

The Positive-Normative Dichotomy and Economics*

D. Wade Hands
Department of Economics
University of Puget Sound
Tacoma, WA 98416
hands@ups.edu
January 2009
Words 9,728
Version 3.5

*Paper prepared for Philosophy of Economics, Uskali Mäki (ed.), Vol. 13 of D. Gabbay, P. Thagard and J. Woods (eds.), Handbook of the Philosophy of Science. Amsterdam: Elsevier. I would like to thank John Davis and Uskali Mäki for helpful comments on earlier drafts of this chapter. Errors and omissions of course remain solely the author's responsibility.

Science is science and ethics is ethics; it takes both to make a whole man; but only confusion, misunderstanding and discord can come from not keeping them separate and distinct, from trying to impose the absolutes of ethics on the relatives of science. (Friedman, 1955, p. 409)

Morality, it could be argued, represents the way that people would like the world to work – whereas economics represents how it actually does work..
(Levitt and Dubner, Freakonomics, 2005, p. 13)

1. Introduction to the Positive-Normative Dichotomy

There seems to be a clear distinction between the statement "I give to charity" (i.e. it is the case that I give) and the statement "I ought to give to charity" (i.e. it would be a good thing if I were to give). What is the case is one thing, a factual matter; and what ought to be the case is something else entirely, a matter of valuation, or of right and wrong. Perhaps one actually does what one ought to do, but then again, perhaps not. In either case, there does not appear to be any necessary relationship between the two types of statements; that something is the case does not imply that it should be that way, and that it should be that way does not imply that it is. The difference between "is" and "ought" seems substantive enough to be called a dichotomy: a distinction between two fundamentally different things. It is a dichotomy that we employ effortlessly in everyday life – and thus, may not appear to require philosophical analysis – but it is a dichotomy nonetheless. This is not to say of course that it is easy to determine what "is" in any particular case (What is the temperature at the center of the sun? or What is the most effective way to reduce unemployment?) nor is it always easy to know what one "ought" to do (What are the appropriate limits of tolerance? or Is lying ever the morally right thing to do?), but understanding the general conceptual difference seems to be straightforward. Even the family dog behaves as if she knows the difference between the shoe she (in fact) just chewed and the toy she ought to have chewed instead.

While the dichotomy between positive and normative – descriptive and prescriptive, facts and values, etc. – may appear straightforward, it has long been the subject of philosophical debate. Although the is-ought distinction has ancient roots in Western philosophy, much of the contemporary discussion can be traced to David Hume. For this reason it has also been called "Hume's dichotomy," "Hume's fork," and "Hume's guillotine." Hume's primary concern was to block efforts to ground ethics in the facts of nature. In his own words:

In every system of morality, which I have hitherto met with, I have always remark'd that the author proceeds for some time in the ordinary way of reasoning, and establishes the being of God, or makes observations concerning human affairs; when of a sudden I am surpriz'd to find, that instead of the usual copulations of propositions, is, and, is not, I meet with no proposition that is not connected with an ought, or an ought not. This change is imperceptible; but is, however, of the last consequence. For as ought, or ought not, expresses some new relation of affirmation, 'tis necessary that it should be observ'd and explain'd; and at the same time that a reason should be given, for what seems altogether inconceivable, how this new relation can be a deduction from others, which are entirely different from it. (Hume, 1888, p. 469, emphasis in original)

The term "naturalistic fallacy" was introduced by G. E. Moore early in the 20th century for the related error of trying to (or believing that one can) derive/deduce an "ought" from an "is," and the imperative that "one cannot deduce an ought from an is" is often considered to be the positive-normative dichotomy's most enduring philosophical lesson. Although this interpretation has reduced some of the controversy surrounding the dichotomy, it has not eliminated it. Even in this rather narrow imperative form, the dichotomy has been, and continues to be, much debated within the philosophical literature (Searle 1965, 2001). But the focus here is not purely philosophical debates, it is on how the positive-normative dichotomy has been interpreted within the economics literature, and it is to that topic we now turn.

2. The History of the Positive-Normative Dichotomy in Economics

Economics is a discipline that has traditionally maintained (or at least insisted that it is important to maintain) a strict dichotomy between the positive and the normative; economic science tells (or should tell) us what "is" the case, while normative and ethical inquires tell us what "ought to be."¹ One economist that is frequently cited regarding the

¹ It is quite common, and not unreasonable, for discussions of the positive-normative dichotomy in economics to be couched in terms of the related, but somewhat broader, distinction between facts and values (e.g. Blaug 1992, Ch.5; Dasgupta 2005; Gordon 1977; Mongin 2006; Nagel 1961, pp. 485-502; Weston 1994), but I have self-consciously resisted that temptation here. There are many reasons for this, but let me try to explain the most important one. The problem is that if one wants to seriously examine the fact-value distinction as it affects economic science it would be necessary to consider the debate over the theory- or social- "ladenness" of empirical observations – the question of whether, how, or to what extent, theoretical or social values determine/condition scientific facts (in economics and other sciences). This is a very important question that has played a major role in many contemporary methodological debates (see Blaug 1992 or Hands 2001), but as such it is a topic that would lead us too far away from the question of the relationship between the positive and the normative in economics and into the methodological jungle of properly characterizing "positive" economics. This is a discussion of the "Positive-Normative dichotomy and economics," not "major issues in economic methodology," and as such the decision was made to focus on the relationship between positive and normative within the economics literature and how the (implicit or explicit) definition/characterization of the normative has affected this relationship; and to try to steer around the broader methodological/philosophical question of the general relationship between values and empirical science.

importance of separating positive and normative is John Neville Keynes. It is useful to quote him at length.

