NEOCLASSICAL ECONOMICS FROM A HERMENEUTICAL PERSPECTIVE: A METHODOLOGICAL APPRAISAL

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CHAPTER I

INTRODUCTION

Economic methodology is concerned, in a very important sense, with providing a philosophical legitimation for the claims of economic inquiry. If an economist is asked "Why should one believe your theories?" or, "Why should one support public policy that is based on your theories?", the answer given can be considered to be a methodological statement. Mark Blaug notes in the preface to his influential book The Methodology of Economics, "I have added the subtitle, How Economists Explain, suggesting that 'the methodology of economics' is to be understood simply as philosophy of science applied to economics" (Blaug, 1980, p. xi).

Philosophy of science has traditionally been concerned with providing a philosophical legitimation for the claims of scientific inquiry in general. Blaug notes that "Anyone consulting some current textbooks in the philosophy of science will soon discover that the philosophy of science... appears to consist largely of a purely logical analysis of the formal structure of scientific theories, which seem to be more concerned with prescribing good scientific practice than with describing what it is that has actually passed as

science..." (Blaug, 1980, p. 1).

The notion of philosophy of science as prescriptive, however, has been undergoing a drastic change in the last two decades. Philosophy of science, which had been built largely upon positivist foundations, or at least shaped by positivist ideals, has been dominated by a raging debate about whether it should be prescriptive (in the traditional sense), or whether it should give up prescriptive pretensions and settle for a descriptive role of the sort popularized by Thomas Kuhn in The Structure of Scientific Revolutions. This debate, moreover, has filtered down to economics. A review of recent literature in this area (provided in Chapter II) reveals an overwhelming concern of economic methodologists in coming to grips with the ideas of Thomas Kuhn, the late Imre Lakatos, and other contemporary philosophers of science.

Some economic methodologists -- most notably, Bruce Caldwell -- have concluded that the ideal of a single, prescriptive methodology for economics should be given up. They advocate methodological pluralism. Caldwell specifically has lined out a program for methodological appraisal from a pluralistic perspective. He suggests that, in addition to an assessment of the internal logical consistency of a research programme, a critical assessment of its strengths and limitations, etc., should be preceded by a "rational reconstruction" of its methodological content. Furthermore, Caldwell emphasizes, "Every such reconstruction

should be from a particular point of view that should be explicitly stated" (Caldwell, pp. 245-246). Within this program, then, a methodological appraisal would be both descriptive and evaluative.

This dissertation is a methodological appraisal of certain key aspects of neoclassical economics, carried out in the spirit of Caldwell's program of methodological pluralism. Neoclassical economics has, of course, been the subject of several methodological appraisals. The uniqueness of the present appraisal is its "point of view" -- its hermeneutical perspective. Neoclassical economics was chosen for this project not only because it is the dominant research programme in economics, but also because the fact that it has been appraised (methodologically) from other perspectives facilitates a comparison of the hermeneutical perspective with those other perspectives.

Philosophical hermeneutics is concerned primarily with the development of a theory of human understanding. It is rooted in a concern with ontological issues, as opposed to positivist philosophy of science which is rooted in a concern with epistemological issues. It should, therefore, provide an interesting and fruitful contrast with other perspectives on economic methodology. It is also an appropriate perspective to introduce to methodological appraisal in economics because it is having a significant impact on methodological issues in other social sciences (Outhwaite, p 37).

The key figure in contemporary philosophical hermeneutics is the German philosopher, Hans-Georg Gadamer. Gadamer's philosophical hermeneutics (discussed more fully in Chapter III) is the specific perspective that informs the appraisal of neoclassical economics in Chapters IV thru IX. This appraisal begins with a so-called "rational reconstruction" of neoclassical economics (Chapter IV). This is a standard procedure for methodological appraisal under Caldwell's suggested program, and it also serves to clarify the sense in which "neoclassical economics" is used in this appraisal. Next, in Chapter V, an exploration is presented of the adequacy of neoclassical economic inquiry. This exploration is guided by Gadamer's model of conversation in which he emphasizes the importance of asking the "right" questions. This is followed by three chapters which evaluate several methodological issues which have been evaluated from several perspectives --methodological individualism is considered in Chapter VI, the rationality postulate and the theory of consumer behavior in Chapter VII, and the normative/positive distinction is taken up in Chapter VIII. And finally, in Chapter IX, Milton Friedman's "Essay on Positive Economics" and the debate over explanation versus prediction is reviewed from a hermeneutical perspective. Friedman's essay is deemed worthy of explicit attention because it is, according to Blaug, "the centerpiece of postwar economic methodology, the one essay on methodological questions that virtually every modern economist has read

at some stage in his or her career..." (Blaug, 1980, p. 103).

Throughout this appraisal the views of other economic methodologists have been incorporated in ways deemed useful for purposes of clarification, contrast and comparison. The final chapter (Chapter X) summarizes the findings of this appraisal regarding the strengths and weaknesses of neoclassical economics from a hermeneutical perspective.

CHAPTER II

REVIEW OF LITERATURE ON POST-KUHNIAN ECONOMIC METHODOLOGY

Economic methodology in this century has, for the most part, reflected the strong influence of the positivist heritage in the philosophy of science. In the past 25 years or so, however, the philosophy of science has been in a state of turmoil. The 1962 publication of Thomas Kuhn's popular and influential The Structure of Scientific Revolutions posed a challenge to Popperian falsificationism and kicked off what has come to be known as the "growth of knowledge" movement in philosophy of science. Kuhn's work seemed to "pull the rug out from under" the claim that science is a rational enterprise. Imre Lakatos, in an effort to shore up science's claim to rationality while maintaining Kuhn's descriptive accuracy regarding actual scientific practice, developed the methodology of scientific research programmes (MSRP).

The literature on economic methodology has increasingly reflected an attempt to come to grips with the work of Kuhn and Lakatos. But a review of the literature leaves one with the distinct impression that economic inquiry is methodologically ungrounded. Douglas Hands recently examined the

applicability of Lakatos' MSRP to economics and concluded that it "must be negatively appraised" (1985, p.13). Bruce Caldwell claims, "The most significant contribution of the 'growth of knowledge' philosophers was the demonstration that the quest for a single, universal prescriptive scien tific methodology is quixotic" (p. 244). Caldwell advocates methodological pluralism. Still another economist, Donald McCloskey, argues that all the concern about scientific methodology is a misplaced concern, that instead economics would benefit from a heightened awareness of the rhetoric of economics (McCloskey, p. 509).

Turmoil in the Philosophy of Science

In a review of Mark Blaug's The Methodology of Economics (1980), Hands points out that philosophy of science "has undergone a major upheaval during the last twenty years" (1984, p. 116). And although a new consensus philosophy of science does not appear to be imminent, it has become widely accepted that, "The so-called 'received view' of the preceding epoch is dead" (Hands, 1984, p. 116). What has happened is that a new growth of knowledge movement has apparently pulled off a successful revolution against what Caldwell states as

> ...the long-held views that scientific activity is best distinguished by the rigor and objectivity of its methods and that science progresses by the gradual accumulation of true knowledge, either in the form of brute, atomic facts or in the form of theories whose structural characteristics mimic an objectively discernable phenomenal reality. The

> growth of knowledge tradition emphasizes that science is a dynamic, growing enterprise, that its impressive successes are not due to its having followed immutable and objective procedures (p. 244).

In a nutshell, the growth of knowledge movement has raised severe doubts about any legitimate prescriptive role for philosophy of science and about the epistemological validity of scientific knowledge itself.

The following is a summary of the contemporary debate in philosophy of science. The philosophy of science has gone through several phases in attempting to provide a basis for the superiority of scientific knowledge, each phase being weaker than the previous phase. The verificationists laid down criteria (verifiability) for a theory being considered "scientific" as well as rules for determining (verifying) the truth of a theory. The falsificationists, emphasizing that there is no amount of empirical observation that will provide conclusive proof that a theory is true, proposed changing the criterion for scientific status from verifiability to falsifiability and provided their own rules -- very complex and sophisticated ones in Popper's philosophy -- for determining when a theory must be considered false. The falsificationists admitted that scientific knowledge could not be claimed to be conclusively true, but they claimed that science is still rational and that it generates knowledge that at least grows ever closer to the truth. Both the verificationists and the falsificationists advocated a prescriptive approach to philosophy of science.

Then Kuhn, with the publication of The Structure of Scientific Revolutions in 1962, shifted the debate from one over alternative prescriptions to one of prescription versus description. Kuhn's descriptive study of the history of scientific practice pointed out major stages (revolutions) in the scientific process that necessarily rely on non-rational decisions by scientists. Kuhn's study became the focus of the contemporary debate in philosophy of science, apparently because it created a large opening for critics of science bent on challenging the notion of the inherent superiority of scientific knowledge. Lakatos attempted to formulate a methodology, described in a later section, that was descriptively accurate while still providing assurance that science is rational.

Paul Feyerabend, however, claimed that Lakatos' methodology actually did not rule out anything, and thus was equivalent to no scientific method, that is, equivalent to Feyerabend's own proposal that "anything goes". Feyerabend made explicit what the philosophy of science debate is ultimately about (i.e., whether there is any unique sort of knowledge that is classifiable as "scientific knowledge" and whether such knowledge has any legitimate claim to superiority over any other sort of knowledge such as myth, metaphysical, religious, etc.).

Revolutions in Economic Thought

Positivist philosophy of science -- used in the broadest

sense to include Sir Karl Popper's falsificationism -- has been the dominant influence on mainstream economic methodology in this century. The mainstream writers have engaged in disputes about "direct versus indirect" testing of hypotheses, the importance or irrelevance of assumptions being realistic, and about whether predictive accuracy, explanatory power, or descriptive accuracy should be the goal of economic theory. But they have overwhelmingly accepted the notion that the validity of economic theory must, at some point, be judged on the basis of empirical evidence.

With hindsight, however, it may become apparent that Kuhn's The Structure of Scientific Revolutions in 1962 signalled the end of the positivist era in economic methodology. Kuhn's work generated very little attention from economists during the 1960's. It wasn't until 1965 that an economics article suggested that his work was applicable to economics, and it wasn't until 1969 that an economics article was exclusively concerned with the application of Kuhnian thought to economics. But since 1970, the attention of economic methodologists has focused increasingly on placing economic methodology in the "growth of knowledge" perspective.

According to Kuhn, most scientific activity is carried out within an accepted theoretical framework which has been built upon past scientific achievements. The accepted theoretical framework reflects certain beliefs about the world, and it serves as a foundation for the articulation of

problems that must be solved if the range of explanatory power is to be extended. Furthermore, even the methods of research that were used in the foundational achievements tend to be accepted as the legitimate methods, and thus perpetuated. All of this adds up to what Kuhn characterizes as paradigm-based research. The term "paradigm," in the broad sense, "stands for the entire constellation of beliefs, values, techniques, and so on shared by the members of a given community" (Kuhn, 1970a, p. 175). Paradigm-based research is what Kuhn refers to as "normal science." It is research aimed at the fleshing out and extension of the already accepted theoretical framework, and contradictory theories and viewpoints tend to be suppressed by the established scientific community. Kuhn claims that the research problems pursued tend to be those which are seen as holding the most promise for such fleshing out and extension, and has likened the process to puzzle-solving.

Normal science can be seen, according to Kuhn, as an attempt to improve the perceived fit between the theoretical structure and nature. In this process, there will always be discrepancies in the fit which can be characterized as anomaly -- data which contradict the theoretical predictions. Some discrepancies may become the subject of new normal science puzzle-solving activity, others may be set aside indefinitely to be dealt with later, but some discrepancies may evoke a crisis that threatens the paradigm itself. Such crises result in what Kuhn characterizes as

"extraordinary research." Extraordinary science may involve deliberate attempts to find other areas where the paradigm seems to break down and it may involve new types of experiments based on new and speculative theories. Such times of crisis may also be characterized by resort to philosophical analysis, methodological debate, and explicit questioning of underlying assumptions. Extraordinary science may spawn competing paradigms while the old paradigm is being weakened.

Kuhn's explanation of such crises and their resolution probably represents the most controversial aspect of his description of the scientific process. He maintains that scientists who switch from one paradigm to another during such crises, are strongly influenced by non-rational factors. He deliberately uses the term "revolution" to characterize periods of widespread switching from one paradigm to another, because of parallels he sees between political and scientific change.

Kuhn discusses several things that tend to keep participants in a debate over paradigms from making complete logical contact with each other. A new paradigm is likely to assign somewhat different meanings to some of the vocabulary of the old paradigm. A new paradigm is likely to employ a somewhat different set of criteria in determining what will be considered legitimate problems and solutions. A new paradigm will also be built around a new theoretical structure which purports to be a better fit with nature than

was the theoretical structure of the old paradigm. Thus, the new theories may be logically incompatible with the old ones to the extent that they generate a different set of predictions. And finally, Kuhn claims that scientists working within the new paradigm can be said to "see" a different world than their counterparts in the old paradigm. They "adopt new instruments and look in new places...[and they]...see new and different things when looking with familiar instruments in places they have looked before" (Kuhn, 1970a, p. 111).

So, for all these reasons, Kuhn concludes that scientific revolutions are important stages in the growth of scientific knowledge that fall outside the logically controlled processes of normal science. He refers to a decision to adopt a new paradigm as a conversion experience that cannot be forced by logic. And since the conversion results in a new way of seeing the world, Kuhn likens the process to a visual gestalt switch, or to a man who has put on inverting lenses. "Confronting the same constellation of objects as before and knowing that he does so, he nevertheless finds them transformed through and through in many of their details" (Kuhn, 1970a, p. 122).

Kuhn's ideas were first brought into economic literature by Donald Gordon in 1965. Gordon made the claim that Kuhn's description of "normal science" is an adequate characterization of economics. He maintains that Adam Smith provided the basic paradigm--"the maximizing individual in a

relatively free market" (Gordon, p. 123) -- for the development of economics as a normal science. According to Gordon, most of the research that has been done since Smith readily fits Kuhn's characterization of "mopping-up operations". However, he claims that unlike the natural sciences, there have been no revolutions in economics. There have been rebellions (e.g., the historicists and the institutionalists). "But the profession has never permitted the dissent to get out of hand" (Gordon, p. 124).

Brian Loasby argued in a 1971 article that the difficulty of overthrowing paradigms in economics is due, in large part, to the fact that "to discard a well-established paradigm is to discard an important part of one's apparatus for recognizing and solving problems" (p. 868). He illustrates this incentive for sticking with a paradigm by exploring the debate generated by the crisis in Marshallian value theory.

Another strand of Kuhnian thought was taken up by Benjamin Ward. In his What's Wrong With Economics (1972), he explores the idea of academic economics as a special kind of social system, a sort of invisible college of economists who share a common perspective, complete with a system of rewards and punishments, a power elite, etc. He also examined the question of whether there have been revolutions (in the Kuhnian sense) in economics. He reached a different conclusion than Gordon. Ward maintains, as does Stanfield (1974), "Within economics, the Keynesian revolution was

definitely a Kuhnian revolution..." (Ward, p. 40).

The Keynesian revolution is the one that seems most likely to come to mind when Kuhnian thought is applied to economics. But several others have been suggested as candidates for Kuhnian revolutions. Bronfenbrenner (1971), with some modifications to Kuhnian thought, suggests that three revolutions can be identified. "They might be called the laissez-faire revolution, the utility revolution, and the macroeconomic revolution" (Bronfenbrenner, p. 150). Blaug, in a 1973 article, explored the question of whether there was a marginalist revolution. And Hicks, in a 1976 article, suggests a Ricardian revolution, a Marxian revolution, a marginalist revolution, and a Keynesian revolution.

Some economists, however, have questioned the applicability of Kuhnian thought to economics, while others have suggested that it is applicable only with certain modifications. Stigler (1969) rejects its applicability to either economics or the natural sciences on the ground that it lacks empirical content: "My main quarrel with Kuhn is over his failure to specify the nature of a paradigm in sufficient detail that his central thesis can be tested empirically" (p. 225).

Coats (1969) suggests that Kuhn's description of the way change takes place in the natural sciences may not be applicable to economics because economics may not be a mature science. Coats suggests, since economists' "efforts to improve the match between the facts and the paradigm's

predictions have met with only limited success...[does]... this not mean that by comparison with the natural sciences economics has not yet passed beyond the 'developmental' or pre-paradigm stage" (p. 292)?

Bronfenbrenner (1972), on the other hand, maintains that Kuhnian thought can provide an appropriate perspective for understanding changes in economic thought if it is modified to reflect the dialectical nature of economic thought. Leonard Kunin and F. Stirton Weaver (1971) agree with Bronfenbrenner. They also stress the inherent differences between the natural sciences and economics. The physical sciences that Kuhn was describing are inquiries about a universe whose structure and behavior "do not exhibit change on a time scale which would alter significantly any important characteristics of the population of that universe...[while]...the economist studies a universe which changes historically" (Kunin and Weaver, pp. 394-395). Economics, they maintain, "is a profoundly historical science; its roots lie in the attempt to understand a particular configuration of human (social) institutions" (Kunin and Weaver, p. 395). Hicks (1976) also strongly emphasized this difference between economics and the natural sciences.

Ward had suggested that economics is primarily concerned with maintaining control and providing for orderly adjustments of liberal society. This, of course, is one of the main contentions of radical economists. Gerald Peabody (1971) makes essentially the same point in the lead article

of the July 1971 issue of The Review of Radical Policital Economics, an issue devoted to an examination of the relationship of Kuhnian thought to economics. But Peabody goes much further. He points out that radical economists are working for a revolution in economic thought because they "do not believe that the orthodox paradigm is adequate to deal with questions of income distribution, poverty, racism, sexism, imperialism, social and economic development in the third world, alienation of workers, the meaningless character of work, etc" (Peabody, p. 8).

In a very thoughtful scrutiny of the radical position, Stephen Worland (1972) points out that a Kuhnian revolution requires that a new paradigm be available to replace the old one. The radicals, he claims, have not yet articulated a new paradigm. He does, however, see a possible basis for a radical paradigm in the remarks of John Gurley at the 1970 American Economics Association convention.

> Gurley points out that 'political economics ...studies economic problems by systematically taking into account...the pervasiveness of ruler-subject relations in society'... It would seem to require only a shift of conceptual view-point to convert Gurley's proposition that power relations emerge in every human institution into the axiomatic principle that all aspects of economic activity are ultimately determined by power conflicts (Worland, p. 280).

Power conflicts could thus replace utility maximization as "the basic force which governs the play of economic variables" (Worland, p. 281). Such an eventuality would not necessarily mean that the utility-maximization model should

be totally scrapped; it could simply be incorporated as a special case within the power conflict model.

So, within a very few years, economists made an extensive exploration of the applicability of Kuhnian thought to economics, both retrospectively and with an eye to possible future revolutions. Most of these articles were published in the early seventies. But with the growing awareness of Lakatos' criticism of Kuhn and his suggested methodology of scientific research programmes (MSRP), economists began more and more to explore the applicability of Lakatos' ideas to economics and to evaluations of paradigms versus research programmes.

Lakatos' MSRP and Economics

Economists' involvement with Lakatos' methodology of scientific research programmes (MSRP) apparently began with a unique conference held in Nafplion, Greece in 1974 -- the Nafplion Colloquium on Research Programmes in Physics and Economics. The papers read during the economics sessions of the conference plus some others written in response to the conference were published in Method and Appraisal in Economics (1976) edited by Spiro J. Latsis. Before discussing these and other applications of MSRP to economics, however, it is desirable to give a brief overview of Lakatos' MSRP and his meta-methodology.

According to Lakatos, most of the important series of theories in the growth of science are welded together by a

certain continuity of conceptual framework into research programmes. Scientists working within a programme tend to work as if they had agreed at an early stage on a set of methodological rules. The most basic "agreement" concerns the conceptual framework that will not be subject to rejection. Lakatos characterizes this as the "hard core" of the programme. It "is 'irrefutable' by the methodological decision of its protagonists" (Lakatos, 1970, p. 133). Scientists working within the programme then use their

> ingenuity to articulate or even invent 'auxiliary hypotheses', which form a protective belt around this core.... It is this protective belt of auxiliary hypotheses which has to bear the brunt of tests and get adjusted and readjusted, or even completely replaced, to defend the thus-hardened core (Lakatos, 1970, p. 133).

