ORIGINS AND DEVELOPMENT OF THE TREND TOWARD VALUE-FREE ECONOMICS

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I. INTRODUCTION

The idea of value-free economics is an old methodological issue. It has given rise to one of the most important controversies in the history of economic thought. The discussion was important because it had to do with the scientific nature of economics. One can still find a significant number of methodological works (e.g. Coddington 1972, Gordon 1977, Samuels 1977, Sugden 1981, Colander 1994) which echo this old controversy. Most economists today, though, would agree that the claim of an economic theory free from values is essential in establishing the scientific nature of the discipline. A positive, value-free economics, in the sense of not relying on any particular set of value judgments or on any philosophical or psychological framework, is generally seen as the ideal. This approach has crucially influenced important branches of economics such as microeconomic theory. The current established position was a product of a historical process which played a significant role in the formation of the body of economic theory. Furthermore, the idea of what is value-free economics has changed since its first introduction as a scientific ideal. The nature of this change is also important for understanding the present conception of the scientific character of economics.

The purpose of this paper is to trace the origins and the development of the tendency towards a value-free economic science. In order to understand this process we need to trace the evolution of the meaning of the term value-free. Thus the paper starts with a section discussing the notion and the types of objectivity and their historical evolution. The next

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Journal of the History of Economic Thought, 19, Fali 1997. ©1997 by the History of Economics Society. section deals with the gradual introduction of the value-free idea in economics, which occurred in the classical school. It also discusses the conception of value-free that classical economists had. Section IV examines the change in the idea of what constitutes value-free economics in the marginal school and also in the neoclassical school. After noticing that there was a continuous broadening of the meaning of the term "value judgments," section V assesses this development by discussing two examples from modern economics. Section VI examines the findings and draws some conclusions concerning the nature of value-free economics.

II. TYPES AND DEVELOPMENT OF THE CONCEPT OF OBJECTIVITY

It is clear that there is a close connection between the concept of objectivity and the idea of value-free economics. As was mentioned, value free economics is mainly appreciated because it is objective. Thus a discussion of the meaning of objectivity is necessary. Contemporary economists and many scientists conceive the term "objective" as implying neutrality, or in T. Nagel's words : "the view from nowhere" (Nagel 1986). However, it should be pointed out that this was not always the meaning of objectivity. Furthermore as will be seen, it is only one aspect of the notion of objectivity.

Historians and philosophers of science, especially L. Daston (1992), have distinguished three types of objectivity. The first has been termed aperspectival objectivity and refers to eliminating individual or group idiosyncrasies. It relates to social context and to the ethos projected by the researcher. In particular, according to this notion "a view or form of thought is more objective than another if it relies less on the specifics of the individual's makeup and position in the world, or on the character of the particular type of creature he is" (Nagel 1986, pp. 4-5). As P. Dear states, "objectivity can be conceptualized in terms of its opposite, subjectivity, which relates to the perspective of an individual human subject" (Dear 1992, p. 619). According to many historians of science this type of objectivity dominates current usage (e.g. Daston 1992, p. 599).

The second type has been called ontological objectivity and it relates to the ultimate structure of reality. In short, it is about the world. Finally the third type, mechanical objectivity, forbids judgment and interpretation in reporting and picturing scientific results. It precludes judgment, in the sense of suppressing the universal human propensity to judge and to aestheticize. The difference between perspectival and mechanical objectivity can be seen with reference to photography. The photograph is the perfect example of mechanical objectivity because it appears to be a direct representation of nature without any human interference. On the other hand perspectival objectivity rejects the photograph because it preserves the peculiarly individual point of view or the unfamiliar angle of vision (ibid., p. 616).

Aperspectival objectivity made its first appearance in moral and aesthetic philosophy. It was subsequently imported into the scientific culture of the natural sciences. Before this introduction, in the seventeenth century, the term objective had to do with objects or with the truth (Dear 1992). It has been maintained that the success in terms of the influence of aperspectival objectivity was due to the reorganization of science. The increase in the number of scientists, which took place mainly in the nineteenth century, required greater communication. Aperspectival objectivity facilitated greater communicability among scientists (Daston 1992, p. 609). It has also been argued that the trend towards quantification, which gained momentum during the same period, has been associated with objectivity, not because it mirrors reality but because it serves the ideal of communicability (Porter 1992).