As the terms are used here, a positive science may be defined as a body of systematized knowledge concerning what is, a normative or regulative science as a body of systematized knowledge relating to criteria of what ought to be, and concerned therefore with the ideal as distinguished from the actual; and art as a system of rules for the attainment of a given end. The object of a positive science is the establishment of uniformities, of a normative science the determination of ideas, of an art the formulation of precepts.

The problem whether political economy is to be regarded as a positive science, or as a normative science, or as an art, or as some combination of these, is to a certain extent a question merely of nomenclature and classification. It is, nevertheless, important to distinguish economic enquiries according as they belong to the three departments respectively; and it is also important to make clear their mutual relations. (Keynes, 1917, pp. 34-5, emphasis in original)

Note that while Neville Keynes emphasized the distinction between positive and normative, he was not arguing that normative concepts have no place in economic science. Writing in the pre-positivist British context (the first edition was published in 1890), Keynes viewed the positive and the normative as different kinds of sciences – one descriptive and one prescriptive – thus leaving the door open for economists to pursue the material welfare economics (Cooter and Rappoport 1984) endorsed by Keynes's colleague Alfred Marshall and other Cambridge neoclassicals such as Arthur Pigou (1920).

The importation of logical positivist ideas and other changes within the economics profession during the first few decades of the twentieth century led to the adoption of an even stronger version of the dichotomy than the one defended by Neville Keynes. The dichotomy – the strict separation of the positive and the normative – was replaced by an epistemic condemnation and prohibition of the normative; not only was it necessary to recognize that positive and normative statements were fundamentally different, in addition it was argued that the normative was scientifically illegitimate and should be prohibited from proper economic science. According to logical positivism there were only two types of meaningful discourse – empirical science (synthetic knowledge) and logic/mathematics (analytic knowledge) – everything else was meaningless metaphysics. Since normative economics was based on presuppositions that were not derived from either of these two sources, normative economic science ceased to be any type of science at all, and was relegated to the epistemic dustbin along with religion, metaphysics, and other "meaningless" discourse. This positivist view of the normative was often combined with an emotivist view of ethics – that ethical statements were simply expression of attitude or emotion (Davis 1990).

One of the most influential voices supporting the prohibition of the normative was Lionel Robbins (1935). Like earlier authors, he demarcated “ought’ from “is”:

Economics deals with ascertainable facts; ethics with valuations and obligations. The two fields of inquiry 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 in space or time bridge over. (Robbins, 1935, p. 148)

But Robbins went beyond merely claiming that “propositions involving ‘ought’ are on an entirely different plane from propositions involving ‘is’” (ibid., pp. 142-43) – he argued that separate was not epistemically equal – that normative propositions were “illegitimate” and had no place within economic science.

Robbins effectively employed his prohibition of the normative in his general argument against interpersonal utility comparisons and economic policies based on such comparisons. Comparing the satisfaction/utility two different people receive from a particular bundle of commodities or level of income

... is a comparison which necessarily falls outside the scope of any positive science. To state that A’s preference stands above B’s in order of importance is entirely different from stating that A prefers n to m and B prefers n and m in a different order. It involves an element of conventional valuation. Hence it is essentially normative. It has no place in pure science. (ibid., p. 139)

Robbins used the scientific illegitimacy of interpersonal utility comparisons to attack the utilitarian argument – endorsed by Marshall, Pigou, and others – that the diminishing marginal utility of money income provided economics with scientific grounds for redistributing income from the rich to the poor and progressive income taxes as a means for achieving such redistributions. Since interpersonal utility comparisons were normative and had no place in scientific economics, Robbins argued that any redistribution or progressive taxes based on economics analysis containing such assumptions was scientifically illegitimate.

Hence the extension of the Law of Diminishing Marginal Utility, postulated in the propositions we are examining is illegitimate. And the arguments based upon it therefore are lacking in scientific foundations ... The conception of diminishing relative utility (the convexity downwards of the indifference curve) does not justify the inference that transferences from the rich to the poor will increase total satisfaction ... Indeed, all that part of the theory of public finance which deals with “Social Utility” must assume a different significance. Interesting as a development of an ethical postulate, it does not at all follow from the positive assumptions of pure theory. (ibid., p. 141)

Robbins fully admitted that we make interpersonal utility comparisons all the time in our daily lives (ibid., p. 140), but as in many other cases, usefulness in everyday life does not imply validity for scientific inquiry. He, like Max Weber (1949), was also willing to allow economic scientists the option of attributing moral, or otherwise value-laden, preferences to economic agents and examining the implications of such preferences, but if the normative values of the economists doing the research (as opposed to the agents being studied) leaked into the analysis, then it ceased to be science.

During the next few decades Robbins's view of the relationship between positive and normative economics was endorsed by a growing number of influential, and soon to be influential, economists. A good example of such support can be found in various statements by Milton Friedman. Although many of the methodological views Friedman presented in his famous 1953 paper on economic methodology differed from those Robbins endorsed, his view of the positive-normative dichotomy was essentially the same.

