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Value Judgments and Value Neutrality in Economics. A Perspective from Today

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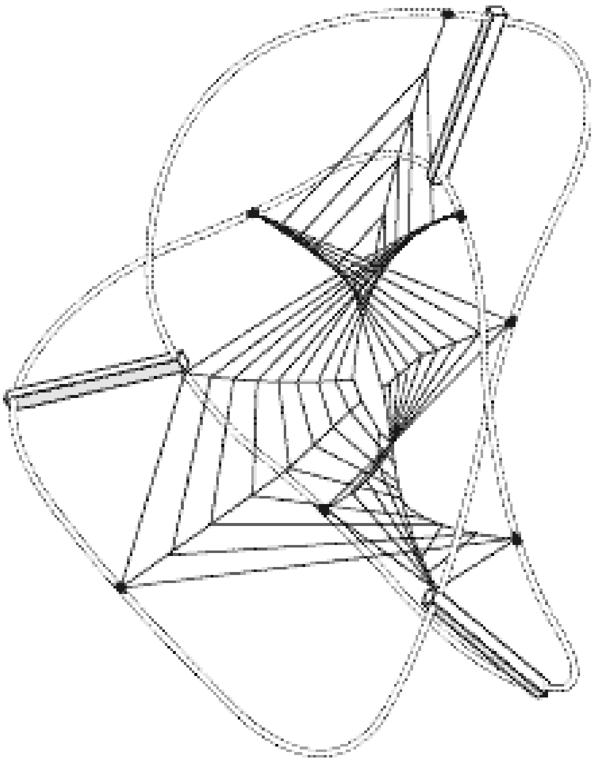

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Value Judgments and Value Neutrality in Economics. A Perspective from Today*

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Abstract. The paper compares the various theses that have been offered about value-neutrality in economics and examines the main available arguments in turn. The extreme non-neutrality thesis (universal value-impregnation) and the extreme neutrality thesis (there is no normative economics) are rebutted, and the analysis is then oriented towards settling the dispute between two intermediary variants. In conclusion, the paper argues for a weak non-neutrality thesis, allowing for a separation between positive and normative economics. The conclusions depend on clarifying the logical notion of an evaluation, the claim that seemingly evaluative concepts like Pareto-optimality are factual, Hume's *no-ought-from-is* principle, and Weber's classic argument that the social scientist should be neutral as between values and ends.
Keywords: Value Judgments, Value Neutrality, Positive-Normative Distinction, Pareto Optimality, Hume, Weber.
Résumé. L'article compare les différentes thèses proposées relativement à la neutralité axiologique en économie et il examine tour à tour les principaux arguments disponibles. Après avoir rejeté les thèses extrêmes de non-neutralité (l'imprégnation universelle par les valeurs) et de neutralité (il n'existe pas d'économie normative), on consacre l'analyse à préparer un choix deux positions intermédiaires. On retient finalement une thèse de non-neutralité faible qui permet de séparer l'économie positive et l'économie normative. Les conclusions dépendent de clarifications préalables concernant la notion logique d'évaluation, la thèse selon laquelle des concepts apparemment évaluatifs comme l'optimalité parétienne seraient de nature factuelle, le principe *no-ought-from-is* de Hume et les arguments classiques de Weber sur la neutralité du savant par rapport aux valeurs et par rapport aux fins.
Mots-clefs: jugements de valeurs, neutralité axiologique, distinction du positif et du normatif, optimalité de Pareto, Hume, Weber.

Classification: JEL B41, D60, D70, B20

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1. Introduction

There are few discussions of value judgments and value neutrality in economics nowadays. This is the more striking since up to roughly 1970 the talk of values was pervasive, and many economists thought that they had to take a stand on value neutrality. Sen's (1970) memorable text on collective choice might be one of the latest references dealing with the problem of what it means for economists to make value judgments and to be neutral as between values. Outmoded though these notions sound now, they are still pressing. Neutrality is a real question because, triviallly, economists must decide whether they should, and how they could, disentangle the economic agents' evaluations from their own. Further, economics investigates concepts that are either plainly normative, like distributive justice, or at least plausibly so, like social welfare and Pareto optimality, and it is no less urgent today than it was yesterday to understand what purpose these concepts serve within economics.

Even at the heyday of the methodological talk of value judgments, economists would spend little time analyzing what it meant for them to make a value judgment, to utter a ought-statement, to infringe neutrality, or to pursue a normative inquiry. The standard attitude was to employ these abstract notions unreflectingly and interchangeably while rushing into some broad pronouncement about neutrality. More often than not in this precipitous way, economists appear to have entertained four different theses:

1) At the extreme of neutrality, some disputed even the need for normative economics to exist as a separate field of inquiry. This is in effect Robbins's (1932) stance in his classic essay on economic method. Whatever argument he and others sketched for it amounted to invoking, for one, Hume's *no-ought-from-is* principle, and for another, the social scientist's necessary agnosticism about ends and values. Weber's (1922) methodology can be recognized distinctively when they make the latter point. To put it very tersely, they saw economics as being *non only a neutral, but an exclusively positive field*. If upheld today, this view would entail rejecting into "ethics" the bulk of the work now pursued under the heading of welfare economics, social choice theory, decision theory, distributive economics, and even public economics. I doubt that today's economists would be willing to endorse such drastic consequences once they are spelled out to them. However, despite its sheer implausibility, the strong neutrality thesis still gets a hearing in part of the current work.

2) There was a less extreme view of neutrality that did not dispute the need for a special subfield of normative economics. The Robbinsians notwithstanding, many - especially the welfare economists - believed that they had something to say *qua economists* about the agents' and the society's ends or values. However, they believed that end- or value-oriented inquiries did not call for methods truly different from those of positive economics. Normative economics would be separated from positive inquiries *only materially*, i.e., by its objects, like social welfare, not methodologically. Allegedly, it was both feasible and desirable for economists not to make any value judgments. This relatively sophisticated position gradually emerged

within the so-called new welfare economics of the 1930's although it received its final polish later. The arguments were in part the same as before - roughly, Hume's and Weber's - but there was also an interesting construal of social welfare and Pareto optimality as being, in effect, *factual* notions. Later, some social choice theorists developped a *formalistic* argument, according to which the normative economist's rôle would be only to draw the logical consequences of given value propositions. One way or another, the less extreme view of neutrality has become a common position to adopt, if unwittingly, in today's economics.

3) The least extreme view of neutrality, which is already a weak view of non-neutrality, took it that normative and positive economics were separated from each other not materially but *methodologically*. The value- and end-component of economics could be treated as being objective in some inquiries, e.g., when consumer theorists state the law of demand, whereas it could not in others, e.g., when decision theorists criticize the optimizing model of decision or when social choice theorists assess the conditions in Arrow's impossibility theorem. The correct division between positive and normative economics results from this differential handling of values, and cuts across existing boundaries within economics. This is again a sophisticated view. Unfortunately, there is little available in terms of explicit argument to substantiate it. The founding book of social choice theory, Arrow's (1951), appears to embody it to a significant extent and should perhaps count as its major historical representative. Arguably, this weak non-neutrality thesis is less influential among today's economists than is the previous weak neutrality thesis.

4) At the extreme of non-neutrality some claimed that economists were bound to take positions, or make value judgments, *whatever their theoretical objects*. One line emphasized the historical entanglement of economics with political views such as *laisser-faire*, while another line made a great deal of the point that social scientists belong to their subject matter. On an even more drastic view, theorizing *was* valuing. There are further variants, most of which apply to all social sciences, that deliver the same sweeping conclusion that economics is a non-neutral field throughout. Generally, this "critical" tradition of thinking is not strong on the argumentative side. The various lines are often mingled together, and even the consequences for non-neutrality are not drawn clearly. I take Myrdal's (1958) treatise on value as the epitome for the attitudes converging towards the strong non-neutrality thesis in economics. This thesis has always been more popular in the other social scientists' discussions of economics than in the field itself. Be they neo-Marxist, neo-Keynesian or still something else, those economists who defend it nowadays typically belong to a fringe of self-proclaimed heterodoxy.

My objective will be to examine these four theses and decide which, if any, can eventually be adopted. The initial arguments are often either coarse or confused, beside being directed to a state of the art that is now superseded. Accordingly, the task of this paper must involve a significant element of reconstruction. I have benefitted from the existing work in meta-ethics, deontic logic, and analytical philosophy, and indeed, one of the conclusions I wish to push forward is that it is easier to make progress on value in the social sciences by exploiting this philosophical groundwork than the methodological literature.[1]

[1] I refer to Blaug's (1998) survey for methodological references that are not taken up here.

As it turns out, theses 1) and 4) collapse shortly after the basic philosophical distinctions relative to facts and evaluations are drawn. The other two theses offer more resistance, and to decide between them involves one in discussing three major pieces of reasoning in turn: (i) the welfare economists' special argument that seemingly evaluative terms can receive a factual meaning; (ii) Hume's *no-ought-from-is* principle; (iii) Weber's argument that social scientists can and should be neutral as between values and ends. The main effort of the paper is towards promoting a version of 3) against 2), which calls for some strenuous effort as the latter is a sophisticated thesis.

Section 2 provides the conceptual groundwork. There, I introduce the crucial distinction between the old logic of value *judgments* and the new logic of evaluative *propositions* - a motto of this paper. Next, I deal with evaluations versus other norms and versus propositions of fact. Without arguing for it in detail, I take the view that the distinctions here can generally be *recognized*, if not fully understood. Section 3 draws various conclusions, one of which is a quick rebuttal of the strong neutrality and strong non-neutrality theses. Section 4 is devoted to ambiguous concepts such as Pareto optimality and the related welfare economists' argument. Section 5 moves on to Hume's principle, and its alleged consequences for neutrality. I will oppose the commonsense of the economics profession by arguing that there are no consequences of any significance. This is not the case with Weber's argument, which I analyze into a claim about values and a claim about ends, both being dealt with in section 6. By making important qualifications to Weber's construction of neutrality, I finally discriminate between the two theses I am more particularly concerned with. Section 7 draws some further connections, lists omitted topics, and concludes.