The protective belt thus provides an indication of the acceptable research paths which Lakatos classifies as the "positive heuristic." The hard core, on the other hand, indicates the "negative heuristic" -- research paths to be avoided.

Lakatos also provides a guideline for appraising a research programme to determine whether it is "progressive" or "degenerative". He distinguishes between theoretical progressiveness and empirical progressiveness. A programme is theoretically progressive "if some of this excess empirical content is also corroborated, that is, if each new theory leads us to the actual discovery of some new fact" (Lakatos, 1970, p. 118). The research programme is consid-

ered to be progressive only if it is both theoretically and empirically progressive.

Lakatos downplays, severely, the instances of widespread abandonment of one research programme in favor of another, the sort of situation Kuhn describes as a religious sort of conversion. Lakatos claims that there can be objective reasons for rejecting one programme for another: "...such an objective reason is provided by a rival research programme which explains the previous success of its rival and supersedes it by a further display of heuristic power" (Lakatos, 1970, p. 155). As has been indicated, a further display of heuristic power means, in this context, the ability to generate new "facts". But Lakatos claims that the progressivity of a programme can only be determined with hindsight. "Only an extremely difficult and-indefinitely-long process can establish a research programme as superseding its rival..." (Lakatos, 1970, p. 163).

Lakatos' claim of uniqueness for his methodology of scientific research programmes is that it recasts the line of demarcation between the internal and external factors in such a way that many of the important external factors for other methodologists become internal factors for his MSRP. "What for Popper, Watkins and Agassi is external, influential metaphysics, here turns into the internal 'hard core' of a programme" (Lakatos, 1971, p. 99). Like other methodologies, Lakatos' MSRP is not without epistemological problems. But Lakatos implies that the MSRP is preferable

because it extends the area that can be covered by a rational reconstruction of science, leaving relatively less to be explained by "external history."

Just as the MSRP provides a basis for appraisal of research programmes, Lakatos' meta-methodology provides a basis for appraising methodologies. His meta-methodological criteria can be stated quite simply: A methodology is acceptable if its application makes the "best gambits" of a science appear "rational". That is, if a methodology can be used to "rationally reconstruct" the history of a science, then it is an acceptable methodology. In terms of the MSRP, progressive means rational in the sense that scientists have good reasons for supporting a research programme, namely that it consistently generates new facts, at least some of which are empirically corroborated. Thus, according to Lakatos' meta-methodology, the MSRP is an acceptable methodology for appraisal of research programmes in economics if the "best gambits" of economics (as judged by the profession) can be shown to be "progressive" with its application.

Economists have applied Lakatos' MSRP to the theory of the firm (Latsis, 1976), the theory of consumer behavior (Coats, 1976), international trade theory (de Marchi, 1976), Keynesian macroeconomics (Blaug, 1976; Leijonhufvud, 1976), and production function theory (Fulton, 1984). Latsis concludes that the neoclassical theory of the firm appears to be degenerating because the modifications of the model of perfect competition (modifications in the direction of

increased realism -- monopolistic competition, duopoly, oligopoly, and limit-price theory) contain less and less rather than more and more empirical content, and because they rely on ad hoc changes in order to preserve the hard core of the programme.

In Coats' article in Method and Appraisal, it appears that the applicability of MSRP to economics may be a secondary concern. In fact, one reviewer (Archibald, 1979) has suggested that Coats would have told the same story, with only minor variations of vocabulary and emphasis, even if he had never heard of MSRP (p. 306). But regarding Neil de Marchi's contribution of "Anomaly and the Development of Economics; the Case of the Leontief Paradox" in Method and Appraisal, Archibald claims: "not only does de Marchi make sense, but I doubt if the same sense could be made within another methodological programme" (p. 306). He also notes that de Marchi's paper "would appear to be a paradigm case of the application of MSRP" (Archibald, p. 306).

De Marchi maintains that Lakatos' MSRP provides a useful perspective for understanding that there may be good reasons -- not simply inertia or perverseness -- for economists clinging to a theory in the face of contradictory evidence. As a case in point, he explores the response (or lack thereof) of Samuelson and other economists to the findings of Leontief's study on U.S. trade which seem to obviously contradict the Ohlin-Samuelson theory of trade.

Latsis, Coats, and de Marchi (in Method and Appraisal)

all dealt with the applicability of MSRP to microeconomics. Blaug and Leijonhufvud, on the other hand, turned to macroeconomics. They both examined the Keynesian revolution as a Lakatosian research programme. Blaug is straightforward. He maintains that this new programme has excess empirical content over the old one. "Its principal novel prediction was the chronic tendency of competitive market economies to generate unemployment" (Blaug, 1976, p. 162). And since, according to Blaug, the explanations of the prolonged depression that were coming from economists of the old programme were ad hoc explanations, he reaches the following conclusion: "The tendency of economists to join the rank of the Keynesians in increasing numbers after 1936 was therefore perfectly rational; it was a switch from a 'degenerating' to a 'progressive' research programme, which had little to do with contentious issues of public policy" (1976, p. 163).

Leijonhufvud, on the other hand, presents a much more complicated analysis. He points out some aspects of economic inquiry which have no counterpart in the natural sciences. These are considerations that call into question any straightforward application of Lakatos' MSRP to economics. Among other things, Leijonhufvud maintains that the linkage between the substance and form of economic theories is significantly different from the linkage between the substance and form of theories in physics. He also maintains that a statement of the hard-core propositions of an econom-

ic model is likely to omit crucial hard-core beliefs or presuppositions that are important differences in the perspectives of the models' proponents. He cites as an example, the "belief" of most monetarists that the economy will adjust relatively quickly to the equilibrium value for certain variables in "real" terms. These kinds of subtleties are then made full use of in his retelling of the Keynesian revolution and the neoclassical synthesis.

Blaug, although on the whole an advocate of Lakatosian thought, has also voiced some reservations about its applicability to economics. He notes that economists, while paying lip service to the ideal of falsification, display a reluctance in practice "to produce theories which yield unambiguously refutable implications," (Blaug, 1976, p. 172) and that, where testable predictions are involved, "instead of attempting to refute testable predictions, economists spend much of their time showing that the real world bears out their predictions, thus replacing falsification, which is difficult, with confirmation, which is easy" (Blaug, 1976, p. 173). He points out that this at least raises the possibility that

> ...MSRP may not fit the history of economics; economists may cling to 'degenerating' research programmes in the presence of rival 'progressive' research programmes while denying that the 'degenerating' programme is in need of resuscitation because they are suspicious of hard data, inclined to assign low priority to the discovery of novel facts, accustomed by long habit to deny the feedback of evidence on theory or simply because they are deeply attached to the welfare

> implications of their theories (Blaug, 1976, p. 176).

Douglas Hands (1985) used a different approach in appraising the applicability of MSRP to economics. He applied Lakatos's own meta-methodological criteria. He identifies Keynesian economics and general equilibrium theory (GE) as the best gambits of economics. Both of these, he argues, fail to meet the MSRP's standards of progressivity. Hands states, regarding Keynesian theory, "We are told that the program's principal novel prediction was the chronic tendency of competitive market economies to generate unemployment" (1985, p. 8). Unemployment, Hands points out, was not a new fact in any sense. The existence of unemployment was a known fact; it was not in dispute. Furthermore, Keynesian theory had less empirical content than its predecessors because it could not be falsified by any level of unemployment, whereas classical theory did not allow unemployment in a competitive economy. Thus, Hands concludes that the acceptance of Keynesian theory cannot be claimed as "rational" under Lakatos' MSRP.

The progressivity of general equilibrium (GE) theory is judged the same way by Hands. "With GE, as with Keynesian economics, the MSRP has failed to rationalize the generally accepted best gambits of the profession..." (Hands, 1985, p. 12). He supports this conclusion, however, with very little argument. He simply notes that Weintraub, in his 1979 book Microfoundations, used MSRP to claim progressivity

for GE, without ever addressing necessary questions regarding factual novelty and empirical content of GE.

Methodological Pluralism; Economics as Rhetoric

So, the philosophical foundations of positivist philosophy of science appear to have been discredited, there are serious questions about the validity of Kuhn's paradigmatic perspective for a description of economics, and there are good reasons to be dubious about the applicability of Lakatos' MSRP to economics. It is, thus, easy to understand how Caldwell could conclude that "the quest for a single, universal, prescriptive scientific methodology is quixotic" (p. 244). Caldwell thus advocates "methodological pluralism." At the same time, Donald McCloskey whose views appear to be complementary to Caldwell's, claims that economic argument would be improved by an explicit recognition of its rhetorical basis. Economists, he says, "in their actual scientific work...argue about the aptness of economic metaphors, the relevance of historical precedents, the persuasiveness of introspections, the power of authority, the charm of symmetry, the claims of morality" (McCloskey, p. 482). In short, they work within a rhetorical framework. McCloskey's complaint is that the rhetoric itself is not consciously examined.

Caldwell's "methodological pluralism" begins with the assumption that no universally applicable, logically compel-

ling method of theory appraisal exists (Caldwell, p. 245). This does not, however, mean that there is no way to engage in reasonable and fruitful criticism and debate. Caldwell suggests that the following approach could be applied to various research programs or methodological traditions within economics (i.e., neoclassical, Marxian, institutionalist, etc.). For any given research program, the first step would be a description or "rational reconstruction" of the methodological content of the research program. This would be followed by a "critical assessment of the methodological content", highlighting strengths and limitations. This latter step would open up the possibility of critical discussion and debate. This sort of methodological discussion, according to Caldwell, is as much a form of persuasion as it is a means of ensuring that problems are viewed from different perspectives (Caldwell, p. 251).

Methodological pluralism, following Caldwell's suggested approach, could be a move in the direction of overcoming the dogmatism that he claims exists today, a dogmatism that derives from the opposite of methodological pluralism: "Alternative programs which do not meet the standards of scientific practice alleged to be followed by the mainstream are often summarily (hence dogmatically) rejected" (p. 251).

As mentioned above, there appears to be no incompatibility between Caldwell's recommendations and McCloskey's viewpoint regarding the rhetoric of economics. McCloskey claims, "Economists should become more self-conscious about

their rhetoric..." (p. 482). His view of rhetoric, as disciplined conversation, is consistent with Wayne Booth's definitions of rhetoric which he quotes: "Rhetoric is 'the art of probing what men believe they ought to believe, rather than proving what is true according to abstract methods'; it is 'the art of discovering good reasons, finding what really warrants assent, because any reasonable person ought to be persuaded'; it is careful weighing of more-or-less good reasons to arrive at more-or-less probable or plausible conclusions -- none too secure but better than would be arrived at by chance or unthinking impulse'..." (McCloskey, pp. 482-483).

McCloskey claims that economic discourse is actually a rhetorical discourse in spite of economists' claims that it is based on "scientific method". He does not see this as, in itself, problematic. It is not problematic, in part, because the received view of scientific method --"an amalgam of logical positivism, behaviorism, operationalism, and the hypothetico-deductive model of science" (McCloskey, p. 484) -- is philosophically obsolete and, in any case, impossible to practice in economic inquiry. What he does find troubling is that economists do not examine their rhetoric. "Everywhere in the literature of economics, one is met with premises that are unargued, tricks of style masquerading as reason ('it is evident that'), forms of evidence that ignore the concerns of the audience, and other symptoms of a lack of self-consciousness in rhetoric" (McCloskey, pp. 493-494).

According to McCloskey, economists not only use, but must use, literary devices in presenting their viewpoints.

> Each step in economic reasoning, even the reasoning of the official rhetoric, is metaphor. The world is said to be "like" a complex model, and its measurements are said to be like the easily measured proxy variable to hand. The complex model is said to be like a simpler model for actual thinking, which is, in turn, an even simpler model for calculation (McCloskey, p. 502).

He even claims that economic literature can be analyzed in the same terms used in analyzing poetry--the demand curve is a "symbol"; the Keynesian theory of income determination is a symbol system; the statement "the firm behaves as if it were one mind, maximizing its discounted value" is "simile"; the economics of education using human capital is "allegory", etc. (McCloskey, p. 505).

These claims are not made in a disparaging way. It is not that economists should choose between scientific method and rhetoric. On the one hand, McCloskey is opposed to any methodology that claims the power of philosophical authority. On the other hand, he maintains that rhetoric is both desirable and unavoidable. What he sees as undesirable is the unconscious or unexamined use of rhetoric. Unexamined metaphors in economics are especially capable of mischievousness because they can so easily be used to convey indirect political or ideological messages with the implication of scientific authority and ethical neutrality: "The invisible hand is so very discrete, so soothing, that we might be inclined to accept its touch without protest..."

(McCloskey, p. 507).

In short, McCloskey views the unexamined metaphor as a substitute for thought and the examined metaphor as an instrument of thought. And in a broader sense, he views the examination of the rhetoric of economics as a move toward greater rationality in economic discourse. "The invitation to rhetoric...is an invitation to leave the irrationality of an artificially narrow range of arguments and to move to the rationality of arguing like human beings" (McCloskey, p. 509).

An Opportunity for Exploring New Perspectives

It is obvious that economic methodologists have used the turmoil in philosophy of science and the accompanying breakdown of consensus in economic methodology as an opportunity to explore new methodological perspectives. Against this background of apparent disarray in economic methodology the author is suggesting that yet another perspective is worthy of consideration -- the hermeneutical perspective that has grown out of the German phenomenological movement.

CHAPTER III

GADAMER'S PHILOSOPHICAL HERMENEUTICS

Hermeneutics has a long history. It has gone through many transformations; becoming broader and more universal in scope with each. The key figure in contemporary hermeneutics is Hans-Georg Gadamer whose magnum opus -- Truth and Method (1960) -- is the recognized touchstone with which all major writers in contemporary hermeneutics must come to grips. The theory developed in this work is a theory of human understanding. It is not prescriptive, as such. It purports to describe the happening of human understanding. It provides an explication of the conditions necessary for understanding to take place. However, as indicated by the title, Gadamer is concerned with some of the same issues -- truth and method -- that have occupied positivist philosophers of science. Gadamer's perspective, however, is radically different. His questioning originates with primarily ontological concerns, whereas positivist philosophy of science grew out of primarily epistemological concerns. This, together with the fact that philosophical hermeneutics has become very influential in the other social sciences warrants its serious consideration by economic methodologists. Before delving into some of the details of Gadamer's

thought, however, it should prove helpful to review briefly the historical development of hermeneutical thought and to give a brief explication of the contrast between the hermeneutical perspective and the epistemological perspective.

The Development of Hermeneutics

Richard E. Palmer, in 1969, published the first book-length English introduction to philosophical hermeneutics. He traced the development of hermeneutics from its oldest usage as the theory of biblical exegesis to its contemporary philosophical usage as the theory of all human understanding. He noted that the term "hermeneutics" originated in the seventeenth century in reference to the principles of biblical interpretation. However, its usage was soon broadened to refer to the interpretation of nonbiblical texts whose meaning was unclear, especially literary and legal works. Under the influence of rationalism and the Enlightenment, "Biblical interpretation developed techniques of grammatical analysis to great refinement, and interpreters were more than ever before committed to full knowledge of the historical context of the biblical accounts" (Palmer, p. 39). The methods of biblical hermeneutics thus gradually merged with the methods of classical philology until "the conception of hermeneutics as strictly biblical gradually shaded into hermeneutics as the general rules of philological exegesis, with the Bible as one among other possible objects of these rules" (Palmer, p. 40).

A major turning point was reached, according to Palmer, in the early nineteenth century with Schleiermacher's reconception of hermeneutics as "a science which describes the conditions for understanding in all dialogue" (p. 40). Then in the late nineteenth century Wilhelm Dilthey put forward the idea of hermeneutics as a foundation for all the human sciences. Dilthey considered the proper objects of focus for the human sciences to be those "expressions of life" (ideas, laws, art works, social forms, language, etc.) which provide a fixed, objective base for study. And since these "expressions of life" are objectifications of "life experiences" (experiences which take on meaning in the context of one's life), the understanding that is the proper goal of the human sciences is a matter of life understanding life. Thus, as Palmer puts it, "Understanding in not a mere act of thought but a transposition and reexperiencing of the world as another person meets it in lived experience" (p. 115).

The next major turning point in hermeneutics was the publication of Martin Heidegger's Being and Time in 1927. This work represents the origin of what is properly called philosophical hermeneutics. What sets it apart from previous hermeneutical thought is its incorporation of Edmund Husserl's phenomenological philosophy.

The most significant aspect of Husserl's thought for the development of hermeneutics was his demonstration of the active role that we unwittingly play in the constitution of our own cognitive experience. Every cognitive process is

intentional in the sense that it is directed toward something. Husserl also calls attention to the way thought-forms which have been preconceptually developed shape our cognition of the world around us.

Husserl's exploration of the active role we unwittingly play in shaping our own framework for conceptual understanding had a major positive impact on Heidegger's philosophy. But equally significant was the negative response that Husserl's Cartesian bent generated in Heidegger. Husserl's aim was to develop an epistemologically sound science of cognition. He accordingly built upon Descartes' foundational insight that one cannot doubt the existence of one's own mental processes. This is knowledge that involves no presupposition, according to Husserl, because "it presents nothing else, 'points' to nothing 'outside' itself..." (p. 3).

Heidegger's opposition to this Cartesian approach to philosophy is fundamental not only to his own philosophy, but also to the philosophical hermeneutics developed subsequently by Gadamer. This opposition is thus fundamental to a hermeneutical critique of positivist methodology in the social sciences.

Cartesian philosophy implies that human "consciousness" is prior to the world that we become "conscious of". This notion of a consciousness existing independently of a "world" is wrong, according to Heidegger. No one, he claims, ever exists separate from a "world". There is never

an empty consciousness going out in search of a world. We are each, as long as we exist, enmeshed in a network of relationships within a world. "Consciousness" and "consciousness of" relationships with other entities happens simultaneously. As Calvin Schrag puts it in an overview of Heidegger's philosophy, "Prior to the rise of the epistemological question there is already a preconceptual disclosure of man's relation to his world" (1967, p. 283).

Heidegger also claims that "projection" into the future is an ontological characteristic of being human. As humans, we move through time casting our attention ahead of us in concern about the future state of our world. We are always engaged in "projects", whether they be trivial and mundane -- such as bathing, getting dressed, cooking breakfast, etc. -- or whether they be extraordinary and spectacular -- such as moving to another country, fighting a war, exploring space, etc. In our looking ahead, or projecting, we are always directing our attention within a context of relationships, and our projection always involves a constant interpretation of these relationships. But this ongoing interpretation is never a brand-new, original, presuppositionless interpretation. It is always based on, and conditioned by, previous interpretations and understandings of the fabric of relationships that we have been ongoingly caught up in.

In characterizing our relationship to things in the world, Heidegger contrasts practical activity with theoreti-

cal activity. In our practical activity we interact with things automatically and unthinkingly. These things are, in Heidegger's terminology, "ready-to-hand". As a simple and straight-forward example, Heidegger notes that "when I open the door...I use the latch" (p. 96) In this example, using the latch is automatic and the relationship with it is transparent. The latch is "ready-to-hand". But as Heidegger points out, our relationship with those things that are ready-to-hand is not a blind relationship; it is grounded in our preconceptual understanding.

In our practical activity, then, the world is largely transparent. But in the course of practical activity things break down, and this breakdown forces us to "see" the world. If, for example, I attempt to open the door and the latch doesn't work, I suddenly become very conscious of the latch; my involvement with it is no longer transparent. The latch is no longer ready-to-hand. In Heidegger's terminology, it is now "present-at-hand". I am now curious about the latch. I now want to know the nature of the latch. Granted, my interest is in fixing the latch so I can get on with my business, but in the sense of Heidegger's terminology I am now involved in theoretical activity -- I am engaged in an effort to determine the nature of the latch.

According to Heidegger, both practical activity and theoretical activity take place within a context of previous interpretations and understandings. Heidegger denies that theoretical activity, even in the form of scientific inves-

tigation, can escape the context of previous interpretations. He thus denies that science can generate presuppositionless knowledge. The desire to do so is analogous to a desire to examine the ground on which one is standing.