Positive economics is in principle independent of any particular ethical position or normative judgments. As Keynes says, it deals with "what is," not with "what ought to be" ... Its performance is to be judged by the precision, scope, and conformity with experience of the predictions it yields. In short, positive economics is, or can be, an "objective" science, in precisely the same sense as any of the physical sciences. (Friedman, 1953, p. 4)

By the middle of the twentieth century, Robbins's view of the positive-normative dichotomy, reinforced by a number of other influential economists, had become essentially the conventional wisdom within the economics profession. This is not to suggest there were not critics of the dichotomy (Little 1949, Souter 1933) and/or Robbins's use of it to indict interpersonal utility comparisons (Robertson 1952), but for the majority of English-language economists, including many of those writing on economic methodology, the profession's main goal was to produce positive economic science: science that tells us what is the case. As science, such positive inquiry should never be mixed up with normative or ethical concerns regarding how things ought to be. For many economists normative ideas had an important role to play in economic policy debates, but not in economic science strictly defined. Of course debate continued (and continues) about what exactly is required for the successful practice of positive economics – that has been the traditional subject matter of economic methodology (Hands 2001) – but there is hardly any debate about whether scientific practice should be sharply distinguished from normative and ethical concerns; the relationship between is and ought is a strict dichotomy and everything on the normative side of the dichotomy should be prohibited from economic science. The profession's conventional wisdom on the matter is reflected nicely in Kurt Klappholz's remarks from the late 1950s:

I have tried to show that the various claims, often advanced "... with an air of penetrating profundity," that economics is necessarily value-impregnated can easily be refuted. Why, then, should criticisms which so

clearly miss the target continue to be urged so vociferously? And why should the defenders of the “orthodox” position respond to these criticisms by reiterating the principle of ethical neutrality rather as if present-day geographers continued to insist that the earth is not flat? (Klappholz, 1959. p. 111, emphasis in original)

The tone of this quote is as important as its content. Klappholz is not simply disagreeing with those like Gunnar Myrdal (1958) who argued that normative values are inexorably intertwined with economic science – so intertwined that the most “objective” approach the economic scientist could possibly take was simply to state (self-consciously, openly, and explicitly), rather than eliminate, his or her normative presuppositions – he expresses a frustration that one even needs to respond to such flat-earth critics. The implication being that it is so obvious that the normative has no place in economic science that there is simply nothing to discuss.

One of many critical responses that have been made to economists' commitment to the positive-normative dichotomy is that while the profession may preach the importance of maintaining a strict dichotomy, it has not always been successful practicing what it preaches (Blaug 1992). One of the most commonly cited examples of the profession's failure to practice this dichotomization, involves the norm-ladenness of the concept of economic efficiency. As the profession turned away from interpersonal utility comparisons during the late 1930s and 1940s, the earlier utilitarian policy criterion (maximize total or average utility) was replaced by the Pareto criterion. According to the Pareto criterion a particular distribution of resources was Pareto Optimal (and thus efficient) if and only if any reallocation that would make one person better off would also make someone else worse off. Perhaps the most important result of Pareto-based welfare economics was the so called “First Fundamental Theorem of Welfare Economics,” which proved that any competitive equilibrium is Pareto Optimal (see any standard microeconomics textbook). Economists embraced the change to the Pareto criteria in welfare economics primarily because it offered an evaluative standard that was devoid of all of the troublesome normative issues associated with interpersonal comparisons of utility and thus provided a strictly positive/scientific way of making judgments about social welfare and microeconomic policy. And yet, as many economists and philosophers have argued over the years, employing the Pareto criterion in welfare economics does not necessarily allow economists to avoid commitment to moral theory (see Blaug 1992 or Hausman and McPherson 2006). There are a variety of such criticisms, but a relatively standard argument is that since the Pareto criterion is based entirely on satisfying the preferences of the relevant economic agents – making them better off or worse off – it is implicitly committed to an individual preference satisfaction view of the good. Of course it may be that most economists would accept that bringing about states of the world that increase the satisfaction of individual preferences should be the sole basis for good social policy, but even if it is professionally acceptable it is still a commitment that functions “as a Trojan horse smuggling ethical commitments into the theoretical citadel of positive mainstream economics” (Hausman and McPherson, 2006, pp. 67-68). Armed with this ostensibly value-free definition of economic efficiency, the First Fundamental Theorem of Welfare Economics allows economists to “conclude that, ceteris paribus, perfectly

competitive equilibria are morally desirable and market imperfections that interfere with the achievement of competitive equilibria are morally undesirable" (ibid., p. 66) – a conclusion that sounds very close to positive economics asserting what ought to be.

Although such criticism of economists' theoretical practice may be legitimate, the tensions between the profession's rhetoric and practice will not be the focus of this discussion. Whether the argument is that economists have traditionally endorsed the positive-normative dichotomy, or criticism of the profession for not living up to what it preaches, the discussion leaves in place the claim that facts and values constitute a strict dichotomy. It is this claim – a claim that is taken as a given in most discussion of the positive and normative economics – that I wish to examine.

The remainder of the paper will be divided into two parts. The next section will start by emphasizing that not everything that is "normative" concerns ethics, and go on to draw out some of the implications of this (increasingly recognized) fact for economic theorizing. The second part makes the case that, even if one is only interested in ethical normativity, then there are still serious difficulties with the claim that the difference between positive and normative constitutes a strict dichotomy. There is obviously a useful everyday distinction between facts and values, but the two sets of concepts are far too entangled for us to be able to speak sensibly about the strict separation that economists have traditionally endorsed.