2. Groundwork on evaluations

2.1. To explain what value judgments are has proved to be a daunting task, and what most writers on the subject have ended up doing instead is to exemplify them and single out some of their recognizable properties. Since I am relying on existing work in this section, I cannot proceed otherwise. Statements of the form "x is good" or "x is better than y" are normally taken to express value judgments. Statements of the form "x is a good *something*" or "x is a better *something* than y" are more ambiguous because they can sometimes be construed in a factual manner. This is arguably the case with examples such as, "He is a good mechanic", or, "This is good corkscrew". At a minimum, it is clear that each class of statements delivers some intuitively unambiguous examples of value judgments, and this is all that is needed to make a start.

One may attend three different things when someone says, e.g., "x is good". There is the *statement* itself, which is a linguistic entity. Beyond it, there is the *judgment* made and the *proposition* that is meant by the statement and expressed by the judgment. The word "evaluation" can be used conveniently to cover the three items. Discussions of these matters in economics and the social sciences are traditionally concerned with judgments, which gives them a psychological flavour. One should expect logical and semantic investigations, as against psychological ones, to be

carried rather in terms of statements and propositions. I will have to say much more on these two different perspectives shortly.

There is a familiar philosophical objection to be envisaged against one's dealing with propositions in a value context. Many philosophers (e.g., the positivists, and in ethics, the emotivists and prescriptivists) have denied that the statement "x is a good" can mean a proposition. They argue that propositions must have truth values and that the claim made by "x is a good", like the claim made by the statement "x should be done", does not have any.[2] I wish to keep the issues open in this paper, so I will adopt the not entirely conventional stance that the defining feature of propositions is that they enter certain logical relations with each other, not that they bear truth values. This move makes it possible to talk of evaluative as well normative and prescriptive propositions without delving into the deep question of whether evaluations, norms and prescriptions can be declared to be true or false.

From the point of view of judgment, "x is good" attributes the goodness predicate to the subject represented by x. Generalizing beyond this example, one may submit that a value judgment is one which attributes an *evaluative predicate* to a subject. But care is needed because the subject-predicate pattern does not fit so well with the other basic examples. Take "x is better than y". It stretches the initial notion of judgment to say that the predicate good is attributed both to x and y, though to a greater extent to x than y. It is a well-documented difficulty with the old logic of judgment that it does not deal with comparisons appropriately. Now, take the other two statements, "x is a good something" and "x is a better something than y". Even the first raises a problem. By saying "John is a good economist", I mean that John is good not in the absolute, but inasmuch as he is an economist, and I thus make the goodness predicate doubly relative. It is relative not only to the subject but also by the kind to which the subject is taken to belong. The logic of judgment can deal deal with this case, but again by streching the initial scheme of attribution. The philosophical terminology somehow registers the problem by reserving the word *predicative* to the use of the good in "John is good" or "John is better than Paul". The other use, as in "John is a good economist", or "John is a better economist than Paul", is said to be *attributive*.[3]

Now, the standard move of 20th century philosophy has been to forget about judgments, and only deal with statements and propositions, and for the issue under discussion, this move entails a definite advantage. In first-order logic "x is good" and "x is better than y" can be dealt with uniformly in terms of the technical notion of a n-place predicate, putting n=1 in one case and n=2 in the other. The same holds of "x is a good something" and "x is a better something than y". Logically, the latter two statements refer to n+1-place predicates, with the added place reserved for the "something". I will continue to employ the language of judgment freely, because it has been the *lingua franca* of the literature on evaluation in social sciences throughout from Weber to Arrow and Sen today. But I will make effective use only of modern logic, not of subject-predicate logic.

[2] Carnap (1935) made this point forcefully. The major controversy it arouses is well summed up in Kalinowski (1960). See also Kaplan's (1963) discussion of Carnap.
[3] This classic distinction is discussed in Ross (1930) and Geach (1956).

The difficult question is of course, what do evaluative predicates consist of? It is again best tackled by making examples and pointing out properties. *Beautiful* and *true* exemplify evaluative predicates in esthetics and logic, and *good* is a prominent evaluative predicate in ethics. Some, along with Moore (1903), have even claimed that *good* is the unique basic concept. It is difficult to take this famous claim too seriously because, even leaving aside deontological predicates like *right*, the Moorean claim does not make sufficient allowance for the so-called *thick* predicates of morality, like honest, generous, or courageous. The defining feature of thick predicates is that they have both an evaluative and a descriptive side, as against the ethical good, a typically *thin* predicate.

Good (with its relational forms) plays a definitely important rôle in economics. Here are occurrences that have been standard in the field at any stage:
(1) "state x is better than state y for individual i"
(2) "state x is better than state y for society".
The following statements also occur instead of (1) and (2):
(1') "state x is a better economic (social) state than y for individual i"
(2') " state x is a better economic (social) state than y for society".

Economists are rarely careful at distinguishing one set of statements from the other, but it should be clear that the latter set captures their intended meaning more accurately than does the former. In the philosophers' terminology, this may be reexpressed by saying that economics makes *attributive* rather than *predicative* use of the good. There are a number of good or bad aspects of states of affairs that it is typically not concerned with. The relevant restriction is sometimes indicated by saying *economic* such-and-such (in welfare economics) or *social* such-and-such (in social choice theory). Pigou (1920) is often quoted for making the claim that "economic welfare" is "that part of welfare that can be brought into relation with the measuring rod of money". This specific definition was quickly superseded by the progress of welfare economics, but it is useful in revealing Pigou's intention of selecting for consideration just a few aspects of the good. A later welfare economist, Graaff (1957) wrote more broadly than Pigou that "economic welfare" was only a subspecies of "general welfare" and he tried to explicate the difference between the two in terms of various causes acting on welfare. Again, this is a specific but revealing construction. If we equate welfare with the economists' typical notion of the good (more on this later), we will see that in their reflective moods welfare economists always put restrictions on what they mean by the latter. Because of Arrow's (1951) work, the expression "social welfare" is more commonly heard today than is "economic welfare". Social choice theorists construe it technically and include not only welfare, but also collective rationality considerations into it. Encompassing as it sounds, the social choice theorists' notion is still a restricted one, and it is again on the attributive side of the good.[4] This being granted, I will use (1) and (2) for brevity, meaning really (1') and (2').

As a further problem in interpretation, some economists would construe "good" and "better" in (1)-(1') and (2)-(2') as having a primarily factual meaning. This is not to

[4] Harsanyi (1977) is a special case among the same group of scholars. His normative concepts are *a priori* unrestricted, and accordingly, he does not distinguish between social choice theory and social ethics. Sen's recent work also appears to tend towards social ethics generally, although I suspect he would put relevant restrictions on his notion of good.

suggest that (1) and (2) are ambiguous in economics in the same commonsense way as "This is a good corkscrew" or "He is a good mechanic". The vocabulary of economics is ambiguous between the factual and the normative in a way that is peculiar to the field. I devote the whole of section 4 to this problem.

Now, what about the thick evaluative predicates of economics? There are many of them. Some are borrowed from social ethics but have acquired connotations that are now specific to economics. The best example in this class is perhaps *just* and its variants, like *equitable*, *fair*, etc. In economics these predicates nearly unexceptionally relate to distributive justice, not to other forms of justice as are also discussed in ethics and legal theory. Today's economists do not limit attention to income and commodity distributions anymore, but even so, the range of items they consider remains limited, and some occur more frequently than others. This feature, along with the fact that they traditionally connect distributive justice with equality, contribute to shape the factual content of their justice predicates. In some primitive contexts of welfare economics "state x is more just than y" would have the crude factual implication that "x involves a more equal income distribution than y".

The predicate *rational* is another major example of a thick evaluative predicate in economics. Over and beyond the historical core of static optimization for a single agent, economists, and most actively among them decision theorists and game theorists, have enriched economic rationality in so many ways that it has become multifarious. In the same process it has become equivocal and controversial to an unprecedented extent, even though disagreements between specialists are not as sharp here as they are in the field of justice. The focus of this paper is not on economic rationality, and I will only illustrate the straightforward point that this notion defines a class of thick predicates. If I say, "Alice and Bob are taken in a prisoner's dilemma and they are rational players", the expression "rational player" is recognizably evaluative and will typically be understood as having the factual implication that the two players will not cooperate. This is an example of thickness, as when I say, "Alice works in a bank and is an honest cashier", and am understood as implying that she will not run away with the bank's money at the end of the day.

There is also a rich array of thick evaluative predicates that can be called second-order evaluative because they are applied not to states of affairs or actions, but to claims or conditions that are themselves evaluative. Among the common occurrences can be found *relevant*, *acceptable*, *satisfactory*, *defensible*, *reasonable*, *compelling*. A very good example of the way predicates like these work is provided by Arrow's (1951) thorough assessment of the assumptions he makes in order to prove his impossibility theorem. The assumptions themselves are quite clearly evaluative, and Arrow's discussion of them is even more clearly so.[5] Notice that the thin predicate *good* can also occur in a second-order rôle, as when a social choice theorist would write: "Arrow's Independence of Irrelevant Alternatives condition is a good condition to impose"

I have introduced several ways of looking at economic predicates, in particular the two distinctions of factual versus evaluative, and thick versus thin predicates. It is

[5] I have examined this example in detail elsewhere (Mongin, 1999), with a view of showing that Arrow does not refrain from taking side, contrary to a common view of social choice theory as being mostly formalistic.

important to realize that these two distinctions do not collapse into each other, i.e., that *for a predicate to be thick is not the same thing as to be ambiguous between the factual and the evaluative*. A thick predicate has a descriptive as well as an evaluative side at the same time. An ambiguous predicate can sometimes receive a factual, and sometimes an evaluative interpretation, depending on the context, which is a very different property. This clarification will be useful when it comes to discussing the neutrality argument of section 6. To illustrate, consider again:

(3) "state x is more just than state y".

As I suggested earlier this statement has factual (if not fully unequivocal) content in respect of distributive equality. So the predicate *just* is thick. Nobody would sensibly regard it as an ambiguous predicate. By contrast, as section 4 explains,

(4) "state x is Pareto-superior to sate y"

has been construed as being sometimes evaluative and sometimes not. Hence for those economists who defend the construal, *Pareto-superior* is an ambiguous predicate. No doubt, there is the added complication that *just* does not have unequivocal factual content, if only because economists do not agree on what counts as a just distribution. It may be the case the thick predicates of economics are more equivocal and controversial than the thick predicates of traditional ethics, such as *courageous*. Even if this is so, the basic point of the paragraph remains the same.

2.2. Thus far I have just exemplified economic evaluations and suggested some internal classifications. I have said little of the common properties of evaluations beyond the brute logical fact that they involve predication (in the modern logical sense). Meager as it seems, this fact reveals something about how evaluations can be distinguished from *obligations* and *prescriptions*, and I turn to this consequence now.