Heidegger's specification of the role of preconceptual understanding and interpretation was certainly a major turning point in hermeneutics. It laid the groundwork for Gadamer's examination of the role of language. Regarding perception as "an act of making determinate", Heidegger notes, "What is thus perceived and made determinate can be expressed in propositions, and can be regained and preserved as what has thus been asserted" (p. 89). And since the perception that has been made determinate is grounded in interpretation, "assertion and its structure...are founded upon interpretation..." (Heidegger, p. 266).

Gadamer builds upon Heidegger's ideas of language and interpretation in developing a full-blown theory of human understanding. His theory stresses the role experience plays in understanding, the role of prejudices in shaping our experience, the logic of question and answer, the pervasiveness of language in human life, and the universality of hermeneutics. The more significant aspects of Gadamer's philosophical hermeneutics will be examined after a brief exploration of the contrasts between the hermeneutical perspective and the epistemological perspective.

The Contrast with the Epistemological Perspective

As previously noted, Gadamer is concerned with some of the same issues that positivist philosophy of science dealt with. In fact, those coming from an epistemological perspective may tend to jump to the conclusion that a theory of understanding is an epistemological subject just as much as is a theory of knowledge. Gadamer's theory of understanding, however, is primarily an ontological theory. Whereas traditional epistemology is concerned with determining what types of claims warrant belief, Gadamer is concerned with finding out <u>how</u> we actually come to believe the things we believe. This contrast could also be stated as follows. Traditional epistemology is concerned with providing guidelines for arriving at a "correct" understanding of things, while philosophical hermeneutics is concerned with providing a description of what happens when we understand.

This issue appears to involve a "chicken-or-egg" sort of question. An epistemological position on what constitutes "correct" understanding involves a presupposition about <u>how</u> we understand, whereas Gadamer could be asked by the epistemologist, "How do you <u>know</u> your theory is correct?" The necessity of presupposition seems to be inescapable. This necessity, however, creates more difficulty for the epistemological position than it does for Gadamer's position.

Epistemologically-centered philosophy starts with the

ideal of a logically-certain, presuppositionless foundation upon which to build a conceptual picture of reality. Notions that cannot be thusly grounded are given no credence within this sort of philosophy. The ontologically-centered philosophy developed by Gadamer denies that such an ideal is attainable. It further claims that the epistemologists' ideal of presuppositionlessness is compromised at the outset because it, in fact, rests on an ontological presupposition.

This can be demonstrated by a consideration of the following question: "Is our conceptual world shaped largely by our preconceptual experiences in such a way that all understanding of anything rests on a fluid bed of previous interpretations, many of which are not only preconceptual but preawareness?" A "yes" or "no" answer to this question presupposes knowledge of the nature of human consciousness; it presupposes ontological knowledge. But the epistemologists' quest for a presuppositionless foundation for knowledge implies a "no" answer.

It seems to me, in simple terms, there exists a contradiction in the quest for epistemological foundations -- the ideal of presuppositionlessness is contradictory in that it rests on an ontological presupposition. Furthermore, if the epistemologists are wrong and the answer is "yes", then the usefulness of a system of conceptual knowledge built upon a presumed "no" answer would be dubious at best. Thus the necessity of presuppositions appears to be a much more

serious problem for the epistemologist than for Gadamer.

In any case, the extent of the contrast between the hermeneutical perspective and the epistemological perspective should be apparent. And since economic methodology prior to the current state of turmoil was primarily influenced by positivist philosophy of science which is solidly grounded in the epistemological tradition, this contrast makes Gadamer's philosophical hermeneutics a highly appropriate candidate to explore in searching for a new perspective on economic methodology.

Gadamer's Philosophical Hermeneutics

The major milestone in the development of hermeneutics after Being and Time was the publication of Truth and Method in 1960 by Hans-Georg Gadamer. This book, more than any other work, laid the groundwork for the various strands of contemporary hermeneutical theory. As Palmer points out, Gadamer developed comprehensively the hermeneutical directions inherent in Heidegger's philosophy. Gadamer developed the idea that "understanding" is basic to human existence. He also provided extensive analysis of the way in which all understanding is not only dialectical, but is grounded in historicality and linguisticality. "Understanding, says Gadamer, is always an historical, dialectical, linguistic event -- in the sciences, in the humanities, in the kitchen" (Palmer, p. 215).

Understanding, according to Gadamer, grows out of

experience in the sense that a person with great understanding is necessarily a very "experienced" person. But Gadamer uses "experience" in a very strict sense. Experience is always an event in the sense that it happens when one is faced with a new situation or a new development. An element of the unexpected or unpredicted is always involved in an experience. Thus it is an event that requires an adjustment of one's view of the world. In Gadamer's terminology, understanding always involves a "fusion of horizons". New situations are never approached with a clean slate of outlook and expectations. We always have a perspective that has been historically shaped by culture, tradition, and personal circumstances. When we are faced with a situation that doesn't conform to our expectations, our perspective undergoes an adjustment. This is the sense meant by Gadamer's "fusion of horizons".

The experience that brings forth, or expands, understanding is caught up in the dialectical process of question and answer. Gadamer maintains that "We cannot have experiences without asking questions" (1985, p. 325). In an experience we are faced with indeterminacy which necessarily involves questions. "The recognition that an object is different and not as we first thought, obviously involves the question whether it was this or that" (Gadamer, 1985, p. 325). It also involves "a radical negativity: the knowledge of not knowing" (Gadamer, 1985, p. 325). This knowledge of not knowing involves an openness that allows something to be

disclosed. "Questions always bring out the undetermined possibilities of a thing" (Gadamer, 1985, p. 338). The asking of questions "opens up possibilities of meaning and thus what is meaningful passes into one's own thinking on the subject" (Gadamer, 1985, p. 338). There is a sense, then, in which there is an interaction between one's self and the content of the experience. The situation raises questions which, by definition, involve the awareness of not knowing. And the awareness of not knowing creates an attitude of openness which allows us to "see" possibilities that we hadn't been open to before. We are thus changed as a result of the experience; we have a new understanding. "The experiencer", says Gadamer, "...has acquired a new horizon within which something can become an experience for him" (1985, p. 317).

Understanding also involves temporality in all its modes -- past, present, and future. We are always projecting our possibilities into the future. Our projections, our projects, our intentions, are shaped by our past. Our horizon of understanding that we bring into any situation is always inescapably a horizon that has been shaped by culture, tradition, and personal circumstances. We bring a whole interrelated set of prejudgments into any situation. Gadamer uses "prejudice" in this sense of prejudgment, i.e., not in the negative or pejorative sense.

> Long before we understand ourselves through the process of self-examination, we understand ourselves in a self-evident way in the family,

> society and state in which we live... The self-awareness of the individual is only a flickering in the closed circuits of historical life. That is why the prejudices of the individual, far more than his judgments, constitute the historical reality of his being (Gadamer, 1985, p. 245).

Gadamer takes considerable pains to "rehabilitate" the concept of prejudice, since "all understanding inevitably involves some prejudice..." (1985, p.239). In fact, he devotes a major subsection of Truth and Method to the exposition of the necessity of prejudice as a condition of all understanding. Intimately connected with this is the rehabilitation of the concept of authority. Gadamer explicates the positive sense of authority; the sense in which "authority has nothing to do with obedience, but rather with knowledge" (1985, p. 248). For example, the "authority claimed by the teacher, the superior, the expert" (Gadamer, 1985, p. 249) is of this sort. This sort of authority, Gadamer claims, "has nothing to do with blind obedience to a command" (1985, p. 248). It is an authority which "cannot actually be bestowed, but is acquired and must be acquired, if someone is to lay claim to it" (Gadamer, 1985, p. 248). The acceptance of someone else's authority, in this sense, "rests on recognition and hence on an act of reason itself which, aware of its own limitations, accepts that others have better understanding" (Gadamer, 1985, p. 248).

It is this sense of authority that Gadamer has in mind when he examines the role of tradition in shaping our institutions and attitudes.

> The fact is that tradition is constantly an element of freedom and of history itself. Even the most genuine and solid tradition does not persist by nature because of the inertia of what once existed. It needs to be affirmed, embraced, cultivated. It is, essentially, preservation, such as is active in all historical change. But preservation is an act of reason, though an inconspicuous one. For this reason, only what is new, or what is planned, appears as the result of reason. But this is an illusion (Gadamer, 1985, p. 250).

It is with this role of the active preservation of tradition in mind that Gadamer claims "That which has been sanctioned by tradition and custom has an authority that is nameless, and our finite historical being is marked by the fact that always the authority of what has been transmitted -- and not only what is clearly grounded -- has power over our attitudes and behavior" (1985, p. 249).

This, of course, does not mean that Gadamer is advocating the unquestioned acceptance of what is handed down in the form of tradition. His use of "authority" suggests precisely the opposite, as does the notion that understanding grows out of experience. The following quote illustrates succinctly the necessary relationship that Gadamer sees between prejudices and experience.

> ...the historicity of our existence entails that prejudices, in the literal sense of the word, constitute the initial directedness of our whole ability to experience. Prejudices are biases of our openness to the world. They are simply conditions whereby we experience something -- whereby what we encounter says something to us. This formulation certainly does not mean that we are enclosed within a wall of prejudices and only let through the narrow portals those things that can produce a pass saying, 'Nothing new will be

> said here.' Instead we welcome just that guest who promises something new to our curiosity. But how do we know the guest whom we admit is one who has something new to say to us? Is not our expectation and our readiness to hear the new also necessarily determined by the old that has already taken possession of us (Gadamer, 1976, p. 9)?

None of this takes place, however, without language. According to Gadamer, language is the way tradition is passed on to us. This alone would be sufficient to posit a major linguistic role in understanding. But Gadamer goes much further. He maintains that a "world" is disclosed to us only through language. In short, everything that makes experience possible is grounded in linguisticality. Thus, in the sense that understanding is a mediation between past, present, and future, language is the medium of that mediation. In fact, Gadamer claims, "Being that can be understood is language" (1985, p. 432).

We are in language the way a fish is in water. That is, we can never completely get outside linguisticality to examine it. We are born into a linguistic environment. Not only do we interact via language, but "reality" is given order by language -- by a language that was prior to us as individuals. The tradition that shapes our horizons is transmitted via language. Our concepts are linguistically shaped. And we think in language. According to Gadamer:

> Language is not just one of man's possessions in the world, but on it depends the fact that man has a world at all. For man the world exists as world in a way that no other being in the world experiences. But this world is linguistic in nature. This is the real heart of Humboldt's

> assertion...that languages are views of the world. By this Humboldt means that language maintains a kind of independent life over against the individual member of a linguistic community and introduces him, as he grows into it, to a particular attitude and relationship to the world as well (1985, p. 401).

Gadamer distinguishes between "world" and "habitat". Animals are placed in a habitat on which their life depends. And they can, in some sense, communicate. But human linguisticality and the human "world" is radically different. As Palmer puts it:

> World is not impersonal, nor does it circle an isolated individual, figuratively speaking, like a giant balloon projected by mind and perceptions. World is more aptly seen as between persons. It is the shared understanding between persons, and the medium of this understanding; and what makes it possible is language (p. 206).

Language allows us as humans to transcend our habitat in a way that is not possible for other creatures. Gadamer points out that "For man...to rise above the habitat...does not mean that he leaves his habitat, but that he has another attitude towards it, a free, distanced attitude, which is always realized in language" (1985, p. 432). It is on this basis, then, that Gadamer claims that anything that can be understood is disclosed in a world made possible by language.

> Being that can be understood is language (Gadamer, 1985, p. 432).
>
> Hence language is the real medium of human being, if we only see it in the realm that it alone fills out, the realm of human being -- together, the

> realm of common understanding, of ever-replenished common agreement -- a realm as indispensible to human life as the air we breathe (Gadamer, 1976, p. 68).

Thus, Gadamer claims a universal scope for the applicability of hermeneutics. We are always involved in interpretation in all facets of life. Interpretation, in Gadamer's terminology, is the process of making understanding explicit. Understanding grows out of experience. And human experience is dialectical, historical, and linguistic. Gadamer sums up the task of philosophical hermeneutics as follows:

> Philosophical hermeneutics takes as its task the opening up of the hermeneutical dimension in its full scope, showing its fundamental significance for our entire understanding of the world and thus for all the various forms in which this understanding manifests itself: from interhuman communication to manipulation of society; from personal experience by the individual in society to the way in which he encounters society; and from tradition as it is built of religion and law, art and philosophy, to the revolutionary consciousness that unhinges the tradition through emancipatory reflection (1976, p. 18).

Gadamer's Perspective on Science

Gadamer indicts the human sciences for attempting to emulate the natural sciences. Thus, a brief explication of his view of the natural sciences will provide a useful backdrop against which his methodological considerations regarding the human sciences can be discussed.

It would be incorrect to characterize Gadamer as hostile to science. He does, however, offer some sobering, if

not pessimistic, considerations about science. Our civilization, he maintains, is founded on modern science. It is a civilization characterized by the extensive domination made possible by scientific technology. Technology has obviously made possible the extensive domination of nature by human beings. But the increasing mastery of nature has also, according to Gadamer, led to the domination of human beings over each other. "A result of technology is that it leads to such a manipulation of human society, of the formation of public opinion, of the life conduct of everyone, of the disposition of each individual's time between job and family, and it takes our breath away" (Gadamer, 1982, p. 3).

It is not by chance, claims Gadamer, that our scientifically grounded civilization is characterized by domination. Scientific knowledge is, he maintains, knowledge for domination. This is a perspective that Gadamer has taken over from Heidegger, who had demonstrated that classical Greek metaphysics was the source of concept formation that made science possible.

> In Being and Time Heidegger, as I see it, attains a position from which both the differences and he similarities between Greek science and modern science can be considered. When he showed the concept of presence-at-hand to be a deficient mode of being and saw it as the background of classical metaphysics and its continuance in the modern concept of subjectivity, he was pursuing an ontologically correct connection between Greek theoria and modern science. Within the framework of his temporal interpretation of being, classical metaphysics as a whole is an ontology of what is present-at-hand, and modern science is, unbeknownst to itself, its heir (Gadamer, 1985, p. 413).

The deficiency of the present-at-hand relationship is that it lacks the unity and connectedness of ready-to-hand relationships. Ready-to-hand relationships are characterized by the lack of a sense of separation, by the lack of a sense of where "I" end and "other things" begin. Something that is present-at-hand, however, is seen as a specific, separate object, as a thing-in-itself.

In any case, Gadamer maintains, along with Heidegger, that our conceptual language reflects an ontology of things present-at-hand, an ontology of "absolute objects". And this ontology, he claims, can be traced to the Greeks.

> And if we look about us in a world that is tending to cultural levelling...do we not begin to recognise that the whole of our conceptual philosophical language and its derivative, the conceptual language of modern science, are in the final analysis of Greek origin? It is the language of metaphysics with whose categories we are familiar from grammar -- subject, predicate, nomen, verbum, noun and verb (Gadamer, 1985, p. 494).

All of this is connected with Gadamer's claim that scientific knowledge is knowledge for domination. The aim of science is to achieve objective knowledge. In Heidegger's terminology, such objective knowledge is knowledge of things present-at-hand. In other words, science attempts to find knowledge of the thing-in-itself. And as Gadamer points out, something that is "known in its being-in-itself, is made available in the sense that one can deal with it, ie use it for one's own purposes" (1985, p. 408). The truth of this is made abundantly clear, it seems to me,

by the extensive domination of nature that has resulted from the technological applications of scientific knowledge.

The development of knowledge that allows us to use nature is not, in itself, what Gadamer finds so ominous. He sees modern science as out of control and potentially destructive because it produces dangerously incomplete knowledge as far as human life experience is concerned. Scientific knowledge is incomplete in that it is not cognizant of the extensiveness of the ready-to-hand mode of being that so pervades most of our life experience, especially via the role of preconceptual understanding. And so Gadamer suggests that

> ...over against the whole of our civilization that is founded on modern science, we must ask repeatedly if something has not been omitted. If the presuppositions of these possibilities for knowing and making remain half in the dark, cannot the result be that the hand applying this knowledge will be destructive (1976, p. 10)?

Gadamer thus maintains that "the central question of the modern age is the question of how our natural view of the world -- the experience of the world that we have as we simply live out our lives -- is related to the unassailable and anonymous authority that confronts us in the pronouncements of science" (1976, p. 3) This, he claims, is the question that raises the real task of philosophy to the forefront: "our task is to reconnect the objective world of technology, which the sciences place at our disposal and discretion, with those fundamental orders of our being that

are neither arbitrary nor manipulable by us, but rather simply demand our respect" (Gadamer, 1976, pp. 3-4). Stated more simply, Gadamer is saying that our real task is to regain control over science and technology by somehow making them function for us within the context of our holistic experience of life.

This is a task that would involve the so-called human sciences. However, the human sciences are precluded from making a valid contribution to this task as long as they persist in emulating the natural sciences. An examination of the implications of Gadamer's hermeneutics for methodology in the human sciences should clarify this claim.

Implications for Methodology

In a recent book, Hermeneutics:Questions and Prospects(1984), Gary Shapiro and Alan Sica note that "Gadamer's account of interpretation...is descriptive, not prescriptive; he is trying 'to envisage in a fundamentally universal way what always happens'" (p. 5). In the very strictest sense, this is true. However, Gadamer's philosophical hermeneutics is chock full of implications for methodology in all areas of academic inquiry. And these implications have not gone unnoticed. As pointed out by Joel Weinsheimer in a 1985 book on Gadamer's Hermeneutics, "Gadamer's thought has left its mark everywhere among the human sciences--in sociology, literary theory, history, theology, law -- and indeed in philosophy of natural

science" (p. ix).

Gadamer sees the human sciences as fundamentally different from the natural sciences, and he finds much of relevance for the human sciences in the Aristotelian view of ethics. In Aristotle's view, human being is not something that is fixed, but is always changing; it is becoming. And human reason and knowledge are not detached from that process of becoming. On the contrary, human reason and knowledge are caught up in an interplay with the process of becoming, in such a way that human knowledge is determined by the process and the process is determined by human knowledge. As humans we are continually faced with situations requiring action. How we choose to respond to a situation depends partly on the knowledge we bring into the situation. At the same time, however, our knowledge expands with our experience, with our exposure to various situations and our responses to them.

As Gadamer points out, the object of the human sciences "is man and what he knows of himself...[and the]...purpose of his knowledge is to govern his action" (1985, p. 280). Furthermore, such knowledge "is clearly not objective knowledge, ie the knower is not standing over against a situation that he merely observes, but he is directly affected by what he sees" (Gadamer, 1985, p. 280). This makes for a fundamental difference, according to Gadamer, between the natural sciences and the human sciences; a difference that is clearly implied in the following quote:

> Human civilisation differs essentially from nature in that it is not simply a place in which capacities and powers work themselves out, but man becomes what he is through what he does and how he behaves, ie he behaves in a certain way because of what he has become. Thus Aristotle sees ethos as differing from physis in that it is a sphere in which the laws of nature do not operate, yet not a sphere of lawlessness, but of human institutions and human attitudes that can be changed and have the quality of rules only to a limited degree (Gadamer, 1985, p. 279).

In Gadamer's view, then, the human sciences err in attempting to be objective in the manner of the natural sciences. "The scientific nature of modern science consists precisely in the fact that it makes tradition objective and methodically eliminates any influence of the interpreter on understanding" (Gadamer, 1985, p. 297). But for the human sciences to attempt this is an attempt to distance themselves from the human situation. And the understanding that results from such procedures is a form of alienated understanding in that it is cut off from history and tradition. As Gadamer notes, "knowledge which cannot be applied to the concrete situation remains meaningless and even risks obscuring the demands that the situation makes" (1985, p. 279).

Gadamer thus charges the human sciences with fostering methodological sterility. "Any experience of life can confirm the fact that there is such a thing as methodological sterility, that is, the application of a method to something not really worth knowing, to something that has not been made an object of investigation on the basis of a

genuine question" (Gadamer, 1976, p. 11). Methodological sterility thus impedes the ability to produce knowledge that is relevant to the human situation.