3. Normative and Ethically Normative.

For many practicing economists trained in the post World War II era – the time when Friedman's essay was "the only essay on methodology that a large number, perhaps majority, of economists have ever read" (Hausman, 1992, p. 162) – the term "normative economics" meant the inclusion of "moral" or "ethical" concerns with economic analysis. Of course authors like Friedman and Robbins did not explicitly equate the normative and the ethical² – Friedman says positive statements are "independent of any particular ethical position or normative judgments" (Friedman, 1953, p. 4) – but one can also see how it would be easy to slide into the identification of normative exclusively with ethical. For example in his demarcation of "is" from "ought" Robbins says: "Economics deals with ascertainable facts; ethics with valuations and obligations" (Robbins, 1935, p. 148) and notice Friedman's sharp differentiation of science and ethics in the 1955 quote in the epigraph. The identification of normative exclusively with ethical was certainly clear in the welfare economics of the period where (Pareto) "efficiency" was frequently contrasted with considerations of "equity" in the distribution of income/resources; the former being viewed as a proper subject for economic science, and the latter being viewed as a purely ethical issue. The identification of the normative with the ethical is

² It is interesting that even though Robbins did not literally equate normative and ethical, that was a common interpretation of his position. For example in R. W. Souter's 1933 review of the first edition of Robbins's *Essay* one of his criticisms is that "the terms 'normative' and 'ethical' are not synonyms" (Souter, 1933, pp. 401-02). If pointing out that normative and ethical were not synonymous was considered to be a serious critique of Robbins, it must have been possible to read him as suggesting they were in fact synonyms.

also implicit in many of the standard examples that economists used (and continue to use) as exemplars of economic analysis: the critique of both minimum wages and rent control (both economically inefficient, but supported by the public on ethical grounds) and the defense of perfectly price discriminating monopoly (economically efficient, but viewed as unfair). Finally, and perhaps most importantly for the culture of economics, the identification of the normative with the ethical is common in economics textbooks. For example, the seventeenth edition of the most famous introductory economic textbook of all time (Samuelson) explains “positive economics versus normative economics” in the following way:

In thinking about economic questions, we must distinguish questions of fact from questions of fairness ...

Positive economics deals with questions such as: Why do doctors earn more than janitors? Does free trade raise or lower the wage of most Americans ...

Normative Economics involves ethical precepts and norms of fairness. Should poor people be required to work if they are to get government assistance? ... (Samuelson and Nordhaus, 2001, pp. 7-8)

Of course, outside of economics, it is clearly not the case that everything that is "normative" involves ethics. When someone says "you ought to get more exercise" they do not mean that you ought to get more exercise to be moral; they mean you ought to exercise to be healthy. It is norm, but a norm of good health, not an ethical norm. More relevant to economics and economic methodology, when a Popperian philosopher of science says "scientists ought to make bold conjectures and subject those conjectures to severe empirical tests" they are not saying that failing to live up to such methodological standards makes you an ethically bad person; they are saying that it makes you an epistemically bad scientist. Economic methodology has traditionally been normative in this sense – it explains what economists ought to do to be good scientists – and the relevant norms are the norms of proper scientific behavior, epistemologically-grounded norms, not the norms of proper moral conduct. In general normative terms are simply terms that are action-guiding or prescriptive, and normative statements are statements involving such terms. The relevant norms might be social, legal, epistemological, aesthetic, or a host of other types; ethical norms are just one very special case of such prescriptive terms. On this ground alone the way that economists have traditionally discussed positive and normative seems problematic. Even if, for the sake of argument, we accept the claim that there is a strict dichotomy between the positive and the normative, it still seems unreasonable to characterize the dichotomy in the way that economists traditionally have. What gets left out are all those things – all those aspects of economic theory and practice – that are normative, but not ethically normative.

So why is the profession's traditional conventional wisdom on this matter a problem? Why can't we just say that although there are other kinds of normative statements than ethical statements, economists traditionally have, perhaps for policy reasons, chosen to focus on the ethically normative? Why not just accept that the two most important

categories for economics are "positive" (i.e. scientific and objective) and "ethically normative" (i.e. those involving individual/social values about the nature of the good) and go on thinking about such things as modern economists traditionally have? One problem is that a case can be made – and has been made – that the core economic theory, rational choice theory, falls into neither one of these two categories; it is neither a positive/descriptive theory of real economic agents, nor an ethical theory about what such agents ought to do. It is, many argue, normative but not ethically normative. Such a position implies that rational choice theory – the theoretical heart of microeconomics – may not be contained in either of the two categories that economists regularly use to classify economic theories. This is an important point that requires some elaboration.

Before embarking on the discussion of normative choice theory, it is useful to clarify how some of the key terms will be used and explain the emphasis on rational choice theory. Here, and throughout the rest of this discussion, I use the generic term "rational choice theory" for all of the various specific theories – decision theory, utility theory, expected utility theory, consumer choice theory, etc. – that start with agents having well-ordered preferences (or more abstractly, a choice function) defined over a choice space, and explain behavior as the result of acting in an instrumentally rational way (making the best, or optimal, choice) given those preferences. In the standard neoclassical theory of consumer choice, the economic agent has well-ordered preferences (a suitably concave ordinal utility function, or the equivalent complete, transitive, monotonic and convex preferences) defined over the relevant commodity space, a standard linear budget constraint that restricts the agent to an affordable set, and the agent's behavior (demand functions) are explained as the result of maximizing the utility function over (or choosing the most preferred bundle from) this budget set. In the more general case involving decision making under risk, the basic model is modified to include the probabilities of various outcomes, but the resulting expected utility theory is still an instantiation of generic theory of rational choice.