Consider the propositions expressed by:

(a) "x is a good policy"

(b) "x is the best policy"

(c) "society should implement policy x".

Both (a) and (b) state evaluations, whereas (c) has the force of an obligation. The deontic logicians have convincingly shown that the proposition expressed by (c) does not have the same logical structure as those expressed by (a) and (b). The crucial point is that obligations (I use the word with exactly the same coverage as "evaluation", to refer to propositions, judgments, as well as statements, and similarly with "prescription" below) do not involve predication contrary to evaluations. The basic logical structure of an obligation is that of *a deontic operator acting on a proposition*. That is to say, the statement:

(c') "It is obligatory that society implement policy x".

is the canonical linguistic rendering of obligation (c), i.e., it expresses the logical form of the proposition. There is a divide between propositions having this form and those having the predicative form.[6]

There is a classic philosophical view, shared by doctrines as diverse as Husserl's and Hare's, that at least *moral* evaluations cannot be easily demarcated from the

[6] Here is a practical hint to contrast the two logical forms with each other. Consider the alternative statement:"That society should implement policy x is obligatory". We do have a grammatical predicate ("obligatory") here. But the grammatical subject this predicate is attributed to does not refer to a logical individual, as, say, x in "x is a good policy". It refers to a whole proposition. Notice that the present rendering strikes one as cumbersome compared with (c').

corresponding obligations.[7] This view is loosely connected with utilitarianism, which may explain why it is so popular in economics. The underlying argument is that I cannot declare an action x to be morally best without implying that one should do x, under the proviso that x is feasible. Allegedly, this is a matter of semantic entailement. I cannot assess this argument in any detail here, and will only stress that even though it sounds powerful, it cannot prevail over the brute fact that (a) or (b) on the one hand, and (c) on the other, have different logical structures.

The point made in terms of *obligations* could have been made equally well in terms of *prescriptions*, since they partake in the same general logical structure. However, there are relevant differences between the two. Obligations often have broader scope than prescriptions. Obligations may be only loosely related to the relevant actions to be taken, while prescriptions must specify them clearly. Obligations often state results to be achieved without being very specific about the means, whereas prescriptions are often more specific about the means than the results. There is a sense in which "society should be more just" expresses an obligation, but it is not clear what prescription it makes. Some philosophers and deontic logicians have actually a notion of an obligation as bearing primarily on states of affairs - *sein sollen* - and only secondarily on actions - *tun sollen*. When saying that "society should be more just", one can mean a proposition that holds for all of us and at all moments, or equally well, a proposition that applies to nobody in particular and for no special set of circumstances. Contrary to obligations, prescriptions cannot be vague with respect to persons and circumstances; otherwise, they strike one as being incompletely specified.

While making this further distinction, I do not mean to suggest that there are no structural properties shared by evaluations, obligations, and prescriptions, or to suggest that they cannot be grouped together in relevant contexts. The deontic logicians and ethical philosophers I am relying on have also made that clear.[8] In ethics, the differences between descriptive and moral propositions often prevail over internal distinctions within the latter category. Some of the links between *norms* - I will be using this notion simply as an umbrella to cover evaluations, obligations and prescriptions - would emerge from a more thorough examination. At least, the *prima facie* differences between evaluations, obligations and prescriptions should matter to economics. As it turns out, different views of what economic policy "recommendations" amount to map onto this trichotmy. This will be explained by means of an example in the next section.

2.3 Returning now to evaluations, one wonders how they can plausibly be distinguished from propositions or judgments of facts. Whatever I said thus far is of no use for that distinction. To emphasize the rôle of predication, as I just did, can only make the problem more severe, since predication is a property common to both evaluations and propositions of fact. The aim must be to identify properties that all evaluations but not all propositions of fact have in common.

Some ethical doctrines, like Hare's prescriptivism, make the strong claim that there are semantic entailment relations between evaluations and action-propositions, while

[7] Hare's Language of Morals (1952) is a locus classicus for the argument that follows. Husserl's (1913) Logische Untersuchungen also includes a view that is very roughly similar to Hare's.
[8] See Castaneda (1975), Kalinowski (1972), von Wright (1983).

others deny it. In this writer's own view, Hare's is a far-fetched claim, especially if it is extended from moral evaluations to evaluations in general. However, it points in an interesting direction, and the weaker point that evaluations and actions are *somehow connected in terms of meaning* is probably both correct and worth recording. Vague though it may sound, the conclusion is informative since it uncovers a dissimilarity with factual propositions.

Other candidate properties of this kind have been discussed in meta-ethics. Evaluations are intrinsically comparative. They make implicit reference to an ideal, which is taken as a yardstick for ordinary comparisons. Evaluations are subjective in the sense of making implicit reference to the person who makes them. Empirical evidence can bear on evaluations only obliquely, contrary to the way it bears on propositions of fact. Evaluations involving thick predicates "supervene on" their factual content, by which is meant roughly that the evaluative is not autonomous, and more technically, that it depends functionally, in the mathematical sense, on the factual.[9] All these candidates are important *prima facie*.

I will make the logical and argumentative jump from those unanalyzed suggestions to the following conclusion: evaluations share several universal properties that propositions of facts do not share to the same extent, and the aimed at distinction can to some degree be explicated by listing these properties. There is no known set of necessary and sufficient conditions for evaluations, but rather a set of weak necessary conditions none of which is very informative in isolation but the whole collection of which tells us something suggestive in the end. This is a disappointing conclusion if the target was to provide *definitions* or *demarcation criteria*, such as the alleged falsifiability or confirmability criteria in philosophy of science. But as stated at the outset of this section, no philosopher has ever succeeded to that extent, so I may be excused for my failure.

A related and slightly weaker claim is that the presence of the evaluative can very often be *recognized* in actual practice. Although there are a number of borderline cases, most of us are perhaps not too bad at recognizing thick evaluative predicates. As regards ambiguous predicates, we can often name contexts where we feel that the factual interpretation should prevail over the evaluative, and vice-versa. Some philosophers would take a claim of this sort as stating a neutrality thesis already, in which case it would be the weakest of all those with this labelling. For reasons that the next section will make clear, I do not think it is very helpful to mention neutrality already at this stage, but it is a matter of terminological choice, and I have no query with the claim itself.

3. First conclusions about evaluations and neutrality in economics

The analysis carried out in last section already delivers conclusions relevant to economics. I collect them in this section. The most significant of all, to come last, is

[9] Without using the word, Arrow aptly summarizes what it means for an evaluation to supervene on facts in the following passage: "Value judgments may equate empirically distinguishable phenomena but they cannot differentiate empirically indistinguishable states" (1951, p.112). Hurley (1989) has discussed supervenience in Arrow.

that the extreme neutrality and non-neutrality theses collapse; the other points are stored for the later discussion of the remaining two theses. First of all, I stress that not all the evaluative predicates of economics should be construed as *moral* predicates, contrary to a common misperception in the field. The deontic logicians who have discussed evaluative propositions in the abstract take the evaluative and the moral to have a non-empty intersection, without either including the other, and this appears to be the only sensible position to adopt. The preference concept is the typical example of a two-place evaluative predicate that is normally not a moral concept.[10] Besides, I have argued that the evaluative predicates of economics were specific to the field. As the restrictions surrounding *good* indicate, this thin predicate is not normally meant to be a moral one. And the thick predicates *just*, *rational*, etc are definitely used in a manner specific to economics. This sounds like an obvious point, and it is surprising that many economists do not get it right. The logical groundwork does suggest an explanation, but I will not state it until the end of this section.

Second, and most emphatically, whether or not a proposition is evaluative depends on the nature of the predicates it involves, not on who makes the corresponding judgment or, in modern language, on who *asserts* the proposition. This is a seminal point for the paper as a whole. It entails the following heavy consequence: when we decide whether statements like, say, (1) and (2) in last section express evaluations, *we still say nothing about value-neutrality*. The property of being evaluative is a property of the proposition itself. Value-neutrality arises as a question only at the next stage of the inquiry: supposing that the proposition under consideration is indeed evaluative, is it or is it not the economist who asserts it? Thus, I narrow down the value-neutrality problem by separating it from a prior identification problem. This separation explains the contrast between the sections to come. Sections 4 and 5 are about economic evaluations, whereas section 6 discusses neutrality in the restricted sense, i.e., when there is no ambiguity left on the evaluative status of the propositions under scrutinity. The separation of issues also explains why I just advised against applying the language of neutrality to the claim that evaluative predicates can generally be recognized.

In all this I am still following the contemporary logicians' hints. It is another shortcoming of the old logic of judgment that it fused the question of what is to qualify as an evaluation with the further question of who makes it. The criticism here is not commonly heard, although it connects with the famous complaint by Frege and others that the logic of judgment was psychologistic. A striking point about economics is that *even today's specialists tend to envisage value from the point of view of the old logic*. Most discussions (and a few among them are in fact quite sophisticated) make the mistake of concluding that a certain judgment is not a value judgment simply because it is not the economist, but the agent, "the client", some putative observer, or the assumed opponent, who makes it.

Third, the differences between evaluations, obligations and prescriptions should matter to economists. After all, it is important to be clear about whether an economic policy is just a valuable policy to follow, or it tells the policy-makers how to shape

[10] By "normally" I mean to say: except for purportfully ethical constructions such as Harsanyi's "impartial" preferences; see Harsanyi (1977) and the formal reconstruction in Mongin (2001).

their actions in the broad, or it sets concrete steps for them to take. Take the famous *k*%-rule of monetary growth that was recommended at a time by Friedman (1968). What was exactly its status? Without entering specialized details it seems fair to say that there was no substantial agreement among those who professed to "recommend" it.[11] Some apparently believed - or at least officially claimed - that the money supply was an instrument variable, and accordingly took the rule to be bluntly prescriptive. However, the sophisticated monetarists knew that the money stock was more of the nature of an objective than of an instrument, and for them the rule would enjoin the Central Bank to take whatever steps seemed appropriate in order to achieve a *k*% annual increase in the money stock. Viewed in this way, the *k*%-rule appears to be closer to an obligation than a prescription. Still, a few monetarists might have understood it more like an evaluation: it is a good thing if the Central Bank can achieve a *k*%-rule annual increase in the money stock. The problem with this famous rule was not so much that those who "recommended" it disagreed between themselves as that they did not even have *the concepts* to describe their lack of agreement.