The above discussion can be connected to the meaning of the term value judgments. The conception of many contemporary economists of the term value judgments is that they are not "objective" statements in the sense of aperspectival objectivity. E. Nagel, however, has distinguished another category of value judgments, the characterizing or methodological value judgments which involve the mode and the criteria of investigation and also the choice of subject matter to be investigated (Nagel 1961). Although the role of methodological value judgments in economics has received little attention in the history of economics, there are signs of an increasing interest especially with reference to econometrics (e.g. Blaug 1985, Leamer 1983, Mayer 1993). However, as we shall see, the bulk of the discussion in the history of economics has been focused on the first category of value judgments.

III. THE IDEA OF THE VALUE-FREE IN THE CLASSICAL SCHOOL

In the pre-classical economic thought, the idea of value-free or aperspectival objectivity was not an issue. The purpose of the scholastic analysis was not pure scientific curiosity. It was a desire to understand what the scholastics were called upon to judge from a moral standpoint (Schumpeter 1954, p. 102). The best example is the discussion about interest (Karayiannis 1995).

As was mentioned, there was a gradual shift from ontological objectivity to aperspectival objectivity. One can find clear traces of this in the work of D. Hume. In a statement giving advice on how to judge works of art, Hume states: "In like manner, when any work is addressed to the public, though I should have a friendship or enmity with the author, I must depart from this situation, and, considering myself as a man in general, forget if possible my individual being, and my peculiar circumstances" (Hume 1826, p. 271). One has to note here that although Hume seems to advocate aperspectival objectivity, he is not entirely certain if it is epistemologically possible. Subsequent interpretations by economists consider Hume to be the first who made a clear separation between positive and normative by distinguishing "ought" from "is." The well-known concept of "Hume's guillotine" is taken to distinguish descriptive statements from norms or ethical pronouncements (Blaug 1980, p. 130).

The trend towards aperspectival objectivity took more definite shape in Adam Smith's work "The Theory of Moral Sentiments." Discussing the comparison of different interests, Smith writes:

> Before we can make any proper comparison of those opposite interests, we must change our position. We must view them, neither from our own place nor from his, neither with our own eyes nor with his, but from the place and with the eyes of a third person, who has no particular connection to either, and who judges with impartiality, between us (Smith 1976, p.135).

For many eighteenth century writers such as Smith, scientists (mathematicians, natural philosophers) were the purest example of impartiality (Daston 1992, p. 605). However, the reason for this was their aloofness concerning public opinion criticism of their work.

As was realized early on by historians of economic thought (Gide and Rist 1915, p. 350), Nassau Senior is considered to be one of the first thinkers who brought out the distinction between positive and normative in economics. In a representative statement he writes: "The conclusions of the economist, whatever be their generality and their truth, do not authorize him in adding a single syllable of advice" and also that "the business of the political economist is neither to recommend nor to neglect, but to state general principles" (quoted in Gray 1931, p. 273). J. S. Mill's ideas were developed in the same intellectual climate. He emphasized the distinction between "art" and the "science" of economics. In a similar manner to Senior, Mill conceived art as containing ethical premises (Hutchison 1964, pp. 29-31). This was combined with his conviction about methodological monism (Mill 1874, p. 143). His belief was that economics should be developed in the same way as more positive sciences like geometry (Mill 1874, p. 144). He was one of the first economists to explicitly state that positive sciences should be the model for economics.

J. Cairnes, continuing the tradition of Mill and Senior, believed that political economy is exactly the same kind of science as chemistry and physiology (Cairnes 1875, p. 20). This parallelism of political economy with natural sciences leads to the idea that political economy is a neutral science and that the political economist is an objective scientist. As he states: "In the first place, then, you will remark that, as thus conceived, Political Economy stands apart from all particular systems of social or industrial existence.... But this notwithstanding, the science is neutral, as between social schemes, in this important sense. It pronounces no judgment on the worthiness or desirableness of the ends aimed at such systems" (Cairnes 1875, p. 20). One could also note the emergence of a trend of emphasizing the autonomy of economics as against the other social or moral sciences (Schumpeter 1954, p. 535).