The following discussion will focus exclusively on rational choice theory even though there is obviously a lot more to economics than rational choice. There are two main reasons for this. First, debates about the positive-normative dichotomy in economics (either historically or within the recent literature) have focused much more on microeconomics than other areas of economics such as macroeconomics or econometrics, and second, rational choice theory is at the heart of microeconomics. This is not to say that other areas within economics are completely devoid of such debates, only that microeconomics has generally been at the center of the storm. This is exhibited both in the history of the positive-normative dichotomy in section two above, and in the discussion of contemporary controversies (e.g. Caplin and Schotter 2008). Of course within microeconomics rational choice focuses exclusively on individual behavior (or the behavior of agents that can be modeled as if they were individuals: firms, governments, etc.) and there is more to the microeconomic theory of markets, prices, and strategic interaction than individual behavior. In general a microeconomic explanation/prediction of some phenomenon involves two (interrelated but separable) levels of theorizing: the behavior of the individual agents (which involves some version of rational choice theory) and the characterization of the institutional framework for the interaction of these

individual agents (competitive markets, classical game theory, evolutionary game theory, etc.). Regardless of the specification of the second-level institutional framework, the specification of the individual agent is a necessary part of the story and is always given by some version rational choice theory. Rational choice is thus at the heart of microeconomics and microeconomics has been at the center of most debates about the positive-normative dichotomy in economics.

If economists started with systematic empirical observations of agent's preferences, constraints, and choices and then merely generalized those observations to obtain scientific laws of economic behavior, then it would certainly be legitimate to claim that rational choice theory is a descriptive theory of agent behavior (a positive theory about what "is" the case for all, or a certain class of, agents). But this is not how economic analysis has typically proceeded. The assumptions made on preferences or utility functions have not traditionally been generalizations based on systematic observations (i.e. descriptions) of the actual preferences of economic agents – the economic scientist does not have access to the mental states (preferences, beliefs, and desires) of agents – but rather they are assumptions – such as transitivity, completeness and convexity – that seem to be necessary for such preferences to be "rational." The standard approach imposes very specific structural restrictions on the preferences of agents – restrictions consistent with "rational" preferences – and then uses the agent striving to satisfy such rational preferences as the explanation of the relevant behavior. Of course just because key theoretical terms (such as preference) are not necessarily descriptive does not imply that the theory cannot contribute to our scientific understanding of economic behavior. There are many different approaches to economic methodology – including, but certainly not restricted to, Friedman (1953) and the Millian tradition (Hausman 1992) – that attempt to explain why an economic theory resting on assumptions that are not literally (or even approximately) descriptively true may still be an adequate scientific theory. The point here is not that there is necessarily something epistemically pernicious going on in the practice of rational choice theory, but to suggest that whatever rational choice theory is, it is not a scientific theory that fits neatly into the “positive” category as economists have traditionally defined it.

An alternative way of thinking about rational choice theory in economics – and the standard way that philosophers, particularly philosophers of decision theory, characterize rational choice theory – is as a specific type of normative theory, a normative theory of rationality (see Davidson 2001, 2004 or Suppe 1961 for example). According to this interpretation, rational choice theory is not a descriptive/positive theory (or even an attempt at such a theory), but rather a normative theory of what an agent ought to do in order to be rational. As Daniel Hausman and Michael McPherson explain:

Utility theory lays down formal conditions that choices and preferences ought to satisfy. It is not a positive theory because it says nothing about the extent to which people are rational, and it is not merely a model or definition because rationality is itself a normative notion. To define what rational preference and choice are is ipso facto to say how one ought rationally to prefer and to choose. (Hausman and McPherson, 2006, p. 49)

While there are many different versions of this general interpretation of rational choice theory and substantive debate about the philosophical details, it is fair to say that during the second half of the 20th century this became the standard way of talking about rational choice theory among philosophers. As Robert Nozick explains:

An elaborate theory of rational action has been developed by economists and statisticians, and put to widespread use in theoretical and policy studies. This is a powerful, mathematically precise, and tractable theory. Although its adequacy as a description of actual behavior has been widely questioned, it stands as the dominant view of the conditions that a rational decision should satisfy: it is the dominant normative view. (Nozick, 1993, p. 41)

Although this normative interpretation has not been the standard view of rational choice theory among economists – for most economists it is a positive/scientific theory of economic behavior – it does seem to be the way that rational choice theory has been interpreted by many behavioral economists, experimental economists, and experimental psychologists.³ For example, Richard Thaler opened his much-cited 1980 paper on “a positive theory of consumer choice” with the following paragraph:

Economists rarely draw the distinction between normative models of consumer choice and descriptive or positive models. Although the theory is normatively based (it describes what rational consumers should do) economists argue that it also serves well as a descriptive theory (it predicts what consumers in fact do). This paper argues that exclusive reliance on the normative theory leads economists to make systematic, predictable errors in describing and forecasting consumer choices. (Thaler, 1980, p. 39)

Daniel Kahneman and Amos Tversky introduced their Choices, Values, and Frames with similar remarks:

The study of decisions addresses both normative and descriptive questions. The normative analysis is concerned with the nature of rationality and the logic of decision making. The descriptive analysis, in contrast, is concerned with people’s beliefs and preferences as they are, not as they should be. The tension between normative and descriptive considerations characterizes much of the study of judgment and choice. (Kahneman and Tversky, 2000, p. 1)

For these behavioral economists rational choice theory is a normative theory even though most economists do not recognize it as such. They argue that it fails empirically as a descriptive theory of actual people – a job better done by more behavioral and

³ See Heukelom (2008) for a detailed discussion of the way positive and descriptive are used in behavioral economics.

psychological theories – but this is not surprising since it is normative; it only “describes what rational consumers should do” (Thaler above). Again, this does not necessarily mean that it cannot play an important role in economic science, simply that the role is normative and its relationship to the positive science of economics is far more complex than what is provided by the profession’s traditional view of the positive-normative dichotomy.