The human situation is rooted in tradition, and language is the most powerful medium through which tradition pervades and influences our attitudes and understanding. Gadamer thus sees the process of abstraction and its attendant construction of technical terminologies as a significant source of methodological sterility. Human tradition plays its role via living, spoken language. But technical terminology is an attempt to circumvent the necessary flexibility and adaptability of the living, spoken language. "In contrast with the living meaning of words in spoken language, to which...a range of variation is essential, the technical term has become ossified. The terminological use of a word is an act of violence against language" (Gadamer, 1985, p. 375).

Gadamer's view of the role of language in human experience and the impact that science has on that role are expressed succinctly in the following lengthy quote:

> We know that we are able to cope with an experience by grasping it in language. It is as if its threatening, even annihilating, immediacy is removed, brought within proportions, made communicable and hence dealt with. This coping with experience, however, is obviously something different from the way science works on it, objectivising it and making it available for whatever purposes it likes. Once a scientist has discovered the law of a natural process, he has it in his power. There is no question of this in the natural experience of the world expressed in language. The use of language by no means

> involves making it available and calculable. It is not just that the statement and the judgment are merely one particular form among the multiplicity of linguistic attitudes -- they themselves remain bound up with man's attitude to life (1985, p. 411).

Technical terminology is usually created as part of the process of theory construction. But Gadamer claims that theoretical knowledge itself grows out of an attempt at domination. "The modern theory", he says, "is a tool of construction, by means of which we gather experiences together in a unified way and make it possible to dominate them" (1985, p. 412). Domination happens when the response to a life situation is governed by theoretical knowledge. In such a case, one is not open to other interpretations of the situation and what it calls for. The interpretation of the situation is dominated by previously formed theoretical knowledge. The danger implicit in this sort of domination of experience by theoretical knowledge is that it can result in alienation. The term "alienation" is being used to refer to a sense of being severed from social reality, as when contemporary social institutions, seem to be divorced from the living historical tradition. This is especially significant for a social science such as economics; a social science which has had such a powerful impact on public policy.

Just as individuals are continually faced with choices about how to respond to situations they find themselves in, contemporary society is such that collectivized decisions

are ongoingly necessary. That is, we collectively face situations day after day that require collective responses. Public policy is what guides those responses. Those responses have an impact on institutional arrangements which, in turn, have an impact on the pattern of individual development. In short, the public policy decisions of today influence the course of events in such a way that the concrete human situations faced tomorrow, both collectively and individually, are altered.

So, what is the sense in which a danger is posed? There is a danger that the economic, social and political institutions that evolve in this fashion, may be institutions that are more and more divorced from the living historical tradition that is such a shaping influence on human understanding. To the extent that this happens, individuals find themselves facing situations they do not understand and, accordingly, do not know how to respond to. In short, the author sees the potential of widespread alienation as the danger posed by public policy decisions that are based on theoretical knowledge generated by human sciences that are trying to emulate the methodology of the natural sciences. In the most extreme formulation, the movement of the human enterprise through time is always an uncharted movement, but one that nevertheless has the potential of a unity of understanding in that historicality and tradition, operating via the medium of language, provide a thread of continuity. The danger of alienation is a danger

of breaking that thread of continuity and ultimately destroying the potential for unity within human understanding.

Perhaps the case has been overstated, and almost certainly have overstepped the boundaries of Gadamer's viewpoints. Nevertheless, it seems that the above analysis is a credible extrapolation from Gadamer's hermeneutical philosophy.

All of these methodological considerations, however, are negative in that they deal with methodological approaches that should be avoided. Does Gadamer give any clues to positive methodological considerations? Yes, he does, albeit they are very aptly characterized as "clues". These "clues" are found mainly in his discussion of conversation and the logic of question and answer.

If the human sciences are to generate knowledge (understanding) that is useful in dealing with the human situation, they must first of all ask the "right" questions. The right questions would be those raised by the situation itself. If there is no problematic situation, then there is no need for those fields of inquiry referred to as the social sciences, or, more broadly, as the human sciences. A problematic social situation would be one that arose in contradiction to expectations. This would indicate a need for an adjustment of our understanding. The role of the social sciences is to engage in inquiry that facilitates such an adjustment. The "clue" found in Gadamer's philoso-

phy that would be relevant to the pursuit of inquiry in such an instance is his discussion of the logic of question and answer, discussed briefly earlier in this chapter. If methodological sterility and alienated understanding are to be avoided, the social scientist must follow a course of inquiry that is analogous to conversation.

True conversation, according to Gadamer, requires openness (i.e., the suspension of prejudices). It also requires that one allow oneself to be led by the object of conversation. These are not disconnected requirements. When one is engaged in a "conversation" with the attitude of trying to "out-argue" the other, the result cannot truly be considered conversation. A conversation cannot get underway until the participants allow the object of conversation to pose a genuine question. This requires the suspension of prejudgments, the recognition that one does not know. It requires being open to various possibilities. When this happens then the parties to the conversation will be able to consider the weight of the other person's opinion. As Gadamer points out, "Dialectic consists not in trying to discover the weakness of what is said, but in bringing out its real strength" (1985, p. 331). Reference in this situation is always to the object of conversation. True conversation, then, is a process that allows mere individual opinion to be overcome and replaced by a commonly held view of the truth regarding the object of conversation.

This approach to inquiry would be the opposite of what

Kuhn characterizes as "normal science". Normal science consists of research aimed at the fleshing out and extension of the already accepted theoretical framework (paradigm), and contradictory theories and viewpoints tend to be suppressed by the established scientific community. Kuhn claims that normal science can be seen as "an attempt to force nature into the preformed and relatively inflexible box that the paradigm supplies" (1970a, p. 24).

Finally, it seems likely that a complementary relationship exists between Gadamer's logic of question and answer and the method of pattern modeling discussed by Abraham Kaplan in his The Conduct of Inquiry (1964). The potential for complementarity can be seen in the following quote from Kaplan.

> According to the pattern model...something is explained when it is so related to a set of other elements that together they constitute a unified system. We understand something by identifying it as a specific part in an organized whole (p. 54).

This potential complementarity will be explored further in Chapter IX where the debate in economics over explanation versus prediction is discussed.

CHAPTER IV

A "RATIONAL RECONSTRUCTION" OF NEOCLASSICAL ECONOMICS

Before jumping into a methodological appraisal of neoclassical economics, it seems appropriate, if not mandatory, to delineate the relevant boundaries of "neoclassical economics" as it is used in this appraisal. The purpose of this chapter is to provide that sort of delineation. In the spirit of Caldwell's program for methodological pluralism, this chapter is a rational reconstruction of neoclassical economics. It is intended to provide a unified picture of the whole from which specific components have been selected for detailed appraisal in subsequent chapters.

What is a "Rational Reconstruction"?

Lakatos pointed out that historians of science employ a screening process in determining which theories or which events to include in their history. The screening criteria often have not been explicitly spelled out. But whether implied or explicitly stated, the criteria have typically been derived from some notion of scientific mehtodology. Lakatos thus maintains that scientific methodologies tend to serve as "'theories of scientific rationality'" (1971,

p. 92). Basically, he is saying that modern methodologies consist of sets of rules that are intended to disallow scientific status for theories violating those rules. Those rules embody the 'reasons' for accepting or rejecting theories. Thus, Lakatos maintains, the historian of science reconstructs the history in accordance with some theory of scientific rationality.

In doing an appraisal of a particular school of thought, research programme, or paradigm in economics, a screening process is also employed, either implicitly or explicitly. The purpose of starting with a "rational reconstruction" is to make the screening process as explicit as possible.

While the differences between mainstream neoclassical economics and Marxian economics, or even institutional economics, may seem patently obvious, the differences between mainstream neoclassical and Austrian economics are not very well understood. Also, it is not always clear whether "neoclassical economics" is meant to include Keynesian macroeconomics or not. The remainder of this chapter is intended to clarify and make explicit the "screening" rationale employed in appraising neoclassical economics.

The Transition from Classical to Neoclassical Economics

In a definitional sense, neoclassical economics refers

to a contemporary or modified version of classical economics. In this sense, a delineation of neoclassical economics is derivative from classical economics, and the crucial question is: In the transition to neoclassical economics, what remains unchanged from classical economics and what has changed? Has the methodology changed? Have crucial assumptions been changed? Have the basic conclusions changed? Or, is it simply that the theoretical content changed so drastically as to warrant a distinction?

It is widely accepted among economists that the "marginal revolution" is the most obvious dividing line between classical and neoclassical economics. The specific substantive basis for a reclassification, however, is not as widely agreed upon. As Blaug notes,

> ...there appears to be no agreement as to just what the new paradigm was that Jevons, Menger, and Walras put forward. Was it a new emphasis on demand rather than supply, on consumer utility rather than on production costs? Was it something as ambitious as a subjective theory of value, which was to supplant the objective labor-cost theories of the past? Was it rather the extension of the principle of maximization from business firms to households, making the consumer and not the entrepreneur the epitome of rational action? Was it perhaps the equimarginal principle, enshrined in the proportionality of marginal utilities to prices as the condition of consumer equilibrium? Was it instead, as Schumpeter liked to say, the explicit or implicit discovery of general equilibrium analysis? Or lastly, was it simply the first conscious recognition of constrained maximization as the archetype of all economic reasoning (1973, pp. 8-9)?

Regardless of the ambiguity noted by Blaug, his quote definitely indicates the extensiveness of the impact of the

marginalists on economic thought.

Sir John Hicks maintains that the primary distinction of the "marginalist revolution" was the substitution of a vision of economic life based on a theory of exchange for the classical vision which was based on a theory of production. He considers the term "marginalists" to be a bit of a misnomer since, "The 'margin' is no more than an expression of the mathematical rule for a maximum (or minimum)...[and therefore]...any sort of economics is marginalist when it is concerned with maximising" (Hicks, p. 212). Since "catallactics" was the term used at that time to refer to the theory of exchange, Hicks opts for renaming the marginalists as catallactists.

The essential conclusions of classical economics regarding the desirability of market solutions was not, however, disturbed by the new "catallactic" vision of economic life. As Blaug points out, although the development of a marginalist theory of distribution solidified the logical conflict with classical economics, "In 1891 Marshall provided a reconciliation between marginal utility economics and classical economics which made the new ideas palatable by showing that they could be fitted together into a wider context" (1973, p. 13).

If the marginalists did not change the overall conclusions of classical economics, what did they change? The author agrees with Blaug that the most significant impact was on the way the economics profession saw itself in terms

of a legitimate claim to be called a science. It marked the beginnings of "economic science" and the end of "political economy".

Possibly the most significant aspect of the marginalist approach in triggering this change in perspective was its potential for mathematical construction in economic theory. In an address to the Royal Economic Society, Phyllis Deane noted that

> ...the abstract theorists succeeded in capturing the imagination of a rising generation of economists with the aid of an analytical tool based on the calculus. The marginal technique of analysis could be used to reconstruct the weakest link in the classical theoretical system -- the cost of production theory of value -- without denting the hard core of orthodox classical doctrine. It was a particularly attractive development for economists who had ambitions to mimic the methods of the natural sciences for three sorts of reasons: first because the most progressive natural sciences were obviously benefitting from mathematical tools of analysis; second, because retention of the hard core doctrine of the self-regulating economic system under competitive conditions implied the continuity of classical and neoclassical economics and made it easier to believe in the cumulative advance of economic theory; and thirdly because the independent application of the marginal technique in three separate geographical locations in the early 1870s, gave the intellectual community of economists a sense of international consensus which is rare for social scientists (p. 2).

Another very significant implication of the marginalist view of economics was that it was a value-free analysis, not ethically or politically biased. This bolstered the notion that it was a "scientific" analysis. It was also an attractive characteristic to those classical economists who wanted

a defense against the accusations of the historical economists. "In effect, the classical economists were accused of devising amoral (if not immoral) theories involving implicit presumptions in favour of a laissez-faire stance in economic policy at a time when ethical considerations demanded a programme of legislation to protect the under-privileged sectors of the economy" (Deane, p. 3).

This claim of value neutrality had another impact on economics in addition to bolstering its scientific image -- it severely narrowed its scope. As noted by Deane, "lifting the central body of economic theory out of the arena of ethical and political debate...narrowed the scope of the theoretical core of the economists' research programme so that it was largely reducible to a theory of exchange under competitive conditions" (p. 6).

In summary, the most significant characteristic of the transformation from classical to neoclassical economics was the birth of a professionalized economics that laid claim to being a value-free social science. As Blaug notes, "It is precisely in this period that economics began to emerge as a professional discipline with its own network of associations and journals, the dilettante amateur of the past giving way for the first time to the specialist earning his livelihood under the title of 'economist'" (1973, p. 12). In the words of Robert Heilbronner,

> ...economics had ceased to be the proliferation of world views that, in the hands of now a philosopher, now a stockbroker, now a revolutionary,

> seemed to illuminate the whole avenue down which society was marching. It became instead the special province of professors, whose investigations threw out pinpoint beams rather than the wide-searching beacons of the earlier economists (1980, p. 170).

Does Neoclassical Economics include Keynesian Economics?

"Neoclassical economics" is often used in a very loose way to refer to mainstream or orthodox economics in general. When it is so used, it implies that Keynesian economics is part of "neoclassical economics." It has, in fact, been claimed by some economists that Keynes' ideas did not constitute a revolutionary break in economic thought. Coats, for example, in arguing that there have been no Kuhnian-type revolutions in economics denies such status to Keynesian thought because it lacked one essential attribute of a Kuhnian scientific revolution: "the Keynesian paradigm was not 'incompatible' with its predecessor..." (1969, p. 293).

Among the economists who explored the question of revolutions in economics, however, Coats seems to be in the minority. Ward and Stanfield are two of the economists who argued forcefully that Keynesianism was a Kuhnian-type revolution; that it did represent a major break with neoclassical thought.

Neoclassical economics was in a crisis by the 1930s, according to Ward, due to the persistence of certain anomalies which could no longer be ignored; anomalies in monetary theory, capital theory, and business-cycle analysis. Money

remained outside the neoclassical supply and demand analysis although "it was clear that there was some sort of relationship between short-run fluctuations in economic behavior, and the amount of money available to the economy and its use by citizens..." (Ward, p. 35). At the same time capital theory emphasized real factors and neglected monetary factors. Business-cycle analysis, on the other hand, posed a different sort of anomaly. It was a peripheral subject because the subject itself was anomalous. "It studied variations in the level of economic activity that were certain, according to neoclassical theory, to be corrected by the operation of market forces" (Ward, pp. 35-36). But by the 1930s real economic events had placed the business cycle squarely in the center of public concern: "the great factual anomaly of the period was the persistence of massive unemployment..." (Ward, p. 36). The Keynesian paradigm went a long way toward resolving these anomalies. In fact, Keynes' analysis is most well known for its demonstration that massive unemployment can persist for long periods of time within a market economy. Thus, what was an anomaly in the neoclassical paradigm was not anomalous in the Keynesian paradigm, and the study of variations in the level of aggregate output which had previously been a peripheral subject was placed squarely in the center of conventional economics. "Furthermore, Keynes played a very important role in developing a theory of money in terms of supply and demand, so that one major anomaly of the older theory has virtually

disappeared" (Ward, p. 38).

Stanfield, in a 1974 article, also makes the case for the Keynesian revolution being a Kuhnian revolution. He maintains that, "The basic anomaly of the pre-Keynesian heritage is found in the area of automatic full employment based upon Say's Law and the quantity theory, which deny the possibility of general market gluts" (Stanfield, p. 101). Keynes' General Theory not only provided a solution to the anomaly, it provided a different world view with new puzzles to be solved and new tools of analysis. "In the new view... the government is given a consistent theoretical rationale for fiscal intervention" (Stanfield, p. 103).

The so-called neoclassical synthesis, however, apparently convinced the economics profession at large that, when fully and adequately analyzed, the apparently "revolutionary" thought of Keynes can be seen to be merely a special case within neoclassical thought. This notion has been explored at length, and disputed, by Leijonhufvud.

Keynes, claims Leijonhufvud, was chiefly challenging the "'orthodox' presupposition that the economic system 'naturally' and 'automatically' works to coordinate activities..." (p. 91). Keynes' theory embodied the polar opposite presupposition, and its acceptance among economists, he implies, was made possible by the trauma generated for economists by the Great Depression.

Leijonhufvud points out that Keynesianism did not result in an outright abandonment of orthodox theory. The

macro part of neoclassical economics was abandoned, but the micro part was retained. Neoclassical microeconomics was retained because "the 'revolutionary' Keynesian doctrine provided no sufficiently coherent and well-developed substitute...[for its]...innumerable applications to important guns-or-butter issues..." (Leijonhufvud, p. 84).

So, we have the survival of contradictory research programmes; programmes that are built on contradictory presuppositions. The external world described by the microeconomics courses in most universities has to be a different world, claims Leijonhufvud, than the one described by the counterpart macroeconomics courses. As he puts it,

> ...economists have lived since the Keynesian revolution with two bodies of theory ('micro' and 'macro') based on incompatible presuppositions about what the real system under study is like. How could we possibly have done so? The two theories could not possibly be 'true' of the same external world. Yet, they have survived side-by-side for decades in reasonably peaceful coexistence and without a climactic confrontation. That a relationship of victor to vanquished, of progressive to degenerating programme has not developed is easily understandable. As previously indicated, each of the two is singularly ill-adapted for coping with the phenomena that the other accords the first order of priority. But the actual 'truce', that allowed these two incompatible views of the world to be simultaneously entertained without acute intellectual discomfort by a couple of generations of economists, is so implausible on the face of it as to require explanation (Leijonhufvud, p. 92).

The "truce" was, of course, the "neoclassical synthesis" which, according to Leijonhufvud, simply amounted to a couple of trite and trivial conclusions of Keynesian econom-

ics being incorporated into neoclassical economics as a special case, while ignoring the revolutionary "gestalt" of Keynes' theory. What allowed this to happen were certain incongruities between the form and the substance of Keynes' theory. The most crucial of these incongruities are stated by Leijonhufvud as follows:

> First, in directing his revolt most specifically against the Marshallian economics reigning in Cambridge, he sought to vanquish it with its own analytical weaponry. Among the main 'neoclassical schools' of the time, the Marshallian stands distinct from the rest by its conscientious guardianship of the 'plutological' analytical tradition. Keynesian aggregative economics bears this plutological heritage. For the formal statement of the coordination problem, however, a 'catallactic' approach would have been more appropriate.... Second, Keynes 'cast his theory in static, equilibrium form' whereas the coordination problem will ultimately require the development of methods of 'dynamic', 'disequilibrium' process analysis (pp. 93-94).

These incongruities in Keynes' theory, according to Leijonhufvud, allowed the gradual undermining of the Keynesian perspective as economists attempted to reconcile neoclassical microeconomics with Keynesian macroeconomics. Even though Keynes' theory was dynamic in substance, the fact that it was static in form allowed the analysis to be carried out with the use of static equilibrium models. "Elements of Keynes's theoretical statement that were not to be captured by such representation drifted out of view" (Leijonhufvud, p. 95). Also, the use of a microeconomic model that Leijonhufvud characterizes as a monetary neo-Walrasian model allowed "Keynes's model...to be

reinterpreted as an 'aggregative, catallactic' structure rather than being seen as a late product of Marshallian plutology" (Leijonhufvud, p. 95). And finally, Leijonhufvud notes that, "As the debate proceeded...the accumulation of...substitutions of 'what Keynes ought to have said' for what he did say came to falsify the original gestalt conception" (p. 95). Leijonhufvud sums up the result as follows:

> The process leading up to the neoclassical synthesis featured the standard equilibrium constructions mindlessly eating away at the main Keynesian ideas until nothing was left but the trite and trivial propositions that if wages are (i) 'too high' for equilibrium, and (ii) 'rigid downwards', then unemployment will exist and persist. That end-product is the neoclassical synthesis in a nutshell (p. 96).

Leijonhufvud does not buy the neoclassical synthesis at all. He calls it "patent nonsense any way you look at it" (Leijonhufvud, p. 96). What was accomplished by the "synthesis" is caustically summarized by Leijonhufvud as follows:

> The 'synthesis' gave an understandable answer to only one question, namely Humpty-Dumpty's: 'Who is to be master?' The neo-Walrasian programme came out the master with the Keynesian subordinated to the role of one of its 'special cases' (p. 96).