In general, the idea of aperspectival objectivity was associated with the distinction between art and the science of economics. The term "art" for the classical economists mainly meant the corpus of political and social views. They did not think that the use of concepts like pleasure, pain, utility and ideas like the "greatest happiness" principle were in any sense value judgments (Drakopoulos 1991).

IV. THE VALUE-FREE IN MARGINALISM AND NEOCLASSICAL ECONOMICS

Marginalism. In the first marginalist generation, one can see the increasing attention to issues relating to the nature of economics as a discipline. W. S. Jevons, for instance, viewed economics as basically a mathematical pursuit, its scope narrowly defined by the mechanics of self-interest and utility (Winch 1972, p. 328). Jevons was a believer in methodological monism and also in the idea that astronomy was the perfect model of science, something that economics should aspire to become (Jevons 1971, pp. 6, 25). In his view, exact science meant the exclusion of all normative or political elements. As a consequence of this belief, he omitted the term "Political" from the second edition of his *Theory of Political Economy*. In spite of his conviction of a neutral and exact science of economics, Jevons defined economics in terms of subjective sensations like pleasure and pain (Jevons 1871, p. 44).

In a similar manner, L. Walras believed that the use of mathematics would make pure economics a science of absolute exactness like physics or mechanics (Walras 1965, pp. 47-48). Thus he thought of economics as a pure science which was distinguished by the complete indifference

to consequences, good or bad, with which it carries in the pursuit of pure truth. C. Menger also thought that economics can be as exact as the physical sciences (Menger 1963, p. 218). His convictions regarding pure economics can also be seen in his well-known methodological debate with the German historical school. His main concern was to defend against the attacks of the historical economists (Schumpeter 1954, p. 814).

In the latter half of the nineteenth century, the second marginalist generation of economists emerged. At the same time, the influence of positivism as the dominant scientific philosophy became more apparent. The starting point of positivism was that the enormous success of physical sciences meant that their scientific methodology should be the ideal for disciplines. One of the main components of the methodology of the physical sciences was the rejection of all normative, ethical or metaphysical elements (see Mirowski 1989). Thus the idea of a value-free economics became more prevalent in the writings of the second marginalist generation. This must also be seen in connection with the increasing use of mathematics in economic theory (Mirowski 1991; Drakopoulos 1994). However, there was also a major development in the sense that psychological elements started to be considered as value-laden and therefore unacceptable in the corpus of economic theory. The implication is that there was little interest in developments in the field of psychology, a tendency that can also be found in the work of subsequent economists (see Coats 1976).

Economists of the second marginalist generation started to become much more aware of the methodological discussion concerning value judgments. In 1883, H. Sidgwick summarized the dominant ideas concerning the role of values in economics. Continuing the positivist tradition, he emphasized the distinction between "what is" and "what ought to be." Sidgwick, however, accepted the existence of "ultimate values" which prevail in one's culture at one's own time. The science of economics corresponds to the "what is" part. The art of economics, the propositions of which are precepts, corresponds to these ultimate values (Sidgwick 1883). V. Pareto parallels economics with rational mechanics, which in methodological terms implies that "it deduces its results from experience without bringing in any metaphysical entity" (Pareto 1971, p. 113). Furthermore, he attempted to reconstruct marginal utility theory without using the concept of utility by means of his own concept of ophelimity. One could explain this attitude in terms of suspicion that utility as a term had no positive status. Another indication for this was Pareto's reservations about the scientific status of interpersonal comparisons of utility. In the same spirit. P. Wicksteed was anxious that his economic ideas not be associated with "a hedonistic theory of ethics" (Wicksteed 1933, p. 434).