Just to review, the argument often made is that rational choice theory is a normative theory – a theory of what one ought to do to be rational – but this in no way implies/suggests that the theory has anything to do with ethics (combining rational choice theory with a particular notion of the good makes an ethical commitment, but not rational choice theory alone). There is no reason to believe that having transitive preferences and acting rationally on those preferences makes one a morally good person. In fact one of the key features of "rationality" as defined by rational choice theory – having rational preferences and acting optimally on them – is that rational behavior has nothing whatsoever to do with the content (particularly the moral content) of the agent's preferences. One could certainly have well-ordered – transitive and complete – preferences for murder and proceed to satisfy those preferences in an optimal way. Rationality in the sense of rational choice theory does not imply moral choice; it may be a normative theory, but it is not an ethically normative theory.

So most modern economists generally consider rational choice theory to be a positive, not a normative, theory; endorse the position that normative statements/concepts should be prohibited from scientific economics; and equate normative theories/presuppositions with ethics. On the other hand there is an extensive literature in the philosophy of decision theory, behavioral economics, and experimental psychology that considers the standard model of consumer choice and other rational choice-based parts of microeconomics to be normative (though not ethical) theories of rational choice and that contrasts such normative theories with various positive/descriptive approaches to predicting and explaining human behavior. So why is this a problem? Why is a divergence between what the majority of economists seem to think about the positive-normative dichotomy and the view of these other groups an issue of concern? There are at least three reasons why this divergence might be problematic.

First, there is an extensive philosophical literature on normative rationality – the theory of “practical” rationality – and since microeconomics is the field where rational choice has had its greatest impact (including policy impact), communication and cross-fertilization between philosophers and economists on these matters would be very useful and the divergence flies in the face of such endeavors. Although the normative characterization of rationality has increasingly come to be acknowledged by those writing on the philosophy of economics (Davis 2003, Hausman and McPherson 2006, Mongin 2005, Ross 2005), there is still a long way to go to have (even the possibility) recognized by most practicing economists. As Don Ross explains this leaves philosophers and economists (unnecessarily) wrestling with two separate, but quite interrelated, sets of questions.

Generalizing very broadly, for philosophers rational choice theory is a branch of normative inquiry, part of the answer to questions about what an ideally rational agent ought to do. For economists, by comparison, rational choice theory is often viewed as contributing to descriptive science, offering analysis of what economic agents in fact do given the assumption that they are rational. Economists' use of rational choice theory is thus exposed to criticisms of a sort that philosophers can shrug off, namely, attacks based on evidence that people are not, as a matter of fact, rational in the way they assume. On the other hand, rational choice philosophers, but not economists, must answer worries about the normative appropriateness of being ideally rational, in the relevant sense, in the first place. (Ross, 2005, p. 91, emphasis in original)

Secondly, thinking of rational choice as a normative, but not ethical theory has the potential to redefine the relationship between “rational” and “actual” behavior. If rational choice tells us what agents ought to do to be rational and observed/experimental action is inconsistent with such behavior, then attention shifts from whether rational choice theory or the observation/experiment is wrong, to questions about the things that might cause, and therefore explain, such deviations from optimality and/or to questions about whether the given conception of rationality is appropriate. Although this is increasingly the way that behavioral economists (Camerer and Loewenstein 2004, Lichtenstein and Slovic 2006), experimental economists (Guala 2005, Starmer 2005), and those doing research on neuroeconomics (Glimcher 2003), view the relationship between rational choice theory and descriptive economics, particular authors and/or research programs have very different views of the implications of actual human behavior systematically deviating from that which rationally ought to be done. One approach, discussed above, is the critical stance of many behavioral economists; the implication of the evidence is simply that rational choice theory is not a very good descriptive theory and should be replaced by one that is (or those that are) better at predicting and explaining behavior. But an entirely different stance has been taken by others who recognize the discrepancy between observed/experimental behavior and the norms of rationality; it is that the norms of rationality “should” guide behavior and if actual agents do not behave in the way they “should” then the important question is why they are making such errors. For example, the neuroeconomist Paul Glimcher says:

Economic models describe the task that animals and humans face in any decision-making situation. They define how a problem should be solved. Real animals and real people deviate from these solutions; they perform suboptimally. (Glimcher, 2003, p. 334).

Another approach – somewhere between putting the onus on rational choice theory and putting it on the agents – is the recent literature on “libertarian paternalism” (Sunstein and Thaler 2003, 2008; Loewenstein and Haisley 2008). Here the fact that humans often fail to live up to the norms of rationality sets the stage for the design of choice architectures that “nudge” agents in the direction of making more rational choices – those associated with more effective satisfaction of their own individual preferences – while still

maintaining the libertarian/Millian premise that people should be broadly free to do as they like as long as it does not impose costs on others. These topics are some of the most rapidly growing and hotly contested in contemporary economic theory and yet they all essentially start from the position that rational choice theory to some degree provides norms for rational behavior and that it is not a very good description of what individual economic agents actually do. There is much for philosophers, economists, and other behavioral scientists to sort out about these various positions and much work is currently underway (much of it discussed elsewhere in this Handbook), but notice that the traditional position of most economists – that rational choice theory is exclusively positive and that normative theories necessarily involve ethics – simply closes the door on this discussion and effectively prevents the economics profession from even addressing the serious issues raised within these recent debates.