Even reflective economists play loose and fast with the "normative":
"We have a single dichotomy in economics, between positive enquiries into how something may be done, and *normative recommendations that it should be done*...Positive and normative are separated in employment theory by *a value judgment such as that 'we should try to maintain full employment (rather than, e.g., stable prices)* " (Archibald, 1959, p.321, my emphasis).
I could have selected more recent quotes from either social choice theory or public economics, but this one is telling, coming as it does from a good theorist with definite philosophical inclination. Archibald does not envisage that economics as a normative exercise may be concerned with evaluative claims such as: "a state of full employment of the economy is better than a state of underemployment", and he leaves no room for analyzing what is "recommended" into an obligation or a prescription.

The fourth and last point concerns neutrality. The two extreme theses discussed in the introduction fail *because they rely on a flawed concept of evaluation*. I deal with each in turn. Because Myrdal's non-neutrality thesis is so grand and elusive, it will helps I restrict attention to a representative passage:
"A disinterested social science' has never existed and, for logical reasons, cannot exist. The value connotations of our main concepts represents our interest in a matter, give direction to our thoughts and significance to our inferences. It poses the questions without which there are no answers.
The recognition that our very concepts are value-loaded implies that they cannot be defined except in terms of political valuations. It is indeed on account of scientific stringency that these valuations should be made explicit. They represent value premises for scientific analysis... " (1958, p.1-2).[12]

I would not have enough ink if I were to dispell the mass of confusions contained in these lines. Myrdal equates evaluations with *political* evaluations – as if there was anything political underlying a decision theorist's claim that expected utility is a good model of decision. He jumps from the claim that social scientists make evaluations to

[11] Besides, not all the monetarists professed to recommend it, which is a different point.
[12] The passage is also discussed in Klappholz (1964) though very differently.

the recommendation that they should include their evaluation into the *premisses* of their reasonings – as if it would serve any logical purpose to add "democracy is a good thing" to the five conditions of Arrow's theorem. The only suggestion resembling an argument is the classic one about the scientists' *interest*. Social scientists are interested in some aspects of reality while they discard others, hence they must implicitly evaluate reality, hence evaluations are pervasive. The first step in this argument is a blatant *non-sequitur* – this has often been pointed out.[13]

Rather than elaborating on these criticisms, it is enough point out that Myrdal's conclusion that evaluations are pervasive would crumble if he construed evaluations as in this paper, i.e., as being propositions of a certain kind. Not everything in economics can be evaluative in economics simply because not every proposition of economics involves an evaluative predicate. This observation is virtually all that is needed to say against thesis 4).

Robbins takes the opposite view that economics is neutral throughout:
"In recent years, certain economists ... have urged that the boundaries of the subject should be extended to include normative studies... (They) have argued that Economics should not only take into account of valuations and ethical standards as given data, but that it should also pronounce upon the ultimate validity of these valuations and standards...Unfortunately, it does not seem logically possible to associate the two studies [= economics and ethics] in any form but mere juxtaposition. Economics deals with ascertainable facts; ethics with valuations and obligations. The two fields of studies are not on the same plane of discourse..." (1932, p.148-149).

Robbins's position has the effect of rejecting into ethics the whole of the economist's normative activity. It appears to be determined by the incorrect equation I complained about:
to make an evaluation=to make an *ethical* evaluation.
On second thoughts Robbins would no doubt grant that the agents' preferences are non-ethical evaluations (he does so elsewhere in the Essay). But when it comes to economists, he does not conceive of their making evaluations that are non-ethical. Admittedly, I am targetting for criticism an author of the past. Robbins could only know of normative economics in the primitive form of Jevons's and Edgeworth's utilitarianism, or Pigou's welfare economics, and did not witness the post-war surge of decision theory, game theory, and social choice theory. This granted, his position relies on a conceptual mistake about evaluations.

Robbins's mode of reasoning has stuck, and later theorists have often discussed the value component of welfare economics as if it were automatically "ethical".[14] This tendency has not even disappeared from the sophisticated recent work in normative economics. I would like to sketch a tentative explanation for what seems to be a very common mistake. The economists' confounding of ethical with non-ethical evaluations is perhaps only secondary; they are trapped into confusion at an earlier stage. *They think of evaluations in terms of judgments, not propositions*. This

[13] Weber (1922) exposed the *non sequitur* in terms of his famous distinction between *Werturteil* and *Wertbeziehung*, i.e., value judgment and value-relation. Weber's argument has become bread-and-butter for later methodologists.
[14] A confusion already noted by Little (1950, p. 77-79).

psychologistic preconception fosters the belief that there cannot be an evaluation without a person's commitment, and personal commitments are supposedly typical of morality.

Myrdal rambles about the economist's secret interests, outlook and motivations. Robbins only notices the economist for being evaluative only when the latter declares: "The taking if interest is absolutely bad". Against either writer, I have stressed the sobering influence of logical analysis.

4. Ambiguous predicates in economics

This section deals with ambiguous predicates, and in effect with *betterness* and those concepts in welfare economics, like *Pareto superiority*, which have served to explicate it in a sometimes factual, sometimes evaluative ways. This is the most important example in the context of this paper, but other ambiguous predicates, such as *equal*, would deserve to be analyzed if space permitted.[15]

4.1 Let us consider again:
(1) "state x is better than y for individual i"
(2) "state x is better than y for society".
In cases like (1) where goodness or betterness are indexed by individuals, economists typically intend one of the following notions of good: *what gives pleasure*, *what provides well-being*, and *what satisfies preferences*. These profoundly distinct interpretations often occur jointly and equivocally in the economists' work, a fact which causes puzzlement to newcomers to the field but economists are reluctant to acknowledge. At least economists have always been clear about the point that with social goodness and betterness, as in (2), their standard interpretations became either unavailable or serioulsy problematic. The common view in economics is that there is no way of talking of the society's pleasure, well-being, and even preferences unless these notions refer to aggregates of the corresponding individual items. This built-in component of methodological individualism became even clearer when Arrovian social choice theory formalized it. Briefly stated, the economists' notion of the social good is *that which achieves the many individuals' good in the aggregate*, with various construals, depending on the particular theory, for both "achieves" and "in the aggregate".[16]

Economists have a special expression to refer to the social good irrespective of the particular construals: "social welfare". As Sen has observed:
"The term 'social welfare', as standardly used in welfare economics, refers to the 'ethical value' or the 'goodness' of the state of affairs of the society... 'Social welfare' is simply the representation of the 'goodness' of the social state. The term leaves the determination of that value completely open" (1991, p.15).
Similar comments apply to the older expression "economic welfare": it was really a name for the economic good, with its wide range of meanings. To non-economists this welfare terminology is another cause of puzzlement. Welfare, it seems, is no

[15] Whether equality is evaluative in economics has been discussed by Sen (1973, 1992).
[16] For this all too brief discussion see, among others, Hook's (1967) collection, Sen (1980-81, 1985, 1991), Hausman and McPherson (1996), Mongin and d'Aspremont (1998).

different from well-being, and if economists genuinely specialized in a theory of social *welfare*, they would have to dispense with the alternative notions of good as *what gives pleasure* and *what satisfies preferences*. But they do not. These alternative interpretations are well established in their tradition, and even the old-fashioned pain and pleasure account of the good has not entirely vanished from today's work. The economists' (or social choice theorists') special use the welfare terminology is unproblematic for the more technical exercises, but it has uselessly complicated foundational discussions.[17]

Returning to the conceptual point, one may wonder how is it possible for economists to take economic and social goodness and betterness to be factual predicates? For individual-relative statements, like (1), the typical move has been to read it in the light of the preferential sense of the good, and then analyze strict preferences in terms of choices, according to the so-called *revealed preference* interpretation of preference. Eventually, (1) becomes synonymous with:
(1a) "if individual i had the choice between the two, he would choose x rather than y".

For society-relative statements like (2), the semantic move consists in first taking *better* to mean *Pareto-superior*, and then factually interpreting the equivalent statement:
(2a) "state x is Pareto-superior to state y".
The last step can be spelled out as follows. Definitionally, (2a) is equivalent to:
(2b) "states x and y are such that all individuals strictly prefer x to y".
(For simplicity, I select the stronger of the two existing notions of Pareto-superiority.) Then, adopting the revealed preference interpretation for strict preference, one ends up with:
(2c) "states x and y are such that if the individuals had the choice between the two, all would choose x rather than y".
This makes a factual assertion.

By a parallel sequence of moves, the notion of a *social optimum* can receive a factual interpretation: first, a social optimum is taken to mean a Pareto optimum; second, the revealed preference interpretation is applied. As Little (1950) and other welfare economists used to say, the social optimum of welfare economics is nothing but "a chosen situation for all". This semantic analysis has the heavy methodological consequence that the two fundamental theorems of welfare economics can receive a factual interpretation. Reformulated accordingly, the first theorem asserts that if there are no externalities and some other assumptions hold, *every state of competitive equilibrium x is a chosen situation for all*. And the second theorem asserts that under related assumptions, *any feasible state x that is a chosen situation for all can be obtained as as a state of competitive equilibrium of the economy by suitably modifying the initial endowments.*

[17] Economists have discussed in the welfare language evaluative notions and arguments that are non-welfarist and even non-consequentialist. As a result, they have long been unable to separate from each other the two major arguments that can be made in favour of a Pareto optimum, i.e., that it is a state which best achieves individual welfare, and that it is a state which best preserves the individuals' freedom of evaluation.

A point to be clarified is, what are the choice-based factual construals intended for? On one reading, they are meant to replace the initial formulations; on another reading, they live with them side by side. They may be intended for economics at large or just for part of it. Some, like Archibald (1959) in the already quoted paper, take the extreme position that the choice-based construals should replace the evaluative notions everywhere. This stand has the drastic consequence that there is no such thing as normative economics, but just positive economics throughout. A less extreme (and more widespread) position is that the choice-based construals are suitable for investigations in demand theory, though not for welfare economics. Some would reinforce this position by adding that the factual construals are not only suitable but *needed* for the scientific purposes of positive economics.[18]

All these positions, even the weaker ones, are bound to collapse under the deep objections raised against the revealed preference account of preference. The latter turns out to be fraught with difficulties even for its use in demand theory. There is no point in repeating here arguments that haven been most effectively made by others, especially by Sen.[19] But I wish to single out two arguments that have perhaps not received all the attention they deserve. By their very nature, *preferences have a wider scope than choices*. It is possible, and actually by all means common, to entertain preferences between states of affairs, one of which is (or even all of which are) not available for choice. For one, we can have preferences between unfeasible states of affairs, e.g., between a completely egalitarian and an extremely inegalitarian society, even if we believe (say for incentives reasons) that neither of the two will ever be feasible. It is important to say "will ever be" here because revealed preference theorists have stretched their notion of choice to include rich counterfactual possibilities, a point well emphasized in Sen's criticism. notion such as theirs cannot Against them, I am suggesting that we can entertain preferences relative to states of affairs that are not even conceptually feasible, i.e., hence in particular cannot be objects of choices.