If one accepts Leijonhufvud's analysis, then, neoclassical economics is essentially microeconomics. In any case, the present appraisal is aimed at neoclassical microeconomics, and is not intended to address Keynesian economics or

neoclassical macroeconomics, however the latter might be construed.

Marxist and Institutionalist Criticism

While there are technical subtleties involved in delineating neoclassical economics from Keynesian economics, there are no difficulties involved in delineating neoclassical from Marxian or from institutionalist economics. The reason for including a discussion of the differences at this point is primarily to highlight the most distinctive characteristics of neoclassical economics when viewed from a distance. The differences that stand out when viewed from a distance, but are obscured when one is close-up, are precisely the differences that should be considered as points of focus in an over-all appraisal. This is especially true when the appraisal is from a "foreign" perspective, such as hermeneutics.

The most distinctive characteristic of neoclassical economics from a Marxist perspective is surely the consistency of its basic conclusions. As has already been mentioned, Adam Smith's basic conclusions regarding the efficacy of market solutions remained essentially unchanged in the transition from classical to neoclassical economics. That is, both classical and neoclassical economists have concluded that a market system in which all parties pursue their own self interests would yield the most desireable solution to economic problems.

> ...as Samuelson said in the Foundations: 'At least from the time of the physiocrats and Adam Smith, there has never been absent from the main body of economic literature the feeling that in some sense perfect competition represented an optimal situation.' The modern Invisible Hand theorem provides a rigorous demonstration of that feeling: every long-run perfectly competitive equilibrium yields an optimal allocation of resources and every optimal allocation of resources is a long-run perfectly competitive equilibrium. Of course, this leaves out the 'justice' of the associated distribution of personal income; furthermore, 'optimal allocation' is strictly defined with reference to the three basic value judgements of Paretian welfare economics. Nevertheless, every economist feels in his bones that the Invisible Hand theorem is almost as relevant to socialism as to capitalism, coming close indeed to a universal justification for the role of market mechanisms in any economy (Blaug, 1976, p. 176).

Blaug, in the above quote, overstates the case. Not every economist shares this feeling regarding the Invisible Hand theorem and the justification of market mechanisms. Marxian economists certainly do not share this feeling, nor do very many institutionalists. In fact, Marxists and institutional economists have often and loudly criticized neoclassical economists for what they claim amounts to dressing up an ideological position as a scientific conclusion.

The view that neoclassical economists are actually reflecting an ideological position is developed by Benjamin Ward. In his What's Wrong With Economics?, he claims that neoclassical economics is held together by a framework of consensus that is based solidly upon classical liberal philosophy with its principles of hedonism, rationalism, and atomism. Neoclassical economics uses the market place as

the key to the reconciliation of atomism with the need for order and a harmony of interests. "The autonomous individuals of economic science come into conflict, but this conflict is dramatically transformed by the bargaining processes of the market place into a harmony of interests, a Pareto-optimality in principle, whose liberal credentials are impeccable" (Ward, p. 26).

Marxists and institutionalists also criticize neoclassical economists for their use of methodological individualism and its unrealistic assumptions about human behavior. In neoclassical economics, market oriented economies are assumed to be driven by the preferences of rational maximizing individuals acting in their self-interest. These preferences are furthermore assumed to be given, that is, exogonous to the economic system.

This difference with Marxist economics is spelled out explicitly by Herbert Gintis.

> 'By acting on the external world and changing it,' Karl Marx once remarked, '[the worker] at the same time changes his own nature.' Much of Marxist theory is a development of this basic observation. The special position in Marxist theory of economic structure, its conception of materialism, of ideology, of classes and of social change, hinge on this connection. Indeed, again to quote Marx, 'the whole of history is nothing but a continual transformation of human nature.'
>
> It is less than happenstance that the major competitor to Marxist theory, the tradition culminating in modern neo-classical economics, is grounded firmly not merely in the abstraction from, but the negation of this insight. The Marxist observation, translated into neo-classical terminology, holds that individual preference structures are products of economic activity. Or more precisely, individual preferences develop and

> change according to variables endogenous to the economic model: prices, quantities, and availabilities of consumption goods, jobs, and the social institutions conditioning the supply of labor. Neo-classical theory starts from the contrary position: the Walrasian system takes preferences as either fixed, or changing only in response to variables external to the model (p. 415).

Institutionalists share this same difference with neoclassical economists. They maintain that individual preferences are shaped largely by the institutional environment surrounding the individual. They furthermore claim that economic activity and economic changes are major influences on the evolution of social and cultural institutions. Nor do institutionalists accept the notion that rationality in decision-making can provide an adequate account of the behavior of economic actors. According to Charles Wilber and Robert Harrison:

> At the motivational level, institutional economics always has recognized the importance of 'nonrational' human behavior in economic decision making. A thirst for power and adventure, a sense of independence, altruism, idle curiosity, custom, and habit may all be powerful motivations of economic behavior. Thus, institutionalists have been particularly critical of the economic man assumption of neoclassical economics (p. 72).

Marxists and the institutionalists, in short, share the view that meaningful economic analysis must take into consideration the psychological, social, political and economic forces that have a shaping influence on individuals.

A Lakatosian Construction of Neoclassical Economics

So, this seems an appropriate point at which to introduce not only a Lakatosian reconstruction of neoclassical economics, but one that gives the (or, at least one) rationale for not dealing with the psychological, social, political and economic influences on individuals. Such a reconstruction is contained in the article by Latsis in Method and Appraisal, apparently the first attempt to introduce the ideas of Imre Lakatos into economic methodology.

Latsis maintains that neoclassical microeconomics has been dominated by a single research programme which he characterizes as "situational determinism". Situational determinism, as it is used by Latsis, is especially useful in understanding how economists have managed to consistently maintain such complete independence of psychology and sociology. It also underscores the importance of the concept of rationality in that independence.

The central characteristic of situational determinism, according to Latsis, "is the autonomy of economic decision-making and the deliberate exclusion of the decision-maker's inner environment from explanations of economic behavior" (1976b, p. 17). The inner environment of the decision-maker refers here to the unique psychological make-up of the individual. Decision situations which require knowledge of this inner environment to predict the decision that the actor will make are what Latsis refers to as multiple-exit

situations. Single-exit situations, on the other hand, are those which require only knowledge of the situation to predict what the response of the actor will be.

Equilibrium models in microeconomics tend to be based on single-exit situations that do not require any assumptions about the social-psychological conditioning of the economic actors. Latsis elucidates this by quoting Herbert Simon regarding an analogous situation ragarding the behavior of liquids.

> Suppose we were pouring...molasses into a bowl of very irregular shape.... How much would we have to know about the properties of molasses to predict its behavior under the circumstances.... The single essential assumption would be that molasses, under the force of gravity would minimize the height of its centre of gravity. With this assumption, which would apply as well to any other liquid, and a complete knowledge of the environment -- in this case the shape of the bowl -- the equilibrium is completely determined.... equilibrium behavior depends only on its goal and its environment, it is otherwise completely independent of the internal properties (1976b, p. 18).

Just as a prediction of the behavior of molasses in this situation requires only a knowledge of a certain characteristic common to all liquids, the prediction of the behavior of an individual in situational determinism requires only a knowledge of a certain characteristic that is common to all humans, namely rationality.

Microeconomists have, for the most part, tacitly adopted the rationality principle. Their models are typically built upon certain assumptions (including the

rationality principle) which are sufficient to render conclusive predictions of the behavior of economic actors. That is, they set up what Latsis refers to as single exit situations. Thus, according to Latsis, the neoclassical research programme can be described as follows:

> The hard core of the neoclassical programme may be put forward in the following four propositions:
>
> (i) Decision-makers have correct knowledge of their economic situation.
>
> (ii) Decision-makers prefer the best available alternative given their knowledge of the situation and of the means at their disposal.
>
> (iii) Given (i) and (ii), situations generate their internal 'logic' and decision-makers act appropriately to the logic of their situation.
>
> (iv) Economic units and structures display stable, coordinated behavior.
>
> The positive heuristic of the programme may be expressed in terms of the following maxims:
>
> (i) 'Construct static models.'
>
> (ii) 'Minimize and if possible completely eliminate psychological and, in general, non-economic content from the model.'
>
> (iii) 'Set up the situational assumptions in such a way that a determinate equilibrium issues.'
>
> (iv) 'Where possible construct functions which are suitable for the application of the procedures of the calculus.'
>
> (v) 'If the model yields no determinate equilibrium, modify the situational assumptions until such a solution becomes possible.'
>
> (vi) 'When the model yields a determinate equilibrium, attempt to refine it by introducting more realistic situational assumptions' (1976b, p. 22).

Both the perfect competition and the pure monopoly models are set up in accordance with this positive heuristic, and both yield unique determinate equilibrium solutions. After reviewing these basic models, Latsis reviews the models of monopolistic competition, duopoly,

oligololy, and limit price theory, all of which can be viewed as extensions of the basic models which have been obtained by altering the situational assumptions in the direction of increased realism.

The author has only one quarrel with Latsis' reconstruction of the neoclassical research programme, and that is his implication that it is built on a theory of rationality. Neoclassical economics merely assumes rationality. Austrian economics, on the other hand, incorporates a very specific theory of rationality. Insofar as the neoclassical research programme is to be distinguished from the Austrian research programme, that distinction must begin with the Austrian's theory of rationality on which they base <u>their</u> legitimation for the use of methodological individualism. It seems that Latsis has inappropriately attributed an Austrian-type theory of rationality to the neoclassical research programme. It thus seems appropriate at this point to explore the distinction between neoclassical economics and Austrian economics -- a distinction between the praxeological approach and the positivist approach.

Praxeology versus Positivism

Positivism has been the most important philosophical influence on the methodological thought of neoclassical economists. There have, of course, been numerous variations on positivist thought. But regardless of the variations, the emphasis on empirical testing of knowledge claims makes

for a definitive dividing line between neoclassical economic thought and Austrian economic thought.

The first major work in economic methodology from a positivist perspective was Terence Hutchison's The Significance and Basic Postulates of Economic Theory, published in 1938. This book was an attempt to establish a solid logical foundation for economics as an empirical science. He followed the positivists in maintaining that the propositions of economic science must be either analytical or empirical. The analytical propositions are true because they are tautological, as are the propositions of mathematics and logic. As such they cannot be proven false by any conceivable set of events. Thus, they have no empirical content. The truth or falsity of empirical propositions, on the other hand, does hinge on actual events. "[T]hese propositions must conceivably be capable of empirical testing or be reducible to such propositions by logical or mathematical deduction" (Quoted in Caldwell, p. 107).

According to Hutchison, all the propositions of pure economic theory are devoid of empirical content. The usefulness of pure theory, however, is only accessory. The objective of economics is to find empirical generalizations which are "conceivably falsifiable, though not practically falsified, empirically" (Quoted in Caldwell, p. 111). These generalizations, Hutchison maintained, constitute scientific laws.

Hutchison also kicked off the most famous debate in

neoclassical economic methodology by further maintaining that the assumptions on which theories are built should be grounded in empirical investigation. Fritz Machlup attacked Hutchison's position, which he labeled "ultra-empiricism". Machlup claimed that this sort of position did not recognize the fact that propositions of different levels of generality, and thus of different levels of testability, are not only useful but necessary in science. He also claimed that the more general propositions need not be tested directly and individually; they can be tested indirectly in the context of testing the theory as a whole (see Caldwell, pp. 141-143).

Milton Friedman's position regarding the assumptions or basic postulates of economic theory is also at odds with Hutchison's position. But it is also different from Machlup's position. Whereas Machlup maintained that the basic assumptions of economic theory need not be directly testable because they can be indirectly tested, Friedman claimed that they needn't be testable at all. According to Friedman, "The ultimate goal of a positive science is the development of a 'theory' or 'hypothesis' that yields valid and meaningful (i.e., not truistic) predictions about phenomena not yet observed" (p. 7) The assumptions on which the theory is built are important as instruments only; their realism or lack thereof is irrelevant.

Freidman's view was, in turn, attacked by Paul Samuelson who argued that economists should be concerned

with providing an accurate description of the economic world. Samuelson thus claims that Friedman "is fundamentally wrong in thinking that unrealism in the sense of factual inaccuracy even to a tolerable degree of approximation is anything but a demerit for a theory or hypothesis" (Quoted in Blaug, 1980, p. 111).

Prior to Kuhn, then, the primary methodological disputes among neoclassical economists in this century have been about direct versus indirect testability of hypotheses, the importance or irrelevance of assumptions being realistic, and about whether predictive accuracy, explanatory power, or descriptive accuracy should be the goal of economic theory. But, there has been general agreement that the validity of economic theory must at some point be judged on the basis of empirical evidence. In this stance, mainstream neoclassical economists are definitely at odds with Austrian economists.

The "Austrian" economic thought specifically referred to, is that line of thought usually associated with Ludwig von Mises. Mises developed a unique praxeology (theory of human action) on which he bases his view of economics. According to Mises, "economic science is praxeological... [and]...the basic postulates of the discipline are necessary and unquestionable truths about the human condition..." (Caldwell, p. 104).

The praxeological point of view relies on a distinction between <u>human</u> action -- that is, a type of action that is

presumably unique to humans -- and all other types of action. Israel Kirzner, in The Economic Point of View (1960), claims that the important contribution of praxeology in understanding human action is that it has isolated an element in human action that operates in addition to any physiological, psychological, or physical influences. That element is human reason or logic. Human reason, according to Kirzner, provides a unique guide to the selection of one or more courses of action that hold out the promise of altering one's state of affairs in a way that is perceived to be desireable. "In so far as human behavior is guided by logic, then, conduct will follow a path that has been selected by reason. This path of conduct is what is known praxeologically as human action" (Kirzner, p. 149).

Kirzner does not deny that specific environmental conditions or physiological and psychological characteristics play a role in human action. What he is claiming is that there is something more at work in human action; "...something more than a bundle of reflexes responding to specific stimuli" (Kirzner, p. 151). The something more is "man's power to weigh, arrange, and choose among courses of behavior..." (Kirzner, p. 151).

Not only do the Misean-type Austrian economists maintain that humans possess a logic of analysis that is not available to other species, but they claim that this logic of analysis is grounded in common properties of the human mind. As Caldwell puts it, "Mises...takes a Kantian per-

spective in arguing that the axioms of praxeology...involve necessary categories of the mind..." (p. 121). He quotes Mises' argument that it is "the human mind with its logical structure, its apriori categories" (Caldwell, p. 121) that allows human beings to take advantage of their sensory input in a way that is not possible for animals.

Kirzner gives a clear-cut description of how this provides an epistemological foundation for knowledge claims regarding human behavior.

> Given all the physical, physiological, and psychological influences on the setting of an action, action of a specific form might be predicted with assurance. But such prediction is conceivable not because these influences <u>in themselves</u> determine action, but because action is subject to the mandate of reason, which guides the act into the path that is to be preferred among those indicated by the external influences. A complete knowledge on the part of an observer of these external influences might allow prediction of the form to be taken by action only because the logic of the observer enables him to know with certainty the path that the actor's own logic will select. When a man is about to perform a mathematical computation upon given data, an observer of the data may attempt to predict the results that the computer will arrive at. But for such a prediction to be successful, it is not sufficient to rely on the fact that these results are 'determined' by the data; it is necessary that the observer with his own logic be able to reproduce mentally the logical operations performed by the computer in arriving at his results (Kirzner, p. 150).

And since, according to Mises and his followers, human action is logical by definition, and since we are all equipped with the same mental categories that shape human logic, then it follows that if we know the external influ-

ences at work in any situation we can predict with certainty the course of human action that will follow. Thus Mises makes claims that are epistemologically uncompromising.

> The theorems attained by correct praxeological reasoning are not only perfectly certain and incontestable, like the correct mathematical theorems. They refer, moreover, with the full rigidity of their apodictic certainty and incontestability to the reality of action as it appears in life and history. Praxeology conveys exact and precise knowledge of real things (Quoted in Caldwell, pp. 121-122).

This, then, is the epistemological foundation for Misesian-type Austrian economic thought. It also, according to Mises, allows economics to claim a unique methodological position: "What assigns economics its peculiar and unique position in the orbit of pure knowledge and of the practical utilization of knowledge is the fact that its particular theorems are not open to any verification or falsification on the ground of experience... the ultimate yardstick of an economic theorem's correctness or incorrectness", says Mises, "is solely reason unaided by experience" (Quoted in Blaug, 1980, p. 92).

There are other notable differences between mainstream neoclassical economics and Austrian economics, such as the latter's denial of the propriety of general equilibrium analysis. But the primary distinction is the extreme difference regarding the methodological basis for knowledge claims.

Summary

In summary, for purposes of this appraisal, "neoclassical economics" refers to the body of mainstream microeconomic doctrine that is perpetuated and extended by those economists who characterize their work as positive social science. The rational reconstruction developed by Latsis is accepted as a valid Lakatosian characterization of neoclassical economics, except for his apparent conflation of neoclassical economic methodology with Austrian methodology. Even if neoclassical economists do not, as Blaug charges, practice what they preach, in terms of empirical methodology, it is still an important characteristic of the neoclassical position in that it is used to claim scientific legitimacy for neoclassical economic theory.

CHAPTER V

NEOCLASSICAL ECONOMIC INQUIRY AND THE CONTEMPORARY PROBLEMATIC SITUATION

According to Gadamer's philosophical hermeneutics, questioning typically originates when our expectations are contradicted by experience. Gadamer implies that this source of questions has implications for the human sciences. He maintains that the purpose of the human sciences is to generate knowledge that is useful for guiding human actions. And since guidance is most needed in problematic situations, it follows that such situations are a source of inquiry for the human sciences. This chapter presents an exploration of the way neoclassical economics responds to problematic situations. It is a critical exploration which relies fundamentally on Gadamer's model of conversation in which he elaborates the role of questions. First, however, a brief sketch of the contemporary role of neoclassical economics is presented as a backdrop for the exploration.

The Contemporary Role of Neoclassical Economics

Milton Friedman has expressed the view that positive

economics is concerned with "what is" and not with "what ought to be". He also maintains that the goal of economic theory is prediction and not explanation. Economic theory, in this view, is solely a tool to be used to make predictions. Economists, armed with their theory, can predict what the economic results of a given policy are likely to be. The theoretical knowledge of economists, in this view, is extremely valuable to those in policy-making positions. It is not the role of the economist, however, to make policy; that is done via the political system in Friedman's ideal world. For Friedman, then, the fact that economics has become extremely influencial with respect to public policy is not, in itself, a negative development. As a citizen, however, Friedman has been extremely critical of economic policy that is not based on neoclassical economic theory.

There is no doubt that neoclassical microeconomic theory has had a tremendous impact on public policy. It has informed the analysis of the impact of antitrust legislation, utility rate regulation, public project analysis (via cost/benefit analysis), excise tax policy, and on and on. But it also has had an impact in another way; neoclassical economics has provided the dominant image of our economic system. As John Kenneth Galbraith has pointed out, it is an image that is implanted in several hundred thousand students each year. And the implications for public policy are <u>not</u> neutral.

> Although the accepted [neoclassical] image of

> economic society is not the reality, it is what is available. As such it serves as a surrogate for the reality for legislators, civil servants, journalists, television commentators, professional prophets -- all, indeed, who must speak, write or act on economic questions. It helps determine their reaction to the economic system; it helps set the norms of behavior or action -- in work, consumption, saving, taxation, regulation -- which they find good or bad (Galbraith, p. 7).

In short, the promotion of the neoclassical image of economic society in the classroom helps to assure public support for public policy analysis that is based on neoclassical economic theory. This consideration considerably heightens the importance of how neoclassical economics deals with issues raised by the contemporary human situation. Before turning to this question, however, a review of Gadamer's views on the initiation of inquiry is in order.

Gadamer's Model of Conversation and the Primacy of Questions

In Gadamer's view, no inquiry is initiated unless something has happened or some situation has arisen that poses a question. So, the product of any inquiry can, or rather must, be seen as the answer to a question.