The final issue concerns economics as a robust social science of human behavior. Humans are normative creatures – obligation matters to behavior – and often the norms have nothing explicitly to do with ethics (although sometimes they do – see below). Narrowly defining the normative and endorsing a strict separation between proper economic science and such normative issues, leaves economics unable to recognize, explain, or accommodate, many important aspects of human behavior (even economic behavior). This issue will be discussed in more detail below.

4. The Entanglement of Positive and (Ethically) Normative

Although there are clearly many other forms of normativity – including what one ought to do to be rational – let us turn away from these and focus on the ethically normative. This section will go through a few of the reasons why the traditional normative-positive dichotomy might not stand up to critical scrutiny even if one defines "normative" in this narrow (moral) way. Although taken alone, none of the arguments provide a knock-down proof that the positive-normative dichotomy really isn't a dichotomy; all of them, taken as an ensemble, do add up to a rather substantive criticism of the standard view. Some of the arguments in this section focus specifically on economics, while others are more general. It is perhaps best to think of the following as a (nonexhaustive) list of the ways that positive science and normative ethics are entangled: in general, as well as specifically within economics.

The standard reading of the dichotomy is that "one cannot deduce ought from is." Although, as noted above, there exists a philosophical literature contesting even this narrow view, I will make no attempt to challenge this deductive interpretation of the dichotomy. The argument in this section is simply that deduction is a very strong, and in many ways not the most interesting, relationship; even if one cannot deduce ought from is, the two categories do have many significant connections (weaker than deducibility). Positive and normative are entangled, and entangled in significant enough ways that the distinction, as common and useful as it is, cannot reasonably be considered a dichotomy. I will discuss three such relationships.

a. Given certain moral presuppositions "is" does imply "ought": If one is committed to a consequentialist ethical system – utilitarianism being the most obvious – then the fact that certain consequences do actually follow from certain actions may imply that such actions ought to be done. For a classical utilitarian, what ought to be done depends on the pleasures and pains associated with the act – note the fact of the pleasures and pains associated with the act. Once one decides that act A in fact causes more pleasure than act B (it is the case that A causes more pleasure than B) then A ought to be done. This is of course not a violation of the argument that "is" (alone) cannot imply "ought" – there needs to be a moral antecedent along with the facts of the matter – but given that moral antecedent, then what is the case, the matter of fact, does imply what ought to be done.

This has at least two interesting (or perhaps ironic) implications for economics. First, during the 19th century, the profession of economics, benefited greatly from just this "fact" of utilitarian ethics. Within a utilitarian framework, what ought to be done with respect to public policy depends on what the results of various actions will in fact be. Policy makers thus need a social science like economics in order to be able to decide what ought to be done. In the earlier religion-dominated world, the right policy was the one that was right with God – in order to obtain that information one consulted god's representatives (i.e. the clergy); in a utilitarian-dominated world the right policy is one that gives the most benefit for the least cost – to obtain that information one needs social scientists (economists in particular). It thus seems rather ironic that economists would be so insistent about separating is and ought when the relationship between the two has played such an important role in the history of the profession.

There is also a second, closely related, irony associated with the profession's commitment to some version of a utilitarian or individual preference satisfaction view of the good. Since so many economists would accept such a definition of the good – at least in their professional roles – it means that such a moral presupposition is actually a given among economists. If it is a given among economists (and thus implicitly a normative premise), then all that is required to obtain a statement about what ought to be is information about what is (what is in fact) the case. Consider two policies X and Y. And let us assume – an assumption that seems to stand up to empirical scrutiny – that most economists in their professional capacity would accept the following quite general (moral) commitment:

The best (good) policy (*ceteris paribus*) is the one that makes people better off (that is, it leads to the highest level of utility or preference satisfaction among the relevant individuals).

Given this presupposition, if our economic analysis tells us that "policy X (*ceteris paribus*) makes people better off than policy Y" then it immediately follows that the society ought to do X (rather than Y). Again, this does not say that we can infer ought from (only) is, but if a community has a shared moral presupposition, as most economists do (Dasgupta 2005), then in practice all that is required to know what ought to be done is to know what will actually happen (Davis 1991). This means that as a practical matter among economists, knowing (positively) what is, tells us exactly what (normatively) ought to be.

b. Ought often causes/explains is because moral norms exist in social life and matter to behavior. Consider the traditional sociological explanation of human behavior. In brief, sociologists argue that humans are members of social communities, and as members of such communities they share certain social norms and values, and these norms and values are the cause, and thus explain, the behavior of individuals within the society. While most economists consider this to be an oversocialized view of human behavior, the key point remains even if social values are not the sole determinant of individual behavior. One does not need complete social determinism to realize that a society where most people believe that it is wrong to murder, will (in fact) be a society where there is substantially fewer murders than in a society where the social norms encourage such behavior. What is the case in society is determined, at least in part, by what the community believes ought to be done. The "is" of human behavior is thus caused/explained by the "oughts" of the relevant social norms. Of course the reason the ought causes/explains behavior is because of the fact that the majority of the people in the society do what they ought to do – so the "is" is both what ought to be done and what is done – but it does point to the fact that ethical norms matter to human behavior and a successful behavioral/social science often needs to recognize that fact.