Also, we do entertain preferences between states of affairs that are not objects of choice for anyone individually. Think of those patterns of society that can be achieved only as unintended consequences of intentional actions.[20] (That these states are conceptually feasible makes the objection different from the previous one.) The critical point here has often escaped the economists' attention because they routinely define individual preferences over baskets of goods. Whenever social states consist of lists of baskets of goods, it becomes an acceptable metonymy to write as if individuals chose between social states of affairs. Luckily, economics is not limited to comparing social states made out of individual baskets of goods. Those who mechanically repeat the choice-based construals of Pareto-superiority and Pareto optimality in wider contexts - e.g., in social "choice" theory in which social states are often nondescript - are missing something very basic about the field.

As a brief historical aside, I note the intriguing point that the reduction of social betterness and Pareto superiority to factual considerations enjoyed maximum

[18] This semi-strong position seems to be roughly Samuelson's (1947). Perhaps it is also Arrow's; there are suggestions in his papers (Arrow, 1984a and 1984b) that it may be.
[19] A *locus classicus* is Sen's (1982) volume, in particular the chapter "Behaviour and the Concept of Preference".
[20] Elster (1983, ch.2) has written in this way about "states that are essentially by-products".

popularity well *after* the heyday of Paretian welfare economics. Little (1950), Graaff (1957), Archibald (1959), and quite a few others, pushed it at a time when it was becoming increasingly obvious that this brand of welfare economics was running out of fuel. This methodological attitude is not to be met in the formative years. Pre-war theorists like Bergson (1938) were not weary of finding evaluations in welfare economics. Some adhered to Weber's neutrality argument one way or another, and others were satisfied with the (dubious) claim that Paretian comparisons involved generally shared, hence innocuous value judgments. Their believed that it was possible to make conceptual progress in the field replete with value judgments. It is tempting to read evidence of Lakatosian degeneracy into this change from frank admission of evaluations in the 1930's to their denial in the 1950's.[21]

4.2. If it had succeeded, the revealed preference construal for (2) would have purged the proposition from *all* its evaluative components. Compare now with the decision of stopping the semantic reduction after the first stage:
(2b) "states x and y are such that all individuals strictly prefer x to y".
This move would delivers the following restatement of the first fundamental theorem of welfare economics:
"Every state of competitive equilibrium x is such that there is no feasible state y having the property that all individuals strictly prefer x to y."
Despite continuing lip-services payed to the revealed preference idol, statements of this kind are pervasive in today's work. They amount to eliminating *only part* of the evaluative component, i.e., the notion of the economic good. The resulting propositions are technically evaluative because they involve the preference predicate, but they are logicall compatible with value-neutrality, as explained in section 3. Are these propositions all that economics needs? They may be all right for demand theory and related investigations; they are not for economics as a whole, as I proceed to argue.

Economics has to deal with *several* notions of goodness at a time. Pareto-optimality is one, but here is another: the core. The latter is logically a refinement of the former. Although it can sometimes be interpreted non-evaluatively (i.e., as putting a condition on incentives), the core concept arguably permits a refined diagnose of what is good about an economic state, and in particular a competitive economy. "An allocation in the core is good in the sense that no group can oppose it on the grounds that it can do better by itself" (Feldman, 1980, p.217). Both Pareto-optimality and the core are on the efficacy side of the economic good. An array of evaluative notions take care of the distributive justice aspect, e.g., the utilitarian sum, the pseudo-Rawlsian leximin, or the no-envy solution of Kolm (1972) and others. It would not do if economists expressed the society's evaluations by merely employing the technical notions mentioned in this paragraph. Each embodies only a partial view of the economic or social good, and they can be compared only in terms of this unifying idea. Thin evaluative notions are the more necessary since the thick technical notions are not all nicely arranged in a logical order. For instance, contrary to the other

[21] More on the quasi-Lakatosian degeneracy of welfare economics in Mongin (2000). I do not expand here on the bizarre view that a value judgment that is generally shared is less of a value judgment for that. It has been discussed several times, e.g., in Sen (1970, ch.5)

concepts mentioned in this paragraph, the no-envy solution is *not* a refinement of Pareto-optimality.[22]

The normative discussions that result from comparing the thick technical notions are roughly analogous with arguments in traditional ethics over which of several, possibly conflicting virtues it is most important to practice if one is to lead a good life. There is of course the difference emphasized in section 2 that economics pays attention to a restricted and relatively predetermined list of goodness considerations. Once this is taken into account, it becomes clear that the predicate *good* in economics functions both positively, i.e., to unify a field of normative investigations, and negatively, i.e., to separate it from strictly ethical investigations.

To sum up this section, I have primarily been arguing that despite what has occasionally been said, the predicate *good* occurs in an evaluative sense within economics. This is a significant result, though, it may be stressed, a negative one. One does not have yet a conclusion about neutrality, except in the indirect sense that the ground is clear of a sweeping argument that would have preempt its being discussed.

5. Hume's no-bridge principle and what the economists have made of it

Contrary to the welfare economists' factual construal, which appeared only passingly, Hume's no-bridge principle that no *ought* ever follows from *is* has been influential throughout the history of economics. There are few examples in the field, and perhaps in the social sciences at large, of a *philosophical* thesis that has enjoyed more popularity and has been claimed to do more work. In this section I will first take stock of the principle itself, thus completing the abstract groundwork of the paper, and then assess its supposedly marvellous effects on economics.

5.1 Hume was ostensibly concerned with deduction, hence propositions or statements.[23] Although it has also been construed thus, explicitly Hume's principle is *not* about meaning. I distinguish it from the semantic claim that a moral concept cannot be synonymous with any natural concept, a claim that is associated with Moore's (1903) "refutation of naturalism". According to the latter claim, *ought* cannot be synonymous with, say, *to follow a convention*. This particular example happens to be Hume's own naturalistic notion of a moral duty, and if anything, contributes to strengthen the case that Hume's no-bridge principle should be kept distinct from related semantic claims. Even more clearly, the principle is not about facts and values themselves. It differs from the metaphysical view that *sein* and *sein sollen* are irreducibly different modes of being. The differences between Hume's

[22] See Varian (1974). The same holds of Pazner and Schmeidler's (1978) egalitarian-equivalent solution and related "solution concepts" discussed in Moulin's (1995) or Fleurbaey's (1996) texts on normative economics.

[23] "Of a sudden I am surprised 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 and an ought not... As this *ought* and *ought not* expresses some new relation or affirmation 'tis necessary that it be observed and explained; and at the same time 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, Treatise on Human Nature, III, I).

logical principle, the semantic antinaturalistic point, and metaphysical views, have come to be recognized only belatedly. Weber and the philosophers of social science who followed him made little or no effort at separating one from the other. I read Moore and Hare as fusing the semantic point with Hume's principle proper.

The principle becomes clearly distinct when construed syntactically. Then, it points out the deductive gap between premiss-statements containing no word of obligation, such as "ought", and conclusion-statements which contain one. A similar version can be propounded for "good", and what matters most to economics, for any other word from the evaluative vocabulary, i.e., "just", "desirable", etc. A relevant variant of the principle would goes like this: a statement containing evaluative words cannot be obtained by a correct deductive inference from statements that do no contain any. This must be stated with the familiar logical provisos. One must take care of trivial counterexamples like the correct deduction from:
"Inflation is above target in Europe now"
to:
"Inflation is above target now OR the Central European Bank ought to lower the interest rate OR the Central European Bank is a good bank OR..."

Concerning ought-statements specifically, there is the point I stressed in section 2 when discussing obligations, i.e., that they involve deontic operators. The logical language required to discuss "ought" is in effect a non-classical (modal) language, and the rules of deductive inference must be specified accordingly in the system. They cannot be simply the rules of deductive inference for first-order logic (Modus Ponens, Modus Tollens). Somewhat paradoxically, it follows that the no-bridge principle is easier to formalize logically in the derivative evaluative version than it is in the primary *no-is-from-ought* form. At any rate, granting various technicalities and restrictions, Hume's principle can be made to hold as a matter of logic. It will then derive from the most straightforward fact about deductive inference, i.e., that it is non-creative. What is part of the syntactical material of the conclusion-statement must somehow be part of the syntactical material of the premiss-statement.[24]

Unfortunately, a principle obtained in this way is bound to be trivial. It holds not only for "ought" or "good", but for any word at all. Take this picturesque variant provided by an Australian philosopher:[25] you cannot draw "hedgehog conclusions" from "hedgehog-free premisses". Any component of the syntax can take advantage of the non-creativity of deductive inference. Viewed as a metalogical theorem, Hume's principle is perhaps useful in reminding us how to use words consistently, but it teaches us nothing special about the language of morals, or the evaluative language, or any sublanguage in particular.

Some will object that it was a mistake in the first place to look at Hume's principle in such a narrowly logical way. Arguably, what it tries to stress is not the deductive gap itself - a triviality - but the further point that we are not prepared to bridge this gap by adding the required premiss. Take the inference from:
"Leonidas is ready to face death hazards at war"
to:

[24] Non-deductive inference does not necessarily enjoy this non-creativity property. Inductive inference, for instance, is ampliative, and it could be made to violate Hume's principle.
[25] Pigden (1991) in his valuable survey of Hume's thesis.

"Leonidas is courageous".
In order to turn it into a correct deductive inference we would need something like:
(*) "To be courageous is to be ready to face death hazards at war".
On the more sophisticated reading, Hume's principle would state in effect that there is no missing premiss in the style of (*) that would ever bridge the deductive gap *to our satisfaction*. This interpretation leads us back to the semantic antinaturalistic thesis that I was trying to disentangle from the logical claim. It may be true that the only way of making interesting sense of Hume's principle is by connecting it with the debate over naturalism. However, it would be a serious mistake to believe that Hume's principle, when so construed has the same status as Hume's principle as a metalogical theorem. To put it bluntly, there is no way in which the principle can be construed as *both* indisputable and philosophically exciting.