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In the work of I. Fisher, one can discern the first concrete attempt to include psychological assumptions in the definition of values. For Fisher, positive economics should be free from any psychological assumptions: "the economist need not envelop his own science in the hazes of ethics. psychology, biology and metaphysics" (Fisher 1965, p. 23). Fisher seemed to be unhappy with the term utility because it is the heritage of J. Bentham and his theory of pleasure and pains (ibid., p. 23). In general, Fisher was one of the first economists of this period to express explicitly his views about the utilitarian bias of economics and to call for its aban-The important point here is that, concepts (such as utility) donment.¹ which the previous marginalists thought of as positive or value-free. gradually started to be seen as inappropriate for a positive science of economics. Furthermore, it can be discerned that in terms of types of objectivity the general approach of marginalists is based on the concept of aperspectival objectivity.

Post-Marginalist Developments. In the first decades of this century, the discussions among economists concerning objectivity and value judgments started to be influenced by the increasingly popular scientific philosophy of logical positivism. The verification principle, which stated that a sentence has no meaning if it can not be verified either analytically or empirically, was in the core of logical positivism (Hanfling 1981). That attitude towards value judgments is summarized by R. Carnap: "Value judgments have no theoretical sense. Therefore we assign them to the realm of metaphysics" (Carnap 1981, p. 150). Logical positivism viewed physics as the scientific ideal and advocated methodological monism.

J. N. Keynes developed further the theme of art and science in economics that we find in the work of previous economists. In particular, he distinguished three categories: a) Positive science, which is defined as a body of a systematized knowledge concerning what is. The object of positive science is the establishment of uniformities. b) Normative science, which is a body of systematized knowledge relating to criteria of what ought to be, the object of which is the determination of ideals. c) Art, which is the formulation of precepts (ibid., p. 34). The second category is the novel point since previous economists would not accept the possibility of a normative science. Keynes thought that: "We ought at least to recognize as fundamental a positive science of political economy which is concerned purely with what is and which seeks to determine

^{1.} The question whether Fisher and Pareto were successful in excluding these elements is another issue which has been dealt elsewhere (Drakopoulos 1991).

economic laws" (Keynes 1904, p. 36). At this point it might be useful to point out that Keynes's categories reinforced the normative-positive distinction, which became quite influential in the writings of subsequent economists (see Hutchison 1981, p. 56).

Over the same period, M. Weber provided a more general discussion about the role of value-judgments in social sciences. Weber believed that all sciences are based on particular methods of investigation which are bound to conceptual schemes characterizing different epochs (this is close to what Nagel termed methodological value judgments). He believed that economics can be nevertheless as objective as the exact sciences if it follows the doctrine of "Wertfreiheit" (freedom from values) as a methodological ideal. His definition of the Wertfreiheit was the freedom from all individual contingencies. Thus, he believed in the possibility of a value-free social science (Weber 1984). Unlike many of his contemporaries however, Weber was suspicious of methodological monism because he thought that there are essential differences between what he called cultural sciences (i.e. economics) and exact natural sciences.

L. Robbins's methodological work in 1932 was the systematized exposition of the prevailing ideas of the period. Robbins's methodological aim was the construction, through the application of the scientific philosophy of logical positivism, of a positive economic science. He thought that the psychological elements that were commonplace in the work of the first marginalists did not belong to a value-free positive economics (Robbins 1932, pp. 83-86). Thus, mental states and motivations were thought to be somehow unscientific. A representative example of this line of thought is found in his view concerning the possibility of interpersonal comparisons of utility. As it is known, most marginalist economists accepted the possibility of comparing the utilities among individuals. Robbins, however, rejects them by referring to scientific validity: "I still cannot believe that it is helpful to speak as if interpersonal comparisons of utility rest upon scientific foundations" (Robbins 1938, p. 640).

