterion of meaning, many current analytic philosophers continue to think that meaningful language must be understood on the model of the language of physics (p. 25). For them, ordinary language psychological terms must refer to 'brain states' (either neurological – like Carnap -- or computational) (p. 26). But to say that, for example, all cruel people are in a particular 'brain state' (and un-cruel people are not in that brain state) appears to be science fiction. To force all the descriptive terms that we employ in our everyday discourse into being classified either as observation terms or as theoretical terms is to force them into a Procrustean bed (p. 26). And there are very many descriptive terms such as 'cruel', which is but one example of what is known as a 'thick' ethical concept to which we now turn.

To make clear his argument that the fact-value dichotomy is a false one, Putnam turns to the issue of 'thick' and 'thin' ethical concepts. Since the entanglement of fact and value is more difficult to see in 'thin' ethical concepts such as 'good', 'ought', 'right', etc., Putnam uses the example of 'thick' ethical concepts (e.g. 'cruel', 'crime', 'brave'). For example, someone said to be a 'cruel' teacher is both not a good teacher as well as not a good man. Yet 'cruel' can also be used purely descriptively. For example according to a historian a certain king was exceptionally cruel (p. 34). Hume denied that there was any 'matter of fact' corresponding to 'crime' and so classified 'thick' ethical concepts as emotive or noncognitive. But there are so many thick ethical concepts that few have followed Hume. Instead modern day defenders of the fact/value dichotomy have formulated their own defenses.

Noncognitivists have two responses. According to Putnam both responses founder on the entanglement of fact and value. First, they maintain that thick ethical concepts are purely factual and not ethical concepts at all. Hare's example concerns a boy in class who explains 'Teacher, I hit him because he spit in my face'. Teacher: 'That wasn't polite, it was rude'. The boy agreed that his action of hitting was rude (p. 36). Hare (1981) argues that this action by itself describes rudeness without the need for evaluating it adversely, even though rude normally has negative connotations (p. 36). Putnam disagrees: see below.

Second, they claim that thick ethical concepts are factorable into a descriptive and attitudinal component (p. 36). Hare says we do not need to use the word 'cruel' to describe a cruel action. We can say 'he was caused to suffer deeply' (descriptive component) and an evaluative implication that the 'action is wrong' (p. 38). But this 'two-components' approach founders on the impossibility of saying what the 'descriptive meaning' of, say, 'cruel' is without using the word 'cruel' or a synonym (p. 38). For example, 'cruel' does not simply mean 'causing deep suffering'. 'Suffering' does not just mean 'pain' and 'deep' does not just mean 'a lot of'. A surgeon who causes pain is not normally cruel while behavior that does not cause pain may be extremely cruel (p. 38).

What is characteristic of thick ethical concepts is that to use them with any discrimination one has to be able to identify imaginatively with an evaluative point of view (p. 39). That is why someone who thought that 'brave' simply meant 'not afraid to risk life and limb' (descriptive use) would not be able to understand the distinction between rashness or foolhardiness and genuine bravery. The <u>descriptive</u> use of 'brave' therefore depends upon <u>evaluation</u> of whether the act was rash or not (p. 40).

The third, and most popular, response is to defend the fact/value dichotomy on metaphysical grounds. The most common metaphysical ground is physicalism, e.g. Williams's (1985) relativism (p. 40). For Williams, a fact is something that can be described in the vocabulary of a physics that describes the world in terms of primary qualities alone (p. 41). In this world the physicalist language describes what is

'absolutely' the case. By contrast in our actual world what is described in ordinary language (both factual and ethical statements) is only true relative to one or other 'perspective'. Putnam points out that Williams is here not concerned with the fact/value dichotomy, but with dismissing the actual world in which we live (with its statements which are only relatively true) in favour of a perfect metaphysical world of 'finished science' (with its absolutely true statements). In this case, he throws 'much more than ethical judgments into the bag of truths that are only valid from some "local perspective" or other' (p. 43).

Putnam argues that noncognitivists such as Mackie (1978) and Hare (1981) have been strongly influenced by the emotivism of the logical positivists for whom ethical judgments were, semantically speaking, no more than expressions of desire and preference (p. 43). Relativism is derived from contemporary scientism. Putnam argues that we are tempted by the fact/value dichotomy because it is easier to say 'that's a value judgment', meaning 'that's just a matter of subjective preference' than to examine our deepest convictions.

While Putnam is concerned to rebut arguments in favour of the fact/value dichotomy, it should be noted that ethical naturalists agree with Putnam that thick ethical concepts cannot be analyzed into a purely descriptive part and a purely evaluative part (Hurley 1985). This reasoning thus undermines the view that there is a fundamental distinction or dichotomy between factual descriptions and normative evaluations. However ethical naturalists do so for reasons different from those of Putnam.

# The philosophers of science's evasion of values

The classical pragmatists (Pierce, James, Dewey) all held that value permeates all of experience. This implied that value judgments are essential to the practice of science itself (p. 30). According to Dewey value is not just one special corner of experience; it is something to do with all of experience (p. 135). In light of this, Putnam (1) explains the way in which value judgments are presupposed by scientific inquiry and (2) contends that many leading philosophers of science have tried to avoid admitting that this is the case (p. 136).