Now, what about the converse claim, i.e., *no-is-from-ought*? It lacks even *prima facie* plausibility. Legal and moral obligations must bear on feasible actions, and to that extent have factual implications. In ethics, there is a traditional argument that a moral law cannot regulate on what is already dictated on by laws of nature. Hence, moral laws have (negative) factual content. Last but not least, evaluations involving thick predicates have direct (positive) factual content. All this contradicts *no-is-from-ought*. Contrary to the direct principle, which connects with antinaturalism, the converse cannot bolster its relevance by an important-though-problematic philosophical thesis; it is just bizarre. But of course, on the syntactical side, the converse claim can be made as safe as the original one if one really wishes. The output will then be a logical triviality again.

5.2 Economists do not understand Hume's principle in this sobering way. With or without the sketch of an argument, they have laid weight on it. I will now identify, discuss, and in effect rebut representative claims that they have made in connection with the no-bridge principle. All relate to neutrality.

Hume's principle is the reason why positive economics is value-neutral. The argument for this claim is implicit in Robbins an other neutrality theorists but it emerges more clearly from the following commentary:
"The 'orthodox' position rests on Hume's observation that norms or proposals cannot be deduced from descriptive statements alone... Since the scientific part of economics consists exclusively of descriptive statements, it cannot have any ethical entailment, and is therefore value-free.
If this is what we mean by 'value-free' then... it seems trivially true that economics, and the social sciences in general, can be value-free." (Klappholz, 1964).
In other words, positive economics starts from assumptions that are phrased in terms of factual statements alone and it proceeds by making deductions from these statements. Because of Hume's principle, it cannot the case that positive economics contains value statements. Q.E.D.

Even if one grants the simplified picture of positive economics as a purely deductive system, the argument is flawed. Hume's principle can be put to use only if the initial premisses are exclusively factual, which they cannot be if, say, they include the evaluative vocabulary of preference. I am aware that the quoted writer would perhaps not count statements like "i prefers x to y" among the evaluative ones. But there is no question that the word "prefers" designates an evaluative concept, and according to

section 2, this is sufficient to make the proposition an evaluative one. Hume's thesis, as a piece of formal logic, is capable of handling the factual-evaluative distinction only if it is drawn *that* way.

There is a further problem and confusion. However construed, Hume's principle does not dictate on what premisses to choose – it only says that the conclusions will somehow resemble the premisses. The economist's decision not to *begin* with evaluations calls for a separate principle. It may be named Bacon's principle after the author of Novum Organum. The case for value-neutrality in positive investigations depends more crucially on Bacon's principle than on Hume's, which spells out only the mechanical part of the argument, as it were. That Hume's principle *by itself* cannot secure the desired conclusion is not a difficult point, contrary to the previous one about what counts as an evaluation. It actually received implicit recognition in the following - faultless - passage from John Neville Keynes:
"It is both possible and desirable to discuss economic uniformities independently of economic ideals, and without formulating economic precepts, although the converse proposition may not hold" (1890, p.36).
In this quote I take "possible" to refer to Hume's thesis and "desirable" to Bacon's. I will shortly return on Keynes' s allusion to "the converse".

By Hume's principle, there is a difference in kind between normative and positive propositions, and this justifies treating normative and positive questions apart. This claim would typically be argued along the same line as before, and it would then crumble at the stage of the first sentence for the reasons that have been just explained. It is more assertive than the previous one because of the following. It is impossible to claim a difference in kind between normative and positive propositions if one does not avail oneself of both Hume's thesis *and its converse*. The point transpires in this passage by an eminent economist:
"The distinction between positive and normative follows from the fact that it is logically impossible to deduce normative statements from positive assumptions, and *vice-versa*" (Lipsey, 1963, p.5).
Here, "vice-versa" states the *no-is-from-ought* addition to the initial *no-ought -from-is* principle. Many economists take the converse for granted and draw extravagantly strong conclusions from it. Notice that the previous passage by Keynes - which I said was faultless - disclaims the converse.

By Hume's principle, there is a difference in kind between normative and positive propositions, and this justifies excluding normative questions altogether from economics. This claim goes reaches one step farther than the previous one. In effect, it is Robbins's strong neutrality thesis, which at one point indeed he tried to base on Hume's principle:
"Between the generalisations of positive and normative studies there is a logical gulf...Propositions involving the verb 'ought' are different in kind from propositions involving the verb 'is'" (1932, p.149).

By Hume's principle, factual and evaluative disagreements are not resolved in the same way, and this difference points towards a major difference between positive and normative inquiries. The connection between Hume's principle and the way disagreements are resolved seems easy enough: turn your mind from Modus Ponens to Modus Tollens. If from a factual statement only factual statements can be

deduced, the only way of validly contradicting the former is by making a factual statement (the negate of each of those factual implications being itself factual). Symmetrically for the converse to Hume's principle: if from an evaluative statement only evaluative statements deductively follow, it is only by making evaluative statements that the initial one can be contradicted validly. That normative and positive disagreements have distinctive features is a popular point to make among economists, which presumably originates in the positivist tradition of the discipline (see again Lipsey, 1963, p.4-5). The issue is distinct from that of neutrality, and it should be examined not only in relation to Hume's principle, but for its own sake, which I will not do here.[26]

In this section I have mostly been arguing that there is no way of making Hume's principle both indisputable and assertive – of having the best of the two worlds of logic and philosophy. Those economists who have argued for strong (and even weak) neutrality conclusions on the basis of Hume's principle are no different from those antinaturalist philosophers who believed that they had found a "proof" of their doctrine. I now move to a more substantial argument for neutrality.

6. Weber's neutrality argument and economics

6.1 As is well-known, Weber (1922) promoted the basic distinction between making a value judgment, as when someone says "x is good", and relating to it neutrally, as social scientists do when investigating, reconstructing, or trying to explain the very same judgment. Weber draws illustrates his distinction by the now classic example of the trade-unionist. The "axiologically neutral" social science, he says, has completed its task once it has provided the most coherent view of the trade-unionist's value-commitments as well as some account of how they came about. Allegedly, this task does not involve the social scientist in adopting, endorsing, approving of, or recommending to adopt the trade unionist's values.[27] It was due to Robbins to popularize Weber's distinction among economists, and thus to open the door to a new way of discussing normative issues in economics. Once the Weberian stone is extracted from the matrix of Hume's thesis in which Robbins buried it irrelevantly, the landmmark contribution of his Essay is put in the proper perspective. His own example (1932, p.148) is as neat and straightforward as Weber's: economists do not need to, and should not, express the view that it is good or bad to consume pork in order to investigate the consumer's preferences for this commodity. *To deal with evaluations does not involve the social scientist in making evaluations, and he should refrain from doing so.* This may be called *Weber's principle*. I will distinguish it

[26] As an interesting elaboration of the disagreement issue, Sen (1970, p.79 sq) distinguishes between two kinds of value judgments, the "non-basic" ones, which can be dismissed on the basis of a factual argument, and the "basic" ones - intuitively the deepest commitments - which cannot. Sen's distinction is drawn *within* evaluations contrary to the more common claim that no evaluative debate can be settled on the basis of facts alone.

[27] See Der Sinn der Wertfreiheit in Gesammelte Aufsätze zur Wissenschaftslehre (1922, p. 500-502). General indications of what it means for the scientist neutrally to relate to value judgment can be collected from the same paper (e.g., 1922, p. 485). The earlier article in the collection, Die Objectivität sozialwissenschaftlicher und sozialpolitischer Erkenntnis, is briefer on the topic of value neutrality but is nonetheless important because it draws the connection, to discussed below, with the topic of instrumental rationality.

from *Weber's argument*, which involves the further ingredient of instrumental reasoning, to be discussed at a later stage.

For simplicity I am glossing over the discussion of where and how exactly social scientists are entitled to make their own evaluations. There is indeed a supplementary Weberian theme that they may profess evaluations not only outside but even within academic circles, provided they emphasize that they talk *in nomine proprio*. After Robbins economists have said the same thing in their words, i.e., that whenever they make a value judgment, they do so *qua* citizens, not *qua* economists, and that it is permitted for them to speak out *qua* citizens even in their professional work if they do so both consciously and recognizably.

I will argue in this section that Weber's neutrality argument is surrounded with major difficulties. Part of my discussion is stated at Weber's own level of generality, i.e., social sciences generally, while other critical points depend on specific features of economics. The conclusive section attempts to turn the difficulties into a constructive argument.

6.2 In the same way as Bacon's principle is to be distinguished from Hume's, Weber's has two parts: it says in effect that it is both *possible* and *desirable* to separate evaluations made by social scientists from those evaluations which they deal with. The principle may then be rephrased and expanded using today's logical language. It then says that for any evaluative proposition which is likely to occur in the social sciences, (i) it is possible for the social scientist to determine who would assert it, and (ii) it is desirable for the social scientist not to assert it himself. Stronger readings underlie claims that are casually made in the literature, but none of them seems to be sensible even at a preliminary level of discussion. For instance, if I wrote that:
(ii') it is desirable for the social scientist not to deal with evaluative propositions that he would himself assert,
I would block economics from dealing with monotonic preferences on the ground that I myself prefer more good to less, which is absurd. When I write that:
(ii") it is desirable for the social scientist not to deal with evaluative propositions that he would be alone to assert,
the silly consequence disappears. However, it would be commendable for the social scientist sometimes to investigate his own evaluations, and sometimes not, depending on whether they are shared. This sounds arbitrary. If one really believes that evaluations can and should be investigated neutrally, it seems logical not to make an exception for those originating in the observer. From Weber's own point of view (ii) appears to be the only satisfactory claim to make.