The influence of Robbins's ideas on the issue of psychological value judgments became apparent in theoretical microeconomics. In particular, J. R. Hicks and R. G. D. Allen in 1934 attempted to set the basis for an objective microeconomic theory, free from any psychological assumptions (Hicks and Allen 1934). This was intensified a few years later with Hicks's Value and Capital, in which he aimed to purge the basic marginalist concepts of Jevons and Walras of their psychological connotations. This aim is stated clearly in the following passage: "If one is utilitarian in philosophy, one has a perfect right to be a utilitarian in one's economics. But if one is not (and few people are nowadays) one has also the right to an economics free from utilitarian assumptions" (Hicks 1946, p. 18). Hicks therefore constructed indifference curves which show combinations of goods for which the consumer is indifferent and the marginalist utility space is replaced by a commodity space, and marginal utility by the marginal rate of substitution. His positivist orientation prevents him from giving any reason for the existence of indifference curves and he simply takes them as given. In the same spirit, he rejects the idea of interpersonal comparisons of utility on the grounds that it would involve a value judgment (Hicks 1939, p. 697).

The trend towards a value-free theory continued in the work of P. Samuelson. Samuelson, however, is not satisfied by Hicks's attempt to construct a value-free theory of consumer behavior. In an early article he expresses his doubts about Hicks's and Allen's reconstruction of utility theory in terms of the marginal rate of substitution: "It is clear that even the most modern analysis shows vestigial traces of the utility concept.... The introduction and meaning of the marginal rate of substitution as an entity independent of any psychological, introspective implications would be, to say the least, ambiguous" (Samuelson 1938, p. 61). Samuelson tries to get away from psychological concepts by accepting observed behaviour only. The revealed preference theory is based on a few basic postulates which describe "rational" economic agents. Samuelson's revealed preference theory is the basis for the modern theory of choice.²

Apart from developments in consumer theory, the current dominant methodological position concerning positive economics rests upon the exclusion of all ethical, normative and psychological elements. Thus the sense in which most orthodox economists conceive the term value-free is based on the concept of aperspectival objectivity (see also Klappholz 1964). The basic methodological justification for this is that the positivenormative distinction helps economics achieve the objective status of the physical sciences (Friedman 1984, Lipsey 1983, Machlup 1984).

At this point it has to be emphasized that the above position is not universally accepted. At the other end there is the view which denies any methodological possibility of excluding value judgments. G. Myrdal (1953), G. Shackle (1955) and W. Samuels (1977) are well-known representatives of this view. Other writers have adopted intermediate positions. For instance, M. Blaug believes that although in practice the opinions (value judgments) of the researchers play a role in scientific analysis, it is methodologically possible to exclude these opinions completely (Blaug 1980, pp. 129-156). Furthermore, other economists such

^{2.} It has to be mentioned, however, that Hicks's and especially Samuelson's attempts to exclude psychological concepts have been challenged (Wong 1978).

as T. Hutchison have argued that value judgments occur in all sciences, economics included, implying that'it might be methodologically impossible to exclude them (Hutchison 1964).

V. THE PROBLEMS OF THE CONTINUOUS BROADENING OF THE VALUE-FREE

Given the above, it can be maintained that the concept of objectivity as it is conceived by economists has been modified substantially. The exclusion of political and ethical elements, which initially was thought to be adequate, is no longer considered acceptable. In the historical process, psychological elements acquired a normative status and thus became valueladen. This implies that there was a strong tendency towards broadening the meaning of the term value-free. However, this tendency is not unproblematic, as the examples of interpersonal comparisons of utility and choice theory under uncertainty in contemporary economics indicate.

Following Pareto's and Robbins's rejection of the possibility of utility comparisons, the new welfare school of economics attempted to build a new approach, which, contrary to Pigovian welfare economics, was not supposed to be based on interpersonal comparisons. After a long discussion, it became evident that the exclusion of utility comparisons posed a number of serious theoretical problems that greatly limited the scope of welfare economics (Drakopoulos 1989, Jackson 1992). A large number of these problems stem from K. Arrow's impossibility theorem and the consequent difficulties in constructing social welfare functions (Ng 1979). As a result, a number of theorists started to rehabilitate the idea. For instance, K. Klappholz and J. Agassi (1959) believe that interpersonal comparisons of utility are testable but, as yet, untested empirical judgments. Furthermore A. Sen indicates that his attitude towards interpersonal comparisons "involves neither Pigovian precision, nor Robbinsonian rejection" (Sen 1982, p. 23). In particular, he allows partial interpersonal comparability, which means "that utility comparisons may be neither impossible nor, on the other hand, terribly exact" (Sen 1982, p. 22). In the same spirit Y.-K. Ng admits that there are difficulties with interpersonal comparisons but he emphasizes that they are not value judgments. As he writes: "Judgements involving interpersonal comparisons of utility are subjective judgements of fact" (Ng 1979, p. 15). In addition, Ng has shown that interpersonal cardinal utilities are necessary in order to escape impossibility results (ibid., p. 121). In general, an increasing number of welfare economists seem to be sympathetic to some form of acceptance of comparability (Drakopoulos 1989).