> It is quite artificial to imagine that statements fall down from heaven and that they can be subjected to analytic labor without once bringing into consideration why they were stated and in what way they are responses to something. That is the first, basic, and infinitely far-reaching demand called for in any hermeneutical undertaking. Not only in philosophy or theology but in any research project, it is required that one elaborate an awareness of the hermeneutic situation. That has to be our initial aim when we

> approach what the question is (Gadamer, 1982, p. 107).

But questions can be misunderstood. Or, what means the same thing in Gadamer's philosophy, the inquirer may not recognize the question posed by the situation. In this case, the "wrong" question will be addressed. Later in this chapter an attempt will be made to establish that a "normal" social science systematically obscures the questions being raised by the human situation. First, however, this notion of "right" and "wrong" questions, can be brought into sharper focus by referring once again to Gadamer's model of conversation as an analogy to the process of inquiry.

For two people who do not agree on some subject and who wish to achieve agreement, conversation holds the possibility of the desired agreement. True conversation, however, is only possible if both parties are willing to be open to the other's point of view. When both parties are open in this way, then the conversation is guided, in a sense, by the subject of the conversation. The matter under discussion, in this case, generates questions -- is it like this or like that?

On the other hand, if the parties are not open but only pretend to be, then the questions they pretend to have are false questions. Thus, according to Gadamer,

> ...a question can be right or wrong, according as it reaches into the sphere of the truly open or fails to do so. We call a question false that does not reach the state of openness, but inhibits it by holding on to false presuppositions. It

> pretends to an openness and susceptibility to decision that it does not have. But if what is undecided is not distinguished, or not correctly distinguished from those predispositions that are effectively held, then it is not brought into the open and nothing can be decided (1985, p. 327).

In the case of false questions, not only do they prohibit the issue at hand from being decided, but they stand in the way of discovering what Gadamer refers to as "truth". Truth, in the sense that Gadamer uses the term, refers to shared understanding and is caught up with the notion of community, as is illustrated in the following quote:

> Every conversation presupposes a common language, or, it creates a common language. Something is placed in the centre, as the Greeks said, which the partners to the dialogue both share, and concerning which they can exchange ideas with one another. Hence agreement concerning the object, which it is the purpose of the conversation to bring about, necessarily means that a common language must first be worked out in the conversation. This is not an external matter of simply adjusting our tools, nor is it even right to say that the partners adapt themselves to one another but, rather, in the successful conversation they both come under the influence of the truth of the object and are thus bound to one another in a new community. To reach an understanding with one's partner in a dialogue is not merely a matter of total self-expression and the successful assertion of one's own point of view, but a transformation into a communion, in which we do not remain what we were (Gadamer, 1985, p. 341).

With these notions of "right" and "wrong" questions in mind we can now turn to an examination of the questions addressed by neoclassical economics. This will be done in two steps. First, a look at the questions addressed by classical economics is in order because these have been, to

a large extent, carried over into neoclassical economics. Second, the change in questioning that resulted from the transition from classical to neoclassical economics is examined.

The Originative Questions for Economics

It is widely acknowledged by historians of economic thought that economics as a distinct field of inquiry began in the eighteenth century and that Adam Smith's The Wealth of Nations published in 1776 was the single most identifiable work that provided a comprehensive unifying perspective for this new field of inquiry. This work, more than any other, marked the beginning of classical economics.

The late eighteenth century was a time of transition. The old feudal arrangements had largely broken down. Markets had historically played a very small role, an almost incidental role, in the workings of society. But by the eithteenth century the role of markets had expanded dramatically. The expansion of markets for movable goods was dramatic in itself. But the expansion of markets to include land and labor was much more significant. Under feudal arrangements, of course, land had not been considered to be "for sale". And the "serfs" -- the workers in the feudal system -- were tied to the land and the "nobleman" who "owned" the land in a relationship which had no similarity to an employee/employer relationship.

The transition to a market system was anything but

smooth. From the sixteenth century until well into the nineteenth century the process of enclosing the common lands to raise sheep for wool resulted in wave after wave of peasants being released from the land with no means of livelihood. The towns and cities were flooded with paupers. Riots erupted against the enclosures. Robert Heilbroner, in The Worldly Philosophers, notes that some 3500 people were killed in one such riot. He also notes that 15,000 peasants were dispossessed in 1820 when the Dutchess of Sutherland replaced them with 131,000 sheep (p. 30).

The peasants were not the only one's to experience dislocation. Heilbroner notes that many of the "nobility" were displaced as power shifted away from them and into the hands of the merchants who understood money and commerce. But merchants and capitalists were also not without challenge. They were faced with change on every side; change which was often fiercely resisted. Heilbroner further described the atmosphere of disruption:

> Capital is fighting against change, and no holds are barred. In England in 1623 a revolutionary patent for a stocking frame not only is denied, but the Privy Council orders the dangerous contraption abolished. In France the importation of printed calicoes is theatening to undermine the clothing industry. It is met with measures that cost the lives of 16,000 people! In Valence alone on one occasion 77 persons are sentenced to be hanged, 58 broken on the wheel, 631 sent to the galleys, and one lone and lucky individual is set free, for the crime of dealing in forbidden calico wares (1980, pp. 28-29).

In short, the transition from feudal society to a

market system was confusing, disruptive, and generally threatening. Long established customary relationships and ways of doing things were ripped apart by forces that were not understood, and thus were feared. Consequently, Heilbroner maintains that, "Nobody wanted this commercialization of life" (1980, p. 28).

It was against this background that Adam Smith wrote The Wealth of Nations, giving classical economics its first comprehensive expression. The questions addressed by Smith have been stated as follows by Heilbroner:

> How is it possible for a community in which everyone is busily following his self-interest not to fly apart from sheer centrifugal force? What is it that guides each individual's private business so that it conforms to the needs of the group? With no central planning authority and no steadying influence of age-old tradition, how does society manage to get those tasks done which are necessary for survival (1980, pp. 51-52)?

Smith's answers to these questions are, of course, well known. He formulated the laws of the market and demonstrated how the markets for land, labor, and capital are self-adjusting on the production side and how production responds to a self-adjusting market for goods and services. The overall result being a demonstration of how a market system acts as an "invisible hand" to coordinate production and distribution of those goods desired by society, subject only to the restraint of natural resources.

From the perspective of Gadamer's hermeneutics the questions addressed by Smith, the originative questions for

classical economics, must be judged as questions that were posed by the problematic historical situation facing society at that time. It would not be easy to make a credible case that they were the "wrong" questions. But that was 200 years ago. And to the extent that neoclassical economics is still pushing roughly the same conclusions as Smith's, it must be asked where neoclassical economics is getting the questions that drive its inquiry. Can they possibly be the same questions that Smith was addressing? Or is neoclassical economics a Kuhnian-type normal science, addressing questions (puzzles) that arise in the process of extending a basic paradigmatic conceptual framework?

Neoclassical Economics as a Normal Science

A good case can be made that neoclassical economics does, in fact, function as a normal science. In fact, the transition from classical to neoclassical economics marked the beginning of economics as a normal science which has been concerned primarily with fleshing out and extending the basic paradigm provided by Adam Smith. As was noted in Chapter II, Donald Gordon made essentially this claim back in 1965, as did Benjamin Ward in a much more extensive analysis in his What's Wrong With Economics? in 1972. A closer look at Ward's analysis is in order after a review of Kuhn's concept of normal science.

According to Kuhn, most scientific activity is carried

out within an accepted conceptual framework which has been built upon past scientific achievements. The accepted framework reflects certain beliefs about the world, and it serves as a foundation for the articulation of problems that must be solved if the range of explanatory power is to be extended. The process of solving these problems is what Kuhn characterizes as paradigm-based research. The term "paradigm", in the broad sense, "stands for the entire constellation of beliefs, values, techniques, and so on shared by the members of a given community" (Kuhn, 1970a, p. 175). Paradigm-based research is also what Kuhn refers to as normal science. Normal science is research aimed at the fleshing out and extension of the already accepted theoretical framework, and contradictory theories and viewpoints tend to be suppressed by the established scientific community. Normal science, Kuhn claims, can be seen as

> ...an attempt to force nature into the preformed and relatively inflexible box that the paradigm supplies. No part of the aim of normal science is to call forth new sorts of phenomena; indeed those that will not fit the box are often not seen at all. Nor do scientists normally aim to invent new theories, and they are often intolerant of those invented by others. Instead, normal-scientific research is directed to the articulation of those phenomena and theories that the paradigm already supplies (Kuhn, 1970a, p. 24).

Accordingly, Kuhn claims that the research problems pursued tend to be those which are seen as holding the most promise for extending the explanatory power of the accepted theoretical framework. Kuhn has likened the process to

puzzle-solving, and has even claimed that the puzzle-type challenges to ingenuity and skill are strong motivating factors for scientists.

> Though its outcome can be anticipated, often in detail so great that what remains to be known is itself uninteresting, the way to achieve that outcome remains very much in doubt. Bringing a normal research problem to a conclusion is achieving the anticipated in a new way, and it requires the solution of all sorts of complex instrumental, conceptual, and mathematical puzzles. The man who succeeds proves himself an expert puzzle-solver, and the challenge of the puzzle is an important part of what usually drives him on (Kuhn, 1970a, p. 13).

Such puzzle-solving activity consists mostly of what Kuhn characterizes as "mopping-up operations", which he claims to be the substance of most scientists' careers.

In exploring the extent to which mainstream economics (neoclassical and Keynesian) functions as a normal science, Ward took Kuhn's suggestion that "the most useful way to look at a science is as a special kind of social system" (Ward, p. 5). When functioning normally, it is made up of researchers who "form a sort of invisible college, based on common interests, shared commitments, and frequent interaction" (Ward, p. 6). Ward claims that economics does fit this description. The training program centered around the Ph.D. curriculum serves as the foundation for the invisible college. These programs tend to have roughly the same basic core which is perpetuated by the fact that a more or less standard set of texts and "classic" papers serve as the main resource for the topics to be learned. He also claims that

economists' tendency toward a common perspective is heightened by contact among colleagues, especially the frequent conferences, national committee work, etc., generated by research. Research, which is governed by the informal rules of the profession, is such a potent influence because its successful completion is the primary source of prestige within the profession.

The abundance of disagreement among economists should not be taken as evidence against an invisible college of economists, Ward points out, because it is generally bounded by agreement on the broader framework of economics. "Keynesians and monetarists generally agree as to the nature of their disagreement and the kinds of tests that are likely to help resolve the controversy" (Ward, p. 11).

Another important consideration, according to Ward, is that, "Economics has acquired a hard core of quite esoteric knowledge which serves to separate sharply the solid, mainline practitioner from others" (p. 12). This hard core consists mainly of the use of mathematics to extend and formalize economic theory. Economists in this area are widely considered to be the elite of the profession. "For practitioners within this area of economics there can be no appeal other than to their peers in the field; no one else knows what they are talking about when they are talking the language of their science" (Ward, pp. 12-13).

These considerations, plus the fact that almost all fields of economics have been self-sustaining, lead Ward to

conclude that economics passes Kuhn's most crucial tests for a normal science. And the practice of economics has puzzle-solving at its heart just as other normal sciences do. Ward claims that puzzles in economics "serve to focus the attention of a number of researchers on a particular problem area, since there is usually widespread agreement that a particular puzzle is in fact a puzzle, and other members of the profession will be excited and impressed by a solution, or even by one of those ingenious attempts" (Ward, pp. 19-20).

A related aspect of economic practice is the widespread use of what Ward calls "stylized facts". "These," he says, "are false or at least exaggerated assumptions about some of the facts of the situation under study which are designed to get the researcher's attention away from these facts and onto others" (Ward, p. 20). He cites as an example, the assumption of stable prefences in the theory of consumer behavior.

> Economists are well aware that this is a stylized fact, that it is often wrong. And there are some studies in which changes in preferences are admitted. But studies that find it convenient to make this assumption are not very likely to be criticized from within the science for this particular stylized fact, because of its familiarity to economists from their training and because of its centrality to the basic normative propositions of welfare economics. Any serious critique of this stylized fact would strike at the heart of neoclassical economics. This raises the question: To what extent are stylized facts used to conceal anomalies, to discourage consideration of topics in ways that would be destructive of the framework of consensus of economic science (Ward, pp. 21-22)?

Finally, Ward claims that, like any social system, economics has certain instruments of incentive and punishment to keep the members of the profession in line. The economists who wield these instruments, those in positions of power "tend to be among the leaders of the profession, men whose status has been acquired by the high quality of the work they have performed as judged by the profession's current and quondam leaders" (Ward, p. 29). These men are "the censors who eliminate from professional consideration some work and who allocate praise among the acceptable studies..." (Ward, p. 29). The process of "censorship" is alluded to by Ward as follows:

> The discipline's censors occupy leading posts in economics departments at the major institutions, and their students and lesser confreres occupy similar posts at nearly all the universities that train new Ph.D.'s. The lion's share of appointment and dismissal power has been vested in the departments themselves at these institutions. Any economist with serious hopes of obtaining a tenured position in one of these departments will soon be made aware of the criteria by which he is to be judged. In a word, he is expected to become a normal economic scientist (pp. 29-30).

These claims advanced by Ward cannot be dismissed as an isolated view of a disenchanted economist. Lester Thurow, a solidly mainstream liberal economist, has recently issued essentially the same view in terms that are bitingly critical. Economics, he suggests, is on its way to becoming a guild which preserves and advances the traditional equilibrium price-auction view of the world: "all honor is reserved for those who can explain current events in terms of 'The

Theory', while anyone trying to develop new theories to explain recent developments is regarded with suspicion at best" (Thurow, p. xix). "The Theory" is blessed, he says, because of its internal logical consistency and its capacity for being expressed in mathematical form. But a logically consistent theory expressed in mathematical form is not, in and of itself, a sufficient foundation for public policy. And Thurow leaves no doubt about his view of the inadequacy of traditional neoclassical economics for public policy.

> I am convinced that accepting the conventional supply-demand model of the economy is rather like believing that the world is flat, or that the sun revolves around the earth -- you can make a rigorous case, on paper, for both propositions, but hard evidence is more than a bit scarce. Moreover, if you choose to act on either belief, you can get into a lot of trouble (Thurow, p. xvii).

"The Theory", Thurow claims, is actually an ideology with noticeable similarities to religious fundamentalism. Both are motivated, he suggests, by "a desire for psychological certainty in a world that is, in the last instance, uncertain" (Thurow, p. xix).

These normal science tendencies of neoclassical economics raise severe doubts about the adequacy of the way it deals with issues generated by the contemporary human situation. The normal social scientist certainly cannot consistently avoid recognition of aspects of the current situation that are anomalous with respect to the ruling paradigm. In such cases, however, the normal scientist does

not suspend his or her preconceived viewpoints and become open to the questions being raised by the situation. Instead, he or she sees the anomalous situation as a puzzle to be solved, and sets out to find some way to extend the accepted theoretical framework so that the anomaly is explained within the paradigm.

The paradigmatic viewpoint of the normal neoclassical economist, however, is at least 200 years old; it is the paradigm provided by Adam Smith. The image of economic society thus provided has been summarized succinctly by Daniel Hausman as follows.

> Since Adam Smith, a particular vision of such [market] economies has dominated economic theorizing. One conceives of an economy as made up of a number of separate agents -- individuals or households or firms -- whose only interactions with one another are voluntary exchanges of goods and services. Everybody knows that people have all sorts of other interactions with one another, but the economist assumes, as a first approximation, that these other connections among agents can be ignored. Economic agents are conceived of as well-informed, rational, and self-interested maximizers. They exchange with one another because they prefer their after-exchange circumstances to their before-exchange circumstances, and their preferences are complete and consistent. In the background is an institutional setting that insures that contracts are kept, violence and coercion and trickery prevented, and so forth. Adam Smith formulates these conditions more loosely than I have, whereas contemporary theorists formulate them with greater precision. But the basic model or vision has persisted (p. 30).

It seems unlikely that the issues generated by the human social situation of the late twentieth century could be adequately addressed within the paradigmatic viewpoint

developed to cope with the problematic situations of the eighteenth century.

Technology as the Twentieth Century's Key Issue

The most spectacular developments since the time of Adam Smith have resulted from the expansion of scientific knowledge. Scientific knowledge and its application in the form of technology were certainly beginning to have a far-reaching impact on eighteenth century society, but certain major implications that were then only seeds of possibility have come to fruition in the twentieth century. Gadamer maintains that "the twentieth century is the first to be determined anew in a decisive fashion by technology, with the onset of the transfer of technical expertise from the mastery of forces of nature to social life" (1982, p. 72).

Prior to the rise of scientific knowledge, the patterns of civilization were modeled after nature. With the rise of scientific knowledge, however, the patterns of civilization are more and more the patterns of human creation. They are, in a sense, artificial patterns. In prescientific societies technical endeavor was subordinated to human needs. In contemporary society, on the other hand, human wants and needs are shaped by technology. As Gadamer puts it, "...in our civilization, characterized by technological growth, what has been artificially produced sets the new terms -- as a consumer-awakening and need-stimulating industry is built

up around us" (1982, p. 71). What has become pervasive as a result of our technological society is a loss of freedom in the way we interact with our world. This, Gadamer maintains, is the price we pay for the comforts and wealth that technology makes available to us.

> Whoever makes use of technology -- and who does not? -- entrusts himself to its functioning. It is by means of a primary renunciation of freedom in relation to one's own overall ability to act that one has come into the enjoyment of these astonishing comforts and enlargements of wealth that modern technology makes available (Gadamer, 1982, p. 71).

This situation, says Gadamer, has obscured two questions: "For whose benefit is the work being accomplished? And how much do the achievements of technology serve life" (1982, p. 71)? The second of these questions is obviously of pressing concern in the form of the nuclear arms situation and the threat of annihilation that it poses. It is also pressing, in a less drastic and immediate sense, in the form of the ecological crisis. Not only do the life threatening dangers of technology pose very pressing questions; they also raise very unique questions because the applications of technology have gone much further than ever before in making the destiny of humankind a common destiny.

The (Neoclassical) Economics of Technology

Neoclassical economists have, of course, addressed the issue of technology, but the subject has only recently

(within the last couple of decades) begun to develop as a recognizable field within microeconomics. In fact, Ralph Landau, in a lengthy article entitled "Technology, Economics, and Public Policy," has commented that,

> The modern economics profession awoke to a comprehension of the major role technology has played only in the middle 1950s, when two economists, Robert Solow of the Massachusetts Institute of Technology and Moses Abramovitz of Stanford University, published works examining the sources of American economic growth since the Civil War. By comparing the conventional inputs with the outputs of the economy for the century following that conflict, they found the inputs were far smaller than the outputs, the difference being attributed to a residual they equated with 'technological progress,' which seemed to constitute nearly 90 percent of the growth during the period from the Civil War until the midfifties (p. 1).

Landau notes that after numerous additional papers on the subject, "It is now widely believed that from one-third to one-half of all our growth has come from technological progress, and that it is the principal driving force for long-term economic growth and the increased standards of living of modern industrial societies" (p. 2).

Quite appropriately, then, the economics of technology is becoming a recognizable field of study. One of the leaders in this field, Edwin Mansfield, introduces students to the field in his popular Microeconomics textbook.

> First we take up the definition, measurement, and determinants of the rate of technological change. Then we discuss the limitations of static efficiency, the economics of the patent system, and the effects of market structure on the rate of technological change and the rate of productivity

increase (Mansfield, 1982, p. 492).

Mansfield does all of this primarily within the framework of the neoclassical microeconomic paradigm developed in his textbook.