Concerning the first issue, Putnam sets out the following four points, seemingly stemming from William James, which help summarise the pragmatist view that science presupposes value judgments (p. 136):

- a. Knowledge of (particular) facts presupposes knowledge of theories (generalisations). For example, to know that something is an oak tree is to know that it belongs to a particular kind of tree i.e. science can't 'start' with 'data' and build up to generalisations.
- b. Knowledge of theories presupposes knowledge of (particular) facts i.e. there are no a priori generalisations.

- c. Knowledge of facts presupposes knowledge of values: (i) justifying factual claims presupposes value judgments and (ii) these value judgments are capable of being 'objectively' right (to avoid subjectivism).
- d. Knowledge of values presupposes knowledge of facts i.e. there is no a priori ethics.

Putnam now takes up the second issue – how philosophers of science in the last half century have evaded dealing with the issue that science presupposes value judgments. In doing so he rebuts their epistemological claims that science can proceed without making any value judgments.

While Quine's (1953) statements on epistemology might lead one to expect that he would be friendly to the doctrine that fact and value interpenetrate in science, this is not the case (p. 138). Putnam argues that Quine (1969) essentially abandoned epistemology. His 'naturalized epistemology' simply means 'settling for (Skinnerian) psychology' (p. 139). Reichenbach (1952) denied the need for the hypothetico-deductive method and instead was concerned to show (deductively) that induction was a viable method. In order to avoid the idea that epistemic values ('coherence', 'simplicity') are needed in order to select scientific theories, Carnap (1950) tried (unsuccessfully) to show that science proceeds by a simple sampling algorithm (p. 141). Popper hoped to reduce the scientific method to a simple rule: test all strongly falsifiable theories and retain the ones that survive. Putnam responds to Popper by making two points. First, although sometimes the theory is given up, sometimes we give up the supposed fact for reasons of coherence, simplicity etc. Secondly, testing every theory (using only deductive logic) is impossible in practice. For example, both Einstein's theory of gravitation and AN Whitehead's 1922 theory agreed with special relativity and both predicted the deflection of light by gravitation etc. Yet Einstein's theory was accepted and Whitehead's theory was rejected fifty years before anyone thought of an observation that would decide between the two. 'That general relativity was accepted before there were any decisive experiments in its favor of course contradicts completely the whole Popperian account, which can be characterized as mythological' (p. 180).

Putnam now turns to address his claim that value judgments are capable of being 'objectively' right. According to Rorty's (1991) relativist position, there are no objective values because different cultures have different values. Putnam contends that these cultural differences are not incommensurable (p. 142). He rejects Rorty's view that we should scrap the whole notion of an objective world and speak of views that 'our culture' would accept instead (p. 143). Talk of 'cultures', Putnam points out, only makes sense if the idea of a common world is already in place. If the notion of an objective world makes no sense, then neither does the notion of 'our culture'. Finally, Putnam turns to address the most common alternative to admitting that value judgments are presupposed by scientific inquiry. According to Goldman's (1986) 'reliabilist' epistemology, a belief in science is justified because it was arrived at by a method which is 'reliable' in the sense of having a high probability of resulting in the acceptance of true hypotheses (p. 144). Instead of going into the sophisticated criticisms and reformulations of Goldman's theory, Putnam elects simply to point out that Einstein's 'method' neither made use of probability theory, nor avoided making value judgments. Einstein tells us that he arrived at the special theory by applying an empiricist critique to the notion of 'simultaneity' and that he arrived at the general theory by seeking the 'simplest' theory of gravity compatible with special relativity (p. 144). Both these methods are completely topic specific (so that probability theory is inapplicable) and both presuppose judgments of reasonableness which cannot be assigned probabilities and so therefore cannot be reduced to non-normative judgments (p. 145).

# 5. Conclusion

The single most important theme of this paper is the issue of the extent to which Putnam (2002) has 'demolished' the fact/value dichotomy in much the same way as Quine (1953) is generally acknowledged to have demolished the analytic/synthetic dichotomy. So far, there appears to have been little acknowledgment that Putnam has successfully completed the demolition job. One possible reason for this state of affairs is that much more politically hangs on the fact/value dichotomy than the analytic/synthetic. Another reason is that the methodology of economics appears to remain focused on the philosophy of science which involves, among other things, continued defence of the fact/value dichotomy on the basis of adherence to physicalism as a metaphysical notion and 'contemporary scientism' (Putnam 2002, 40, 43) and involve a 'substantive turn' towards naturalism (Hands 2001, p. 129). 'Values' appear to have no scope whatsoever in such naturalized epistemology.

Moreover, if Putnam's arguments are accepted, this would seem to 'free ourselves from the last dogma of empiricism' (that facts are objective and values are subjective) (p. 145) which would revolutionize the scope and method of mainstream economic theory. Instead of Sen occupying the anomalous position of being a Nobel prize winner and yet being off-centre mainstream, his work would move more centre-stage.

It may be that many wrongly interpret Putnam's 'demolition' of the fact/value dichotomy as his saying that there is no difference between facts and values or that it implies a postmodernist position a la Rorty i.e. that we should scrap the whole notion of an objective world. It does no such thing.

The main objective of this paper, in the unfinished form in which it currently stands, has been to make more widely known the argument of Putnam (2002): what it says and what it doesn't say. Wider, and

more careful, argumentation about the whole neglected topic of 'facts' and 'values' in economics remains the work of future papers.

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