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The theoretical problems resulting from the continuous broadening of value judgments are not confined to welfare economics. They can also be found in the modern theory of choice, the "hard core" field where this tendency first started. More specifically, a number of relatively recent experiments clearly indicated the existence of the preference reversal phenomenon in choices under uncertainty (Machina 1989). This phenomenon undermines one of the fundamental assumptions of choice theory: the assumption of transitivity of preferences. In order to rescue the expected utility model, theorists have developed the expected regret model (Loomes and Sugden 1983). In this model the standard utility function is replaced by a regret/rejoice function r(x, y) which represents the level of satisfaction (dissatisfaction) the individual would experience if he or she were to receive the outcome x when the alternative choice would have yielded the outcome y. However, this model signifies a return to the use of "psychological notions" such as regret and rejoice. The meaning of these terms is given in the following quotation: "If they realize that a different choice would have led to a different outcome, people may experience the painful sensation of regret; if the alternative would have led to a worse outcome, they may experience a pleasurable sensation we call rejoicing" (Loomes and Sugden 1983, p. 428). Clearly, the use of such terms would not have been acceptable by the representatives of the modern conception of value-free economics. Thus one can observe a tendency towards the gradual readmission of mental states and sensations in recent developments in the theory of choice under uncertainty.

VI. CONCLUSION

One of the main aims of this paper was to examine the development of the concept of value-free in the history of economics. The paper traced the first attempts towards a value-free economics in the writings of the classical economists. It was seen that the trend towards value-free economics was closely connected to the discipline's striving for objectivity. However, the conception of objectivity that prevailed in the classical period was what has been termed aperspectival objectivity. Aperspectival objectivity made its first appearance in the latter half of the eighteenth century, especially in moral and aesthetic philosophy. It was gradually imported in the social sciences through the influence of Hume and Adam Smith. Senior and Mill gave it a more concrete meaning in the context of economic theory, which basically referred to the exclusion of politics, ethics and norms from economic discourse. The trend continued with the appearance of the first marginalist generation. It was also assisted by the increasing dominance of the natural sciences' methodological ideal. With the coming of the second marginalist generation, there were the first signs that the economists' conception of value-free was broadening to include psychological elements. It has been argued here that the increasing influence of positivist scientific philosophies was the main reason for this shift. The signs took definite form with the works of Fisher, J. N. Keynes, and Robbins. Subsequently the theories of choice of Hicks and Samuelson attempted to rebuild economic theory independently from standard marginalist concepts. The main reason for this was that marginalist theory involved psychological concepts which were deemed valueladen and therefore unscientific.

In general, one can observe a broadening of the term value-free. This broadening might be seen as an important factor driving the reconstruction of microeconomic theory which took place in the first decades of this century. However, it should be noted that there are signs in recent developments in economics which indicate that this continuous broadening is not entirely unproblematic in terms of explanatory power. This essay gave two examples where this can be observed: a) the issue of interpersonal comparisons of utility in modern welfare economics and b) the phenomenon of preference reversal in the theory of choice under uncer-These two examples can be taken to indicate the theoretical tainty. necessity of reintroducing concepts which in earlier decades were discarded as value-laden. This idea can be linked to the discussion concerning the methodological possibility of excluding value judgments not only from economics but also from scientific discourse in general. It is hoped that the discussion showed that the change of the meaning of the value-free was an important element in theoretical developments.

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