Most of the other mainstream writings on the economics of technology have likewise been in the nature of an extension of the explanatory power of the neoclassical microeconomic paradigm. For example, Mansfield (1983) has studied technological change and market structure within the general conceptual framework of industrial organization economics, including such considerations as "Effects of Major Process Innovations on Minimum Efficient Scale of Plant" (p. 205) and "The Rate of Technological Change, the Character of Process and Product Innovation, and Changes in Concentration" (p. 208). F. M. Scherer (1983) has studied "R & D and Productivity Increases" with an eye toward public policy implications. His analysis included considerations such as the profitability of R & D and the effects of divergences between the marginal private efficiency of R & D and the marginal social efficiency of R & D. A recent book, Technology and Economic Policy (1986), edited by Ralph Landau and Dale Jorgenson, is primarily a collection of articles using the conceptual framework of public finance to study various aspects of federal tax policy on technological innovation. Another recent book, The Economics of R & D Policy (1985), edited by George Tolley, James Hodge, and James Oehmke, is a collection of numerous articles which

represent extensions of the range of applicability of neoclassical economic tools of analysis. It includes articles which address the resource allocation problem in R & D (Brian Wright), the effect of the patent system on profit incentive (Carole Kitti), and the application of benefit-cost analysis to R & D project evaluation (George Tolley and Stuart Townsend).

Neoclassical economists have also done research which attempts to apply their analytical tools to some of the global problems that have resulted from the cumulative effects of technology and the industrialized world it has made possible. William Nordhaus, for instance, has addressed the question, "How Fast Should We Graze the Global Commons?" He argues that "the pace and extent of use of our global commons [should] be subject to the same reasoned balancing of costs and benefits as other economic activities..." (p. 242). He specifically uses the problem of the global atmospheric buildup of carbon dioxide to illustrate how such an economic approach to such issues might work. The carbon dioxide problem, he maintains,

> ...presents a classical problem in intertemporal choice. Economic analysis suggests that alternative control strategies be weighed by examining their implications for the consumption (or real income) of different generations (p. 242).

Nordhaus developes a model which, given certain parameter specifications, yield a solution for a carbon dioxide shadow price which can be used to determine a path

for optimal carbon dioxide buildup. The model utilizes a social utility function which "states that society seeks to maximize a function that depends only on consumption over time..." (p. 243). Applying the carbon dioxide shadow price in the form of a carbon tax, Nordhaus says, would be one possible approach to the development of a potentially efficient control program. "An efficient control program is one in which each individual has an incentive to reduce emissions up to the point where further reductions cost more than the benefits of emission reduction" (p. 245).

Nordhaus recognizes, however, that this sort of approach -- or any approach -- to global environmental problems must overcome monumental realistic problems in agreeing on global policy. After noting that, "Most externalities are ones that are internal to nations..." (p. 244), he points out how the carbon dioxide problem is different.

> The CO(2) problem is different from conventional pollutants because it is an externality across space and time. Once in the atmosphere, CO(2) disperses across the globe and has a half-life of centuries. In such a situation, a CO(2) control strategy would be effective only if major nations were farsighted and successfully negotiated a global policy. While such an outcome is possible, there are few examples where a multinational environmental pact has succeeded -- the nuclear test ban treaty being the most prominent. Other clearly recognized international problems -- whales, acid rain, undersea mining -- provide a career for negotiators but little concrete agreement (p. 244).

Hermeneutical Criticisms of the Economics of Technology

The cursory review of the economics of technology presented in the previous section revealed the tendency of neoclassical economists to view technology and its resultant global problems through the spectacles of the neoclassical economic paradigm. In doing so they have essentially been working within the confines of Kuhnian normal science. That is, they have been extending the explanatory capability of neoclassical economic theory to new problematic areas in such a way that the economic world continues to fit the predetermined boxes of the basic paradigmatic conception.

This is not to say that their efforts have been of no value. It is, however, a suggestion that their approach may be less than adequate, since they are not really open to the contemporary situation. In Gadamer's terms, normal science inquiry fails to reach into the sphere of the truly open. "It pretends to an openness and susceptibility to decisions that it does not have...[and]...what is undecided is not distinguished, or not correctly distinguished from those predispositions that are effectively held..." (Gadamer, 1985, p. 327).

An examination of Gadamer's views on science and technology and the contemporary human situation indicates that the most salient feature of the current problematic situation is that our capability for technical reason has far out-paced our capability for social reason. Gadamer

sees human solidarity, in the sense of "insight into the suitability of any means to commonly willed ends" (1982, p. 77), as the basis for social reason. The explanations provided by neoclassical economics, on the other hand, are highly individualistic and thus may tend to undermine our sense of solidarity and common reality. It may well be, therefore, that the individualist perspective of neoclassical economics renders economists of that persuasion incapable of comprehending the questions about social reason that are being raised by the contemporary situation. This subject is explored in more detail in the next chapter.

CHAPTER VI

THE SIGNIFICANCE AND IMPLICATIONS OF METHODOLOGICAL INDIVIDUALISM

The core of neoclassical economic theory is the theory of perfect competition. The thoroughly individualistic character of this theory is conveyed succinctly by the following quote from Frank Knight:

> The 'economic man' is not a 'social animal', and economic individualism excludes society in the proper human sense. Economic relations are impersonal. The social organization dealt with in economic theory is best pictured as a number of Crusoes interacting through the market exclusively... (Lowe, p. 105).

Some version of this individualist perspective continues to be perpetuated either explicitly or by implication in the literature of neoclassical economics, despite continuing criticism from Marxists (such as E. K. Hunt, pp. 78-79) and institutionalists (such as William Dugger, pp. 314-315). Marxist and institutionalist critics such as Hunt and Dugger frequently imply that the reason for the perpetuation of methodological individualism in neoclassical economics is that it provides support for the ideological sympathies of neoclassical economists. This sort of explanation gains credence if one accepts Mark Blaug's definition of methodo-

logical individualism as: "The view that social theories must be grounded in the attitudes and behavior of individuals, as opposed to 'methodological holism,' which asserts that social theories must be grounded in the behavior of irreducible groups of individuals" (1980, p. 266). Lawrence Boland points out that Blaug's definition leads to the notion that, "For political reasons, it would seem we have to favor individualism in order to avoid inadvertently advocating any ideology based on 'holism' -- e.g., communism, socialism, Marxism, etc."(p. 29).

Boland, in his 1981 book The Foundations of Economic Method, has suggested a much different explanation of the perpetuation of methodological individualism in neoclassical economics. This work is a unique and thoughtful appraisal of neoclassical economics. An overview of it will be provided in this chapter and certain aspects of it will be taken up in each of the next three chapters.

Individualism and the Hidden Agenda of Neoclassical Economics

Boland makes an argument that ties the persistence of methodological individualism in economics to the acceptance of what he terms "justificationism". By justificationism, he means the attitude that "knowledge claims" must meet the terms of logical certainty if they are to be granted legitimacy. This attitude among economists is, to some extent, a holdover from the inductive logic that John Stuart Mill

advocated as the basis for economic inquiry. Mill promoted the notion that economists formulate theories inductively on the basis of their knowledge of certain atomistic facts. These atomistic facts were provided in the form of knowledge of the psychological states of individuals. The assumption of uniformity of psychological make-up for human beings allowed economists to extrapolate inductively from their own economic behavior to the economic behavior of human beings in general. Economists thus claimed logical certainty for conclusions deduced without error from their inductively generated general laws of economic behavior. Individuals, in this view, represent the irreducible atomistic building blocks of economic explanations.

Economists, Boland claims, no longer accept the notion that there is a valid inductive logic. But, he maintains, they still hang onto several remnants of Mill's methodological approach in their attempts to circumvent the "problem of induction". Specifically, neoclassical economists still tend to see individuals as the irreducible building blocks necessary for valid economic explanation. They still tend to associate individuals with their psychological states. And, they still tend to consider rationality to be a psychological process.

Neoclassical economists have given up inductivism -- or at least temporarily set it aside -- and have embraced what Boland calls "conventionalism". That is, instead of seeking the one <u>true</u> theory to explain the economic world,

economists have opted for the next best thing -- the best theory. Conventionalism, recognizing there is no logical foundation for inductive truth claims, substitutes what is perceived to be the next best thing -- a conventionally-accepted criterion for the best theory.

In their concern for logical certitude, economists have tended to adopt a hypothetical deductive approach to economic theory: an "if__, then__" approach. The hypothetical "if" requires assumptions. Once the assumptions are established, the conclusions are worked out by deductive logic. Thus, if one believes that the assumptions are true, one is bound to accept the conclusions of the model, barring an error in logical deduction.

In this sort of approach the assumptions must be carefully chosen so as to ensure logically certain conclusions. If Boland is correctly understood, it is at this point that he suggests a link between conventionalism and individualism. A significant part of that link has to do with the notion of rationality. The assumption of rationality on the part of decision-makers has been considered necessary if the conclusions of an economic model are to be logically necessary. Otherwise, the outcome of economic decisions would be logically unpredictable. Since economists still tend to accept the notion that rationality is a psychological process, an impetus exists for assuming that decision-makers are individuals, and that they can be identified with their psychological states.

Psychologistic individualism serves another function -- it facilitates an explanation of the economic world with a minimum of givens. This is most noteworthy with respect to institutions. To the extent that institutions act as constraints on the choices of individuals, an acceptable economic model must explain the existence of those institutions. The explanation of social institutions, given psychologistic individualism, is quite simple -- they may be considered "mere epiphenomena".

Confirmation is the conventionalist criterion applied to most articles in the genre of positive economics. That is, most economics articles that purport to test economic theories are essentially attempts to show that empirical data are consistent with the theory: the data "confirm" the theory.

Applied or "positive" economics articles, according to Boland, tend to conform to the following format:

> Specifically, after the introductory section of a typical positive economics article there is a section titled 'The Model' or some variation of this. This is followed by a section titled 'Empirical Results' or something similar, and a final section summarizing the 'Conclusions' (p. 116).

Boland says "The Model" is almost always a conjunction of three sets of assumptions. He outlines them as follows:

> (1) A set of behavioral assumptions about people and/or institutions. This set might include, for example, the behavioral proposition $Q = f(P)$, where dQ/dP is negative. The conjunction of all the behavioral assumptions is

what traditionally constitutes a 'theory'.
(2) A set of simplifying assumptions about the relationships contained in the above set. For example, the demand function stated in the theory might be specified as a linear function, Q = a + bP, where 'a' is positive and 'b' is negative.
(3) A set of assumed parametric specifications about the values of those parameters created in the second set set above. For example, the parameter 'b' above might be assumed to have the value b = -4.2; or the specification that the above model fit the available data according to certain statistical criteria (Boland, p. 120).

"The Model" is typically tested in accordance with conventionally accepted statistical procedures in order to establish its acceptability or unacceptability.

Such testing, however, can never establish with logical conclusiveness the truth or falsity of the theories embodied in the model. Boland illustrates the logical impossibility of proving the truth of a theory by testing models as follows:

> Even though one may confirm a neoclassical model's application to one market during one period of time, one still has not proven that the same model can be applied to any other market or any other period of time. To say that a behavioral theory is true is to say that it applies to every situation to which it purports to be relevant. That is, if a theory is true, then it is possible to build at least one model that will fit the data in any given situation. If the theory is not a tautology (i.e., an argument which for logical reasons cannot be false), then to prove it true we would have to provide a potentially infinite series of models. That is, no finite set of confirmed models will do, since there will always be the logical possibility of a situation which cannot be modeled or fitted. It is easy to see that this is merely the Problem of Induction restated at a slightly different level of discussion (Boland, p. 121).

It is equally impossible to prove a theory false by such model testing. It only takes one set of contradictory empirical data to prove that a model is not true. Proving that the model is not true, however, does not prove the theory to be false. The disconfirming instance may be taken as an indication that the functional relationship has been misspecified -- it may be nonlinear instead of linear. Or, the disconfirming instance may be taken as an indication that the parameters have been misspecified. Since there are an infinite number of possible relational and parametric specifications, no finite number of disconfirming instances could ever prove conclusively that it is the theory itself that is false.

Boland's point is that "building models of a theory in effect insulates the theory from empirical testing if our purpose in testing is either refutation or verification" (Boland, p. 121). This raises an obvious question: If economists who are not prone to logical error persist in a sort of testing that can neither refute nor verify their theories, what are they up to? What is their purpose? Boland answers this question as follows:

> We now argue that if the usual published positive neoclassical articles...are actually considered contributions to 'scientific knowledge', then it can only be the case that the hidden objective of such positive economics is a long-term verification of neoclassical economics. Specifically, each paper which offers a confirmation of the applicability of neoclassical economics to 'real world' problems must be viewed as one more positive contribution towards an ultimate inductive proof of the truth of neoclassical

> theory. Our reason for concluding this is merely that logically all that can be accomplished by the typical application of neoclassical theory to 'real world' phenomena is a proof that it is possible to fit at least one neoclassical model to the available data. Critics can always say that a model's fit may be successful in the reported case but it does not prove that it will be successful in every case. We argue that the agenda of positive neoclassical research programs presumes that if we can continue to contribute more confirming examples of the applicability of neoclassical economics, then eventually we will prove that it is the only true theory of the economy (p. 128).

In summary, since conventionalism is considered by Boland to be an attempt at circumventing the problem of induction (as opposed to setting the problem aside altogether) and since methodological individualism facilitates the conventionalism of neoclassical economics, Boland maintains that a commitment to long-run inductivism based on methodological individualism is foundational to neoclassical economic methodology. Since this commitment is not overtly specified by neoclassical economists, Boland refers to it as a "hidden agenda". The main thesis in Boland's book (The Foundations of Economic Method is that:

> ...the foundations of neoclassical economic methodology, the hidden agenda, consist of two related but autonomous methodological problems. The first is the much discussed 'Problem of Induction'. The other is the less discussed but more pervasive 'Explanatory Problem of Individualism' (p. 8).

More specifically, he argues that "every neoclassical research program is designed (1) to be consistent with acceptable ways of dealing with the Problem of Induction,

and (2) to provide a methodological individualist explanation of economic behavior of the economy, that is, one which is based on the methodological prescription that allows only individuals to be posited as the locus of decision-making" (Boland, p. xiii).

Individualism and Philosophical Liberalism

Boland's argument appears quite unique, provocative and logically compelling. But, it falls way short of being the complete explication of the role of individualism in neoclassical economic methodology. That Boland has not dealt with the roots of the neoclassical economists' reliance on individualism is strongly indicated by his own stated objective: "I shall attempt to show that the essential individualist spirit of neoclassical economics can be preserved if the Problem of Induction is rejected and the concept of individualism is freed of its usual psychologism" (p. xiv).

Why is Boland concerned with preserving "the essential individualist spirit of neoclassical economics"? And, in what sense is the spirit of neoclassical economics essentially individualist? Benjamin Ward was on the right track, in the author's opinion, when he linked neoclassical economics with philosophical liberalism. He claims, "Economics is a liberal profession, and almost all of the [invisible] college's members at major institutions in the United States

are liberals, both by self-avowal and by philosophical orientation" (Ward, p. 24).

The conjunction between philosophical liberalism and neoclassical economics, both in origin and as an ongoing predisposition, can be briefly traced in such a way as to make a very credible case for the claim that the commitment of neoclassical economists to individualism is rooted in the neoclassical economists' commitment to liberalism.

In the midst of the Great Depression, John Dewey delivered a series of lectures that were subsequently published under the title of Liberalism and Social Action. The first of these lectures is a brief history of liberalism, in which Dewey notes that the origins of philosophical liberalism can be traced back at least as far as John Locke. Locke's philosophy linked such notions as reason, liberty, rights, and property with individualism. As Dewey put it, "The outstanding points of Locke's version of liberalism are that governments are instituted to protect the rights that belong to individuals prior to political organization of social relations" (p. 4).

Locke's conception of human nature was devoid of the necessity of social relations. Ideas, according to Locke, were produced by physical sensations and could apparently be generated even without any history of exposure to other human beings. Thus, as Dewey notes, "Reason was...made an inherent endowment of the individual, expressed in men's moral relations to one another, but not sustained and devel-

oped because of these relations" (p. 5). [This conception is notably at odds with Gadamer's philosophy.]

Since individuals were presumed to exist independently of social organization, Locke conceived of liberty as freedom for individual action and rights as natural rights of individuals. The only legitimate role for the state in this conception was to protect the natural rights of individuals. Dewey made note that, "Among the 'natural' rights especially emphasized by Locke is that of property, originating, according to him, in the fact that an individual has 'mixed' himself, through his labor, with some natural hitherto unappropriated object" (p. 4).

Locke's idea about labor as the basis for natural property rights was, of course, a major cornerstone of classical economic theory. Dewey pointed out that by the time of Adam Smith -- roughly a century after Locke -- the advancement of industry and commerce and the accompanying interest in the production of wealth resulted in a somewhat different interest in Locke's conception of natural property rights: "The conception of labor as the source of right in property was employed not so much to protect property from confiscation by the ruler...as to urge and justify freedom in the use and investment of capital and the right of laborers to move about and seek new modes of employment..." (p. 6).

This new conception of the relationship between labor and property was, of course, the labor theory of value. It

was a central aspect of the transformation of liberalism from a primarily political conception of individual liberty to an economic conception. The most notable name associated with this transformation was, of course, Adam Smith. As summarized by Dewey, Smith "held that the activity of individuals, freed as far as possible from political restriction, is the chief source of social welfare and the ultimate spring of social progress" (p. 7). Smith provided a new and powerful twist to liberalism's argument against political action for social change. As Dewey put it, "Such action was not only an invasion of individual liberty but it was in effect a conspiracy against the causes that bring about social progress" (pp. 8-9).

The origins of classical economics not only solidly linked up with the early stages of philosophical liberalism but, in fact, provided the very core of its disposition in favor of the economic freedom of individuals which is perpetuated to this very day. As was established in Chapter IV, the transition from classical economics to neoclassical economics left this disposition very much intact. The ongoing predisposition of most economists in favor of a liberal view of individualism and its expression in their theorizing about economics is captured very succinctly in the following quote from Daniel Hausman:

> Since Adam Smith, a particular vision of [capitalist] economies has dominated economic theorizing. One conceives of an economy as made up of a number of separate agents -- individuals or households or firms -- whose only interactions

> with one another are voluntary exchanges of goods and services. Everybody knows that people have all sorts of other interactions with one another, but the economist assumes, as a first approximation, that these other connections among agents can be ignored. Economic agents are conceived of as well-informed, rational, and self-interested maximizers....
>
> Given these assumptions, economists since Adam Smith have believed that voluntary exchange among such agents would result in a systematic and efficient organization of economic life with an outcome that would be beneficial to the agents involved. In Smith's view, and in the view of most economists since, such a market economy also allows individual agents much greater individual liberty than does any other economic arrangement (pp. 30-31).

A connection can also be established between the logical/epistemological predispositions of philosophical liberalism and Boland's arguments regarding the role of methodological individualism in neoclassical economics. In a recent book -- Strong Democracy(1984) -- Benjamin Barber presents a thorough critique of liberalism. His critique provides strong support for the claim that the neoclassical economist's acceptance of "justificationism" (to use Boland's term) is rooted in the logical/epistemological predispositions of liberalism. "The claim advanced here", says Barber, "is that this relentless quest for certainty has been a particular feature of liberal political philosophy from its inception" (p. 47).

Liberal political philosophy, according to Barber, has attempted to emulate Cartesian philosophy. Descartes sought to find an undoubtable foundation upon which to build a system of knowledge that would be logically indubitable.

The liberal philosopher sought to build, in Barber's words, "A sturdy house of politics...on an inexpungable and infallible foundation, set deep in prepolitical granite" (p. 51). This tendency is nowhere more explicit than in the writings of Thomas Hobbes, one of the philosophical fathers of liberalism. The foundation laid down by Hobbes and his followers is a thoroughly atomistic individualistic foundation. Barber summarizes the Hobbesian perspective as follows:

> ...Hobbes and his successors persuaded themselves that theories of political life had truly to be erected de novo on wholly nonpolitical foundations. Political obligation had to rest on the prepolitics of human interaction in a hypothetical state of nature; political freedom had to derive from natural liberty and stand without reference to politics; political rights had to issue from natural rights established without reference to social or political conditions; and the whole subtle complex of social and political relations, which the Greeks thought defined the individual human being from the outset, had to be reduced to a physics-based psychology of individual atoms defined in radical isolation from one another (p. 48).