This argument has direct relevance to some of the recent critiques of rational choice theory originating from within experimental psychology and experimental economics (Kahneman 2003, Kahneman and Tversky 2000 for example). It is regularly observed that in experimental situations people do not do what is "rational" from a purely economic, rational choice, perspective. In the "ultimatum game" for instance, where a player's rational self-interested behavior would be to offer the smallest possible amount of the good in question, people systematically offer a larger, more "fair," distribution. Agents in experimental situations also systematically overcontribute to public goods (Guala 2005). These are just two of many such cases where positive economics – a science that ostensibly tells us what is the case – ends up not successfully predicting what "is" because of the influence of people's moral values and sense of fairness. In such cases "what ought to be" often tells us what will happen more accurately than positive economic theory that neglects such normative considerations. Ought again contributes to what is.

c) Moral ought implies can (and can depends on what is the case): This third interaction of positive and (ethically) normative is more general and less specifically concerned with economics. If one ought to do A (in order to act morally) then it implies that one could possibly do A, and since what one can possibly do in turn depends on what is in fact the case, then what one ought to do depends on what is. Most ethical systems have some variant of "thou shall not kill" and no ethical system has any variant of "thou shall not be more than fifty feet tall." The reason is of course that it is possible to kill (and it is bad to do so); we know of no circumstances under which it is possible for people to be more than fifty feet tall. Since ought implies can, and can implies "is possible," then ought implies "is possible" (and "is possible" is about what "is" the case). Thus while one may not be able to deduce "ought" from "is," what is the case puts limitations on that which is

possible, which in turn determines the boundaries of moral behavior. It is not a deductive relationship, but it is a fundamental relationship.

One of many cases where this relationship becomes important in contemporary life is in the area of medical ethics. When there was very little that physicians could do – when what was within their power was quite limited – then there was very little debate about what physicians should do to behave morally (do no harm seemed to be sufficient). But technology has changed things – what is possible has greatly expanded – and correspondingly so has the controversy about what ought to be done. In economics, one could tell a similar story about macroeconomic policy for alleviating unemployment. Prior to the 1940s it was not considered the responsibility of governments in even the most advanced economies to reduce unemployment – it was not something they ought to do. In some countries it was the government's responsibility to reduce the damage, the human suffering, caused by unemployment – in the same sense that it might be the government's responsibility to reduce the human suffering caused by a hurricane or volcano – but not to prevent unemployment (any more than to prevent a hurricane or volcano). Once the (Keynesian) tools existed to help governments reduce unemployment – once it became clear that reducing unemployment is possible – then it became something that ought to be done. Again, this is not deducing "ought" from "is," but it ties the two categories up in extremely important and often unrecognized ways.

5. Conclusion

This paper has investigated a number of different aspects of the positive-normative dichotomy and economics. Section one briefly reviewed the philosophical discussion of the topic and section two provided a more extensive discussion of the dichotomy in the history of modern economics. Section two concluded that by the second half of the twentieth century the majority of economists considered the relationship between positive and normative to be a strict dichotomy and agreed with Robbins and others that the normative had no place in, and should be prohibited from, economic science. Section three analyzed the current status of the positive-normative dichotomy in economics. It was argued that in addition to accepting the strict dichotomy and the prohibition of the normative, most practicing economists also identify the normative exclusively with ethics (although this may be changing). It was argued that this standard characterization was problematic for a number of reasons, most involving the idea that rational choice theory may itself be a normative theory: a normative theory of rational action. The final section moved away from economics and examined some of the more general concerns about the positive-normative dichotomy.

The bottom line seems to be that although there is obviously a useful distinction between "is" and "ought," that distinction should not be exaggerated. "Is" and "ought" (even morally "ought") are far too interconnected to justify the strict dichotomy and prohibition that economists have traditionally endorsed (if not always practiced). Following the advice of the philosopher Hilary Putnam, the dichotomy should be "disinflated":

If we disinflate the fact/value dichotomy, what we get is this: there is a distinction to be drawn (one that is useful in some contexts) between ethical judgments and other sorts of judgments. This is undoubtedly the case, just as it is undoubtedly the case that there is a distinction to be drawn (and one that is useful in some contexts) between chemical judgments and judgments that do not belong to the field of chemistry. But nothing metaphysical follows from the existence of a fact/value distinction in this (modest) sense. (Putnam, 2002, p. 19, emphasis in original)

In some sense the strict fact/value dichotomy should have disappeared (or at least been deflated) along with the hegemony of positivist philosophical ideas. Since all of the rigid dichotomies of the positivist era – meaningful-meaningless, theory-observation, a priori-a posteriori, analytic-synthetic, etc. – have, during the latter half of the 20th century, slowly but surely surrendered to more local and context-specific variants of these distinctions, it would seem that the fact-value dichotomy would have suffered (or perhaps benefited) from the same deflation. One would also suspect that economics – a discipline that has seemed to have so much trouble staying on the science side of these positivist-inspired distinctions – would be the first to welcome this deflation. Obviously that has not been the case; many economists continue to insist that the fact/value dichotomy is much more than a convenient distinction. Such insistence is a fact of professional life in economics, but I hope that have been able to demonstrate that it does not necessarily need (or ought) to be the case. The normative is involved (ethically and otherwise) in economic theorizing and one cannot even begin to assess these involvements until they are recognized, and recognition would be much easier if the economics profession were willing to deflate the positive-normative dichotomy into a useful, but more flexible, distinction.

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