There are separate problems for (i) and (ii). As to the possibility part (i), the major difficulty has perhaps to do with *those evaluations which cannot be attributed to anybody in particular*. When "the trade-unionist" refers to a particular historical individual, it is not difficult in principle to determine whether a particular evaluative proposition could have been asserted by him; whether this can be done in practice is of course another matter. The analysis is significantly more complex when "the trade-unionist" refers to an ideal-typical individual, or in Robbins's related example of a (typical) consumer's preference for pork over fish. However, with ideal-typical constructions the problem of who is responsible for the evaluation can sometimes be resolved nominally. For instance, in elementary microeconomics the consumer is

defined to be the bearer of preferences of a certain kind (i.e., monotonic or just non-satiable, convex, and so on). In cases like these, there is a conceptually recognizable subject behind the preference evaluations and little risk of confounding these evaluations with the economist's. By contrast, evaluative statements such as:
"x is a better state of affairs than y for society",
are troublesome because they are more often than not discussed without mentioning *who* is making the assertion. According to (i) there must be a recognizable source for this evaluation, but where is it to be found? Notice that methodological individualism makes the attribution problem more acute, since on this view "society" cannot refer to the source of any evaluation; only individuals (though possibly ideal-typical individuals) can make judgments.

Welfare economists used to circumvent the attribution problem by inventing "the client".[28] For instance, it would be a client who would apply the Pareto principle in order to conclude that x is a better state of affairs than y for society. There would be a client to require that the Pareto principle be strengthened into a utilitarian formula, and another client to resist this move. All value judgments would be the clients', and the welfare economist - like an independent consultant - could remain conveniently neutral between them. The client was meant to be some concrete individual, a point which was meant to address worries about methodological individualism; so with this doctrine, the welfare economists killed several birds with one stone.[29] However, it is just an unimpressive trick. Welfare economists mechanically created a bearer for each and every evaluation that would embarrass them. While pretending to respond to existing individuals, they were in effect multiplying notional entities. Observe the difference with ideal-typical constructions. The latter serve to unify several properties into a limited number of constructs, and they arguably have some counterpart in the real world.

Impersonal evaluations such as "x is a better state of affairs than y for society" are pervasive in economics. Lest the reader may believe that they occur only in specialized areas such as welfare economics and social choice theory, below I give further evidence from macroeconomics. Evaluations of this kind are unpalatable to the Weberians because they blur a preliminary distinction that they have always taken for granted. For them the neutrality trial amounts to adjudicating on which, of the social scientist and *somebody else*, makes a value judgment. I shatter this oversimplified picture by pointing out that there is not always somebody else to be taken into consideration. Notice that I have made my case gently enough in focusing on impersonal evaluations. The case of evaluations originating in ideal-typical constructions is far from being as clear-cut in general as the pork-and-fish example might suggest.

As to the desirability part (ii), there is a simple objection based on the way *thick* evaluative predicates typically function. Evaluative propositions involving thick predicates are easy to argue about. The typical argument takes on the form of a sequence of evaluations, e.g.:
-"Leonidas was not courageous".
-"Leonidas *was* courageous since he fought the Persians knowing that he would die".

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[28] See Little (1952) and Bergson (1954).
[29] The client would never be the State but some public official in need of personal guidance. Arrow (1984a, ch.4) takes up this issue.

Weber's principle in its part (ii) would preclude the historian from making the latter, definitely *evaluative* reply about Leonidas. This is one of those cases in which the neutrality thesis becomes distressing. The reply made here relies on plain factual knowledge. To ban evaluations would have the paradoxical effect of making some factual knowledge unavailable. There are manoeuvres to circumvent the unpleasant conclusion, and as far as I can see they amount first to interpreting thick predicates like *courageous* as if they were ambiguous between the factual and the evaluative, and then interpreting the proposition factually. In section 2 I stressed that thickness and ambiguity were not the same thing. What is wrong with this manoeuvre can be felt by considering the alternative dialogue:

-"Leonidas was not the sort of man to fight when he knew that there was a chance of dying".

-"Leonidas *was* that sort of man since etc".

The first dialogue started with a claim that could have been contradicted in many ways, which is not the case with the second. A feature of interest has been lost, i.e., the wider semantic range, which goes at the same time as the evaluative status of the proposition.

In a different terminology Weber discussed thickness when considering the concept of *progress*. He found it so heavily value-loaded that he ended up recommending that social scientists should give it up altogether.[30] This is a rather strong move, hardly less drastic than, say, to impose a ban on *courageous* in military history. One wonders how many interesting works would have been lost if prohibitions of that sort had been implemented. What about "decadence", "revolution", "reaction", and so on? Thick evaluative predicates are pervasive in the social sciences. This was the limited grain of truth in Myrdal's (1958) conception of social sciences as being "value-impregnated" throughout. As far as economics is concerned, the paper has emphasized their rôle without trying to record them all.[31]

Another case can be made against the desirability part (ii) of Weber's principle by pointing out that it does not allow for different modes of endorsement. If individual i says "I prefer x to y", the observer can endorse i's evaluation either by repeating the same first-order evaluation: "I too prefer x to y", or by making distinctively second-order evaluations such as "It is good to prefer x to y" or "It is good for i to prefer x to y". With their loose talk of approbation, the Weberians have overlooked the distinction here. Far from being a scholastic refinement it matters a great deal in the context of a neutrality discussion. The various modes of endorsement do not carry the same weight: typically, second-order evaluations provide *a reason* for first-order evaluations. The reader of a social science paper may be justified in regarding the economist's approbation of i's preferences as being irrelevant if made one way, and quite informative if made in another way. This issue of second-order versus first-order expression is likely to interfere with the issue of thick predicates. To illustrate, consider the classic controversy about the discount rate in microeconomics:

-Individual i: "I prefer 100£ today to 100£ tomorrow".

-Economist 1: "It is irrational for i not to prefer 100£ today to 100£ tomorrow, and I will tell you why".

[30] Weber, Der Sinn der Wertfreiheit (in 1922, p.516).

[31] Here is an intriguing example: *poverty*. Sen (1981) mentions that it is best construed evaluatively, hence in the language of this paper, as a thick predicate.

-Economist 2: "It is neither rational nor irrational for i not to prefer 100£ today to 100£ tomorrow, and I will tell you why".
An unqualified version of Weber's principle would drive this controversy out of microeconomics into the realm of personal evaluations, which would be the worse for the field. I suspect that such a drastic move can only be explained by a serious misunderstanding, i.e., the confounding of Economists 1 and 2's reasoned claim with something like "Personally, I have, I do not have a preference between 100£ today and 100£ tomorrow".

6.3 Weber's principle is usually defended at the same time, and in tight connection with, a time-honoured claim about instrumental reasoning. Scientists, it is often said, can and should take as given the ends of those whom they are requested to advise. Given these ends, they would explore the means to achieve them, which can be done just by citing the relevant laws of nature. To take a position on the ends themselves is neither needed nor desirable. This is a neutrality claim for *applied science in general*. It is presented as such in a number of positivist or related writings. Poincaré's (1913) eloquent defence of neutrality may be cited here as an example among many.[32] Weber gave a twist to the positivist claim by adapting it to the different problem situation of *the theoretical social science* and he connected it with his own value-neutrality argument. This resulted in a claim like this: *social scientists can and should take as given the ends of those whose actions they investigate*. Taken these ends as given, social scientists would explore the means to achieve it and in this way uncover relevant laws of behaviour. To take a position on the agent's ends would be neither needed nor desirable. The supporting example was the law of diminishing marginal utility, which does not involve the neo-classical theorist in examining in any detail, let alone judging, the economic man's ends.

Logically, this *instrumental neutrality* claim stands or falls by itself; hence the distinction I made above between what Weber's principle and his overall argument. This basic distinction is often overlooked in the literature. The Weberians have conflated the various parts of their neutrality argument in a way which makes them indistinguishable to the hasty reader's eyes: it is a package, a matter of take-it-or-leave-it. In welfare economics the conflation of issues led the habit of using "ends" and "values" more or less interchangeably, a looseness of talk Sen (1970) rightly complained about.[33]

I do not want to deny that the instrumental neutrality claim is roughly plausible for various social science inquiries, such as those of military history, prehistory or archeology, which do employ instrumental reasoning. My target is economics, and I will argue that the claim is unlikely to carry much weight for this field *because the end-means distinction is not really part of the economist's theoretical apparatus*. The apparatus for investigating purposeful action in economics consists of the preference concept and related notions. So the two relevant dichotomies cut between preference - viewed as a binary relation - and the objects of preference, and between preference - viewed as a desirability map - and feasibility constraints. Neither dichotomy cuts in

[32] Poincaré's (1913) neutrality argument is also famous for including a version of Hume's principle. His treatment is flawed for roughly the same reasons as most treatments are, i.e., he mistakes a logical triviality for a much more powerful philosophical claim.
[33] I will once again target Robbins for criticism: "Economics is neutral as between ends. Economics cannot pronounce on the validity of ultimate judgments of values" (1932, p.147).

the same way as ends versus means. There is a translation rule to go from the old instrumental language to the modern language of preference, but it does not work the other way round, as I will now explain.

Suppose that E and E' are an agent's ends, while M and M' are the means available to this agent. Instrumental reasoning leads to conclusions of the following style: E can be reached by means of either M or M', but it is better to employ M; E' can be reached again by means of either M or M', but it is better to employ E'. In the preference language the previous conclusions would be translated by saying that (E,M) is preferred to (E, M'), and (E',M') to (E',M), each of these pairs being feasible. More generally, everything that can be deduced from instrumental reasoning can be expressed in terms of preference and feasibility data. The procedure consists in lumping together descriptions of the ends and the means into states of affairs; and then, a preference map and a feasibility set are constructed so as to reproduce the conclusions drawn from instrumental reasoning, as in the example just given. By contrast, the converse translation is not always possible. The preference language makes it possible, for example, to compare (E,M) with (E',M'), and more generally, to decide whether it is better - in one of the economist's senses - to reach some end with some expense of means or to reach another end with another expense of means. Instrumental reasoning fixes the end and draws conclusions relative only to that end. It is unable to extend its comparisons to several ends at a time.

The point that the modern preference language is more expressive than the old instrumental language is not exactly a novel one, but it is not often made at the proper level of abstraction. It is common to mention the availability of continuous trade-offs as a reason why the modern apparatus supersedes the old.[34] This is an irrelevant suggestion. Even *irregular* preferences have a greater expressive power than the instrumental categories. The crucial moves are the lumping together of relevant descriptions into states of affairs, and the realization that preferences bear on states of affairs, not on actions. (I have used the latter claim already in section 4.) However formulated, the point about relative expressive power has apparently escaped the neutrality theorists' notice. After Weber, economists have often repeated the slogan "Take ends as given" as if it applied to their field as straightforwardly as it does to archeology. The marginalist laws, which concern the agent's utility function (preferences), did not logically fit with the ends-means language, but they would nonetheless endorse the case for marginalism that is based on the slogan.