Upon such a foundation, then, the liberal political philosopher builds an explanatory structure of the political world that is intended to command assent by virtue of its logical consistency. But, the logical derivation of liberal philosophy follows from a predisposition which, according to Barber, equates reasoning with ideational concatenation. That is, the liberal philosopher tends to construct political theory that can be seen as a chain of ideas that are linked by logical necessity. Barber provides the following illustration:

> With one starting point and one model of reasoning, there can only be one true (logically consequential) outcome and thus only one true notion of politics, rights, obligation, and so forth. Spinoza, Descartes, Hobbes, Locke, Hume, Bentham, Rawls, Nozick, and countless others who have employed analytic-dissective or resolutive-compositive or genetic-reductionist methods in the search for a viable political theory have hoped to seduce their antagonists and overwhelm the skeptics by demonstrating that if only they accept A (which as rational persons they are bound to do), they will be able to swallow B (which after all follows necessarily from A), and so on to C and D, until they reach N. And however unpalatable N may seem, and however at variance it is with their original political convictions, it too must be accepted because it is the final link in a chain of reasoning that leads without a break from that first link -- the one that, as rational persons, they felt bound to accept in the first place (p. 31).

The typical microeconomics textbook uses basically this same sort of approach to economic theory. Given certain assumptions, including rational individual decision-makers, a chain of logical reasoning leads to conclusions such as the following: the firm in perfect competition will, at equilibrium, produce at the lowest possible cost per unit (implying efficiency) and will earn zero economic profits (implying no unjustified profits); workers in a perfectly competitive economy at equilibrium will be paid in proportion to their marginal revenue product (implying reward in proportion to contribution); and the finite resources of a competitive economy at equilibrium will be used according to the dictates of consumers "voting with their dollars" (implying democracy in resource allocation).

The author can remember, as a sophomore, being led

through the compelling chain of reasoning that leads to these conclusions. And the author has subsequently led students through the same process. It is undoubtably a process of nullifying sophomore skepticism. They cannot deny the inescapable logical necessity of each link in the chain of reasoning, but some of the initial assumptions are major stumbling blocks. For instance, sophomores naturally balk at the notion that human beings behave rationally. The students usually begin to relax their skepticism, however, when told that economists use the word "rational" as follows: given a clear-cut choice between more or less of a desirable good, a "rational" person will, other things being equal, choose more. And, in any case, it is always explained that the model of perfect competition is not intended to be an accurate portrayal of the real world, but only a useful conceptual tool. Then the instruction proceeds to relax certain of the unrealistic assumptions and illustrate the analytical usefulness of the theory for policy implications.

After all is said and done, however, the student appears to have been endowed with the inclination to feel that market solutions to public policy issues will promote the implied virtues of a perfectly competitive economy. In the last decade or so, this sort of inclination has provided the foundational support for such economic policies as marginal cost pricing in utility regulation, deregulation in the airline industry, and benefit/cost analysis of major

public projects.

In a broader and more general sense the student has been endowed with an affirmative inclination toward competitive market arrangements and a negative inclination toward any sort of social reform that smacks of collectivism. This inclination is largely due to the association of individual political liberty with competitive market systems -- an association that is implicitly or explicitly perpetuated by the instruction provided in economics and political science courses.

In summation, it appears that economists see methodological holism as the only alternative to methodological individualism. They cling to the latter because their liberal intuitions feed the fear that the former implies, or might lead to, a collectivist political system. It also appears that contemporary neoclassical economists still see the same dichotomy that Schumpeter expressed in 1909:

> We seem to be faced by this alternative: either we are to assume social utility curves, in which case society must be the sole owner of capital and land, the society is communistic, and no rent or interest will be paid to individuals; or rent and interest are paid, in which case there are no social values, but only individual ones, and society as such does not control production... (Quoted in Boland, p. 27).

This does not imply that the author rejects Boland's analysis of methodological individualism as a major item on the hidden agenda of neoclassical economics. Methodological individualism, in Boland's analysis, assists neoclassical

economists in dealing with the problem of logical certainty. However, as pointed out above, the concern of logical certainty is not unique to economics; it is an underlying concern of philosophical liberalism itself. So, ultimately, the author accepts both Boland's analysis of the reason why neoclassical economists cling to methodological individualism and the notion that they cling to it due to their predisposition in favor of a liberal political philosophy.

What's Wrong with Individualism

What has been presented so far in this chapter is not a criticism of methodological individualism, but simply an analysis of the role it plays and the apparent motivations for its continual incorporation in neoclassical economics. In this section, a critique from a hermeneutical perspective shall be presented. First, the argument that the assumption of society as the mathematical summation of atomic individuals is blatantly at odds with Gadamer's hermeneutics will be reviewed. Secondly, it shall be argued that the assumption of individualism as a methodological technique is instrumentally counterproductive in terms of addressing questions raised by the contemporary human situation.

Gadamer's philosophy is a denial of the notion that <u>human</u> being can happen in isolation. As was pointed out in a previous chapter, in Gadamer's philosophy the most salient feature of <u>human</u> being is tied to the existence of a <u>human</u> world. Whereas the other animals merely have a habitat,

humans have a "world" that allows them to transcend their habitat. It is language that makes the human world possible. We are born into a world which, by virtue of its linguisticality, has order and structure. That order and structure plays a basic role in an ongoing process of meaning-formation that gives shape to our conception of self and world. Our knowledge of self and world is a product of all sorts of interactions with others. As philosopher Calvin Schrag puts it, "In the performance of everyday speech, in the production and use of tools and utensils, in the handshake and in the embrace, in laughing and crying, in the poetics of the dance, in the rituals of etiquette and religion, in the planning of affairs of households and economy, and in the posture of silence, a comprehension of self and world is already at work" (1980, p. 63).

In short, it is obvious that the notion of atomistic individuals as the building blocks that constitute society must be judged patently false from a hermeneutical perspective. There, however, appears to be reason to dwell at length on this fact. A much more significant issue is whether methodological individualism in the social sciences is instrumentally appropriate. This, however, depends on the purpose of the social sciences.

Fortunately, Schrag has conducted a very useful exploration in search of the "origin" of the human sciences. His Radical Reflection and the Origin of the Human Sciences (1980) provides a hermeneutical perspective on social sci-

ence inquiry that will be extremely useful not only for a critique of the instrumental propriety of methodological individualism in economics, but also for the critique of the "rationality postulate" (Chapter VII) and the normative/positive debate (Chapter VIII).

The social sciences have their roots, Schrag claims, in the ongoing stream of prescientific and prephilosophical interpretive life experiences: "The complex of interests, motivations, and meaning-endowed actions which comprise the world of pure experience is ultimately the base of operations not only for the psychological sciences but also for sociology, anthropology, history, jurisprudence, politics, and economics" (1980, p. 64). The significance of this, if Schrag is understood correctly, is that the social sciences are not doing original interpretation, but are engaged in a secondary sort of interpretation. The social sciences are interpreting the interpretations that have already happened at a more primordial level. And, if Gadamer is understood correctly, the human sciences are open to the charge of methodological sterility when they lose touch with this originary (primordial) stream of experience.

The social scientist, in Schrag's view, is involved in dealing with certain constellations of meaningfulness that have originated in the stream of lived-experience: "Proceeding from the taken-for-granted shared meanings and activities within the originary stream of experience, the special sciences of man adjust their lenses to focus on

particular constellations of these lived meanings" (1980, p. 65).

The result of the work of the social scientist can be considered as a partial profile of the life-world or, as Schrag puts it, "...the required task of each of the special human sciences is that of a special 'constitution' of world ...out of a primordial world of originary experience" (1980, p. 66). In his view, the world constituted by a social science is inseparably associated with the knowledge concerns of a group or community. The word "constitution" has a special meaning for Schrag. He attempts to shed light on this meaning as follows:

> ...we would recommend that constitution be understood as the shared project of a community of investigators and interpreters, guided by an interest in the communication of common knowledge concerns.... It is the work of various communities of investigators (scientists, philosophers, artists, and theologians) seeking agreement on common topics of concern (Schrag, 1980, p. 66).

What Schrag means by "world" is considerably less obscure. It is easily conveyed by the following quote:

> The meaning of world that is at stake in our understanding of the constitution of world by philosophy and the human sciences has more the character of a field or horizon of human concerns. We commonly speak of the "world of the child," the "world of sports," the "business world," and the "academic world." It is this sense of world that is at issue in our question of origin. And it is in this sense of world that we can meaningfully speak of the worlds explored by sociology, psychology, political science, anthropology, linguistics, economics, and history (Schrag, 1980, p. 67).

Schrag points out that natural scientists as well as social scientists are engaged in the constitution of world. He also emphasizes the very considerable difference in implication of the constituted worlds. The behavior of the data investigated by the natural scientist is not endowed with meaning. The thematic horizon of the human world, however, is obviously different. Schrag describes it as follows:

> The psychologist, sociologist, anthropologist, and political scientist...constitute a perspective on the life-world in such a manner that the investigatable data are human agents who endow their own gestures, speech, and actions with signification. What is at issue for the human scientist is human actions, motives, purposes, and concerns, which directly and indirectly inform the self-understanding of the agents and actors under investigation (1980, p. 69).

It is in view of Schrag's hermeneutical perspective on the social sciences, then, that the author argues that methodological individualism in economics is instrumentally inadequate.

The argument that is spelled out in the remainder of this chapter can be summarized as follows. The self-understanding that is perpetuated by the "economic world" as constituted by neoclassical economics is counter-productive in dealing with the major question which, according to Gadamer, is facing humanity today. That question can be phrased as "How can we gain control over the forces of science and technology?" Those very forces, Gadamer claims, are underneath a movement in the direction of "social

irrationality", while an increase in "social reason" is what is necessary to gain control of those forces. A very thorough case has recently been made by Benjamin Barber, a prominent political scientist, indicting philosophical liberalism on charges that would, in Gadamer's terms, amount to fostering "social irrationality". Since the individualist world constituted by neoclassical economics is a cornerstone of philosophical liberalism, then methodological individualism must be indicted as instrumentally counterproductive.

Gadamer sees human solidarity as the basis for social reason which, in turn, is viewed as "insight into the suitability of any means to commonly willed ends..." (1982, p. 77). This insight has declined, according to Gadamer, at the same time that technical rationality has increased. This inverse relationship, he suggests, is not merely coincidence. As technological civilization has expanded, so has our reliance on experts. Therein lies a very significant problem.

> Put in terms of a slogan, the society of experts is simultaneously a society of functionaries as well, for it is constitutive of the notion of the functionary that he be completely concentrated upon the administration of his function. In the scientific, technical, economic, monetary processes, and most especially in administration, politics, and similar forms, he has to maintain himself as what he is: one inserted for the sake of the smooth functioning of the apparatus. That is why he is in demand, and therein lie his chances for advancement. Even when the dialectic of this evolution is sensible to each one who asserts that ever fewer people are making the decisions and ever more are manning the apparatus, modern industrial society is oppressed by immanent structural pressures (Gadamer, 1982, p. 74).

All of this is destructive of solidarity, in Gadamer's view, because it is destructive of the sense of identity. Our identity is inseparably rooted in a common reality, in his philosophy, and anything that atomizes common experiences is destructive of our sense of common reality. Thus, to the extent that technological society tends to generate a sense of isolation and helplessness in individuals, it destroys the sense of identity and solidarity and undermines the potential of social reason. Gadamer points out that the path of our economic and technological growth certainly has the potential of "making life on this planet impossible" (Gadamer, 1982, p. 84), and that "The closed work place of the earth ultimately is the destiny of everyone" (Gadamer, 1982, p. 85). He maintains therefore that "...the chances of anyone's survival are...small...if humanity...does not learn to rediscover out of need a new solidarity" (Gadamer, 1982, p. 85).

All of this makes a strong argument that methodological individualism is not adequate for addressing what Gadamer sees as the major question of our time. The individualist world constituted by neoclassical economics tends to undermine the sense of solidarity and identity rooted in a common reality. This argument is dramatically extended by Benjamin Barber in his book Strong Democracy (1984).

Barber's views are very much in line with the notion that the human world is the shared understanding that exists between persons. The human world is thus extremely mallea-

ble and is, in fact, constantly changing. The primary force behind changes in the human world, in Barber's view and in the hermeneutical view, is language and its use in conversation. Our shared understanding changes in the course of genuine conversation. Our political understanding is no exception. "Political talk is not talk <u>about</u> the world; it is talk that makes and remakes the world" (Barber, p. 177). Political talk thus, according to Barber, shapes our political knowledge. The knowledge thus shaped guides our responses, or lack thereof, to present events and circumstances. "It answers such questions as 'What shall we do?' and 'How shall we reconcile our differences?' and 'How can we conduct ourselves as a just community'" (Barber, p. 169)?

In light of all this, Barber is concerned with the direction of change in our political understanding that is fostered by philosophical liberalism. Liberalism, he maintains, fosters the expansion of the private political world and the contraction of the public political world.

In Barber's view, common value, public goods and public interest grow out of a sense of commonality, mutuality and citizenship which, in turn, is dependent on and nurtured by political conversation. The following quote highlights the contrast between his view and the liberal individualist view of human nature.

> The author of human language, thought, philosophy, science, and art as well as of law, convention, right, authority, and freedom is not Man but men. It is from common rather than individual consciousness -- from generations of

> communal labor and not the passing whimsies of individuals -- that the enduring features of human identity are born. We are above all creatures of time, defined by a history that we make together. The unique capacities that comprise our humanity -- memory (the capacity to recall and use the past), rationality (the capacity to analyze and use the present), and imagination (the capacity to link past and future in an act of creation) -- merge our singularities into the commonness of time and thus bind us to one another, above all in language and conversation and in the politics that conversation makes possible (Barber, p. 90).

The goals inherent in the liberal view -- however honorable and well-intentioned -- appear quite impotent when contrasted with the creative human potential that Barber sees in an expansion of our sense of mutuality and citizenship.

> Protection, preservation, and the security of private interests (including liberty and property as well as life) are the whole of the liberal agenda. It is a difficult and an honorable agenda to be sure. But it is nonetheless a very small agenda tailored to the small men its theories portray (Barber, p. 91).

The most extreme version of the small individual of liberalism is, of course, the modern consumer of neoclassical economic theory.

> The modern consumer is the most recent incarnation of this small man, the last in a long train of models that depict man as a greedy, self-interested, acquisitive survivor who is capable nonetheless of the most self-denying deferrals of gratification for the sake of ultimate material satisfaction. The consumer is a creature of great reason devoted to small ends. His cherished freedom is chained to the most banal need. He uses the gift of choice to multiply his options in and to transform the material conditions of the world, but never to transform himself or to create a

> world of mutuality with his fellow humans (Barber, p. 22).

In the liberal view private interests are fundamental, with public interests considered as products of private interests. Most of the potential conflicts are worked out through the economic system which ideally transforms conflicting private interests into a social harmony. The conflicts which cannot be worked out in the market place are resolved politically. As Barber points out, in the liberal perspective, politics is "nothing more than the chambermaid of private interests" (p. 118). Or, even more cynically, politics is "the conduct of public affairs for private advantage" (Barber, p. 4).

The liberal view is reflected most strongly in the definition of "public goods" by neoclassical economists. Public goods, in the neoclassical economist's conception, are characterized by non-exclusivity in consumption. That is, use by one person does not preclude use by others. If such a good cannot be produced in such a way as to preclude others (the public) from using it, then the market will not supply this good. It will be produced only as a result of a collective decision. It is thus, in the terms of neoclassical economic theory, a public good.

In Barber's view, this is a weak conception of "public good" in that it is essentially a negative conception. It characterizes public goods in terms of qualities that are missing. A strong version of public good would be charac-

terized in terms of positive qualities. In Barber's view, a public good is ineluctably associated with the public will. Public goods, in his view, are those which are desired by the public as a community. He thus maintains that a meaningful account of public goods must take into consideration the process involved in the establishment of community and public will. This process entails participation and citizenship: "public ends...are literally forged through the act of public participation, created through common deliberation and common action and the effect that deliberation and action have on interests, which change shape and direction when subjected to these participatory processes" (Barber, p. 152).

Neoclassical economics, on the other hand, has developed a very powerful conceptual tool -- benefit/cost analysis -- by which "public goods" can be analyzed in terms of individual private interests. The benefits to be considered are the incremental areas under the demand curves for private goods and services that would result from the production of the good under consideration. The costs to be considered are the resulting incremental areas under the supply curves (marginal cost curves) of individual producers. In this way, then, the collective aspects of the decision can be eliminated, or at least minimized, and the primacy of liberal individualism thus protected.

Galbraith has argued that, "Economics provides... [citizens]...with their image of economic society" (p. 5).

The image provided by neoclassical economics is that the economic system is "in the ultimate service of the individual..." (Galbraith, p. 4). That service lies principally in providing the goods and services desired by consumers as private individuals. The effect of the image is to highlight the importance of the process of private production. It is an image, Galbraith claims, that "notably affects their [citizens] behavior -- and how they regard the organizations that comprise the economic system" (p. 5).

If Galbraith is correct, then neoclassical economics would appear to be less than effective in striving for the goals advocated by Barber -- "the development of a citizenry capable of genuinely public thinking and political judgment and thus able to envision a common future in terms of genuinely common goods" (p. 197). What Barber wants, in other words, is an expansion of the capacity for social reason. What the perspective of the neoclassical economist does, on the other hand, is to propagate the idea that public ends deserving of collective action can be determined by the appropriate analysis of marketplace decisions about private goods; it does not emphasize the need for community participation regarding collective action. But participation plays a crucial role in the development of a citizenry capable of social reason. In Barber's view, "participation has as its primary function the education of judgment. The citizen is the individual who has learned how to make civic judgments and who can evaluate goods in public terms" (p. 158).

Summary and Conclusion

The link between the individualism of liberal political philosophy and the methodological individualism of neoclassical economics is deeply rooted. This does not at all contradict Boland's argument that neoclassical economists cling to methodological individualism because of its presupposed utility for achieving epistemological legitimacy. In Strong Democracy, Barber illustrated in detail that philosophical liberalism itself has been dominated by the quest for logical certainty. So, the tendency of neoclassical economists to feel bound by "justificationism", as Boland calls it, can be seen as merely another aspect of their liberal heritage.

Both neoclassical economics and political liberalism continue to be wed to the Cartesian philosophical tendency to place epistemological questions prior to ontological questions. The argument in this chapter could, in fact, be construed as a claim that we have lost control of science and technology largely because modern western society has been built on an ontologically defective understanding of human being. That ontologically defective understanding is epitomized by methodological individualism.

Barber's Strong Democracy can be read as an intellectually sophisticated plea for a new direction which would correct this ontological defect. He argues for the replacement of the liberal conception of democracy (which he characterizes as weak democracy) with what he calls strong

democracy. His notion of strong democracy emphasizes the mutuality rather than the separateness of human beings. It emphasizes the participatory process of creating public ends rather than the science of choosing among preexisting ends. It views individuality in the context of human interdependency. In short, Barber's strong democracy envisions, in his words, "the way that human beings with variable but malleable natures and with competing but overlapping interests can contrive to live together communally not only to their mutual advantage but to the advantage of their mutuality" (p. 118). It is a vision that is radically at odds with the methodological individualism of neoclassical economics.

Barber's vision is, on the other hand, consistent with philosophical hermeneutics in its conception of human nature. It is a view that illustrates how the capacity for social reason could be expanded. At the same time, it illustrates how the individualism of neoclassical economics is linked to the forces that impede the development of social reason.

If Gadamer is correct in his notion that the most pressing issue for humanity today is loss of control over the forces of science and technology, and if an expansion of social reason is necessary to regain control, then methodological individualism will not be effective. In sum, methodological individualism must be indicted for being in "cahoots" with the forces of social irrationality.

CHAPTER VII

THE THEORY OF CONSUMER BEHAVIOR AND THE RATIONALITY POSTULATE

The theory of consumer behavior has long been considered by most economists to be an indispensable cornerstone of neoclassical economics. As a core component of liberal political philosophy, neoclassical economics has propagated the notion of "consumer sovereignty" -- that in a market economy it is the desires and preferences of consumers (registered via marketplace decisions) that determine what goods and services are to be produced with society's scarce resources. In this sense, "consumer sovereignty" has far-reaching political implications which highlight the importance (to liberal economists) of demonstrating that neoclassical economics is built on nonpolitical foundations. The theory of consumer behavior can be seen as an attempt at such demonstration.