The few cases in theoretical economics - applied economics is not part of the present discussion - where ends (or objectives) are mentioned as such do not give much support to the instrumental neutrality claim. The *k*% rule discussed in section 3 is one such case. The monetarists who have proposed it as an objective to be achieved by the central banks have also discussed some (fallible) techniques to approximate the desired end – e.g., to announce the rule publically, not to pursue an interest rate objective at the same time, to compensate for the effect of currency fluctuations. Thus, the *k*% rule provides an example of instrumental reasoning in economics which is both clear-cut and nontrivial. Does it support the claim that economists reason only from "ends taken as given"? No. Inquiries on how to achieve it were just

[34] This is Harsanyi's (1976) somewhat inadequate way of making the point.

a small part of the work, which was primarily concerned with how to *defend the rule itself*.

Friedman's basic argument was that changes in the money stock had an effect on the real economy only in the short-run. Increased or even accelerating inflation would be the only remaining effect in the long-run. This argument involved weighing long-run against short-run consequences, especially damages brought about by inflation against benefits riped from temporary surges in employment. It was an evaluative argument throughout. It raised substantial complaints from the Keynesians and some monetarists as well, but nobody objected to it on the formal ground that economics did not have to pass judgment on policy objectives. Others argued for flexible money supply rules, an interest rate objective, or various forms of policy mix, and they did it on a similarly evaluative basis. This was an important macroeconomic controversy, and one may be pleased in retrospect that it was not blocked by pedanticism about value-neutrality.[35]

To return to the basic point, i.e., conceptual dissimilarities between the economists' categories and those of instrumental resoning, I have tried to cut the ground from under the Weberians' feet. This may be an effective *ad hominem* strategy but it seems to leave the argument incomplete substantially. A neo-Weberian school of neutrality might emerge with slogans such as "Be neutral as between preferences" and "Take preferences as given". It takes more than a few lines to explain what is wrong with these revisionist slogans, but the gist of the argument is already available. Preferences are particular cases of evaluations, and I have argued in 6.2 that it is neither always possible nor always desirable to separate the social scientists' evaluations from those which they investigate. The claim that I will not try to elaborate on now is that this encouragement to non-neutrality holds for preferences no less strongly than it does for other evaluations. Here is just a brief supporting comment, which follows up the macroeconomic example. A natural way to reorganize the monetarists versus Keynesians debate is to get rid of the instrumental language of "objectives" and "instruments", and say that each camp was in effect trying to construct a social welfare preference map. Adopting this language, one is led to conclude that this major controversy bore on the *content* of social preferences, in contradistinction with the above slogans. Social preferences are not the sort of evaluations that can easily be taken for granted.

7. In defence of the weak non-neutrality thesis

Let me take stock of the overall work done on value neutrality up to this point. On the basis of earlier conceptual groundwork, I pointed out that the extreme non-neutrality thesis 4) construed evaluations too broadly, and the extreme neutrality thesis 1) too narrowly, so that it was possible to part with these theses without entering a detailed refutation. The weak neutrality thesis 3) offers more resistance, and it is only now that it can be assessed fully. First, the welfare economists' argument that seemingly evaluative predicates are not so proved to be unconvincing.

[35] Notice that Friedman's (1953) soothing view of neutrality at the beginning of the notorious essay "The Methodology of Positive Economics" is at variance with his practice of making recommendations and fighting for them.

Second, Hume's principle was seen to be much too weak to deliver such an assertive conclusion as neutrality. Third and last, it remains Weber's argument, but the latter has just been shown to be open to severe objections. I may conclude that thesis 3) is left without any supporting argument. The conclusions thus reached are all negative. Is it possible to turn them now into a constructive argument of sorts?

The weak non-neutrality thesis 3) has been left untouched by all the points made in succession, which nearly sounds like a positive argument for it. However, more can be said if Weber's argument is reconsidered. Contrary to so many of the points scrutinized before, the latter is not grossly flawed. It is in trouble often, but not always, the sources of difficulties being (i) thick evaluations, (ii) evaluations that are nobody's, (iii) second-order evaluations, (iv) the difficulty of taking various evaluations (e.g., social preferences) as given. Weber's argument can be *qualified* to take each of these difficulties into account. When this is done, it will resemble the initial argument only remotely, and what is more important, the revised principle will support non-neutrality no less well than neutrality. This is the way in which Weber's argument can be turned into a constructive argument for thesis 3).

This line of reasoning entails drawing the division between positive and normative economics in a certain way. Specifically, I submit that positive economics *includes* those propositions which are neither obligations, nor prescriptions, nor evaluations (the trivial case), or are evaluations but involve an unproblematic evaluative predicate (the nontrivial case). The trivial case takes care of problem (i). To elaborate on the nontrivial case I define an evaluative predicate to be *problematic* if either it does not refer to any recognizable subject (problem (ii)) or the subject is recognizable but the content of the predicate must be reconstructed (problem (iv)), or it is a second-order evaluative predicate (problem (i)). I do not mean to imply that all and every occurrence of a problematic evaluative predicate will correspond with a violation of neutrality. Rather, this notion includes all cases of evaluative non-neutrality, plus a grey area in which the question arises. (The question is sometimes whether neutrality is desirable, sometimes whether it is at all possible.) I was careful in writing "includes" in the first sentence instead of "consists of". I just mean to state a *sufficient* condition for an economic proposition to count as positive. A characterization goes beyond the means of this paper.

Each category of problems calls for further work, which would help to reduce the grey area. To decide whether an evaluation can be attributed to a subject involves one in discussing ideal-typical constructions more carefully than I have done here. Some have objected to Weber that he preempted the debate over neutrality by putting too much in his notion of an ideal-type. This is an insightful objection, although it should not be pushed to the extreme of Myrdal and others, who mistake cognitive norms for evaluative norms (the concept of equilibrium being a case in point). It is not easy to say whether an evaluation has been reconstructed since it is matter of degree. It is common in economics to make *a priori* qualitative assumptions on the agent's preferences, and only then discuss the content of these preferences. For instance, the consumers' preferences will be investigated against the background of the assumption that the substitution effect is negative.[36] Does such a investigation qualify as a reconstruction? Finally, the point about second-order evaluations must

[36] Hildenbrand's (1995) work on market demand is a recent example.

be stated with care. First-order evaluations like "It is good if the other can benefit from what I have" are not always easy to disentangle from second-order evaluations such "Altruism is a good principle of life". There is now a growing interest in the social effects of ethical evaluations.[37] When pursuing this line of inquiry, economists may in due course be confronted with second-order evaluations that are genuinely the agents', not theirs. Evidently, more work needs to be done to consolidate the weak non-neutrality conclusion of this paper.

The reader will perhaps have noticed that some relevant topics are omitted from the overall discussion. I have entirely left out interpersonal comparisons of utility and preferences, despite the fact some of the writers mentioned here - prominently Robbins - described them as being normative in character. This view is not so common now as it was, and its flaws are perhaps sufficiently clear for my cavalier treatment to be excused. More seriously, I have said nothing about causal attribution as a way of separating between positive and normative reasoning, although both Weber and the early economic methodologists, like John Neville Keynes, had made the point. Given the recent outburst of work on the topic, causality is not a notion that be taken casually, so I refrained from discussing it. Nor have I really dealt with the issue of hypothetical versus categorical imperatives, which philosophers sometimes raise in the context of neutrality. I have not repeated here the argument I made elsewhere against the view that social choice theory is a purely formalistic discipline.[38] However, the main omitted topic is rationality, which can simply not be handled at a paper's length. One of the strong intuitive reasons to turn the scale against neutrality is the pervasiveness of decision- and game-theoretic considerations in today's microeconomics and even macroeconomics, a intellectual phenomenon that the older writers can be excused for not foreshadowing.

Despite these lacunae I hope to leave the debate about axiological neutrality in a better state than I found it. The crucial move of the paper, to repeat, was to select the proposition, rather than the judgment, to be the substratum of evaluations, and to define neutrality as a question secondary to the more basic decision of treating the proposition under consideration as being evaluative. The methodological literature does not make this separation of issues, and this arguably accounts for not a few unclarities in it. Philosophically, I did not take side on the deepest problem of all, i.e., whether evaluations have a truth value *qua* evaluations (and not only because of their factual content when they are thick evaluations). Some philosophers will complain that my notion of a proposition as the bearer of logical relations but not necessarily of truth values is simply incomplete. They are welcome to use theirs, but I did not need the truth value part of the definition to make the clarifications of this paper.

I close it with a short discussion of a more historical sort: why is it that a majority of economists are so strongly drawn to value-neutrality that even qualified non-neutrality claims, like the one made in this paper, will sound dubiously heterodox? A reasonable answer is that logical positivism had a deep influence on the 20th century economists' way of understanding and describing their own work, which in turn

[37] The work on people's attitudes towards distributive justice is growing fast. See Miller (1992) and Schokkaert (1999) for surveys.
[38] Hylland (1986) and Fleurbaey (1996) have argued for this view of social choice theory. Mongin (1999) rebuts it by examining some of representative work of the social choice theorists themselves.

influenced the way economics was *practiced* when it came to *normative* issues.[39] The Carnap connection is visible in welfare economics and in part accounts for the obsessive search for positive respectability within that area. However, there is a less obvious, albeit perhaps no less important explanation, which goes deeper into the tradition of economics. I suspect that economists have been attracted to drastic neutrality claims in part *because they understand normative conclusions to be more demanding than they really are*. As explained in section 3, they concentrate on obligations and prescriptions rather than evaluations. Besides, they tend to see anything normative as being ethical. Since commonsense tells them that economics cannot produce much normative output of that elevated brand, they end up being diffident even about straightforward economic evaluations. This sketch of an explanation leads to the deeper question of why economists, more than other social scientists, have blurred rather obvious differences, and the guess is that they are still under the influence of utilitarianism. Philosophically, the utilitarian tradition encourages one to think of statements about the good as being both unrestricted and (actually, for that reason) closely linked with recommendations. Utilitarians infer what should be done from what they have identified to be the ultimately best. Even if economists have come to distance themselves from utilitarianism, and some have strongly rejected it, they are still routinely consequentialist in the utilitarians' way.

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[39] For other areas of economics the practical influence of logical positivism is a matter of dispute; see Hausman (1992) on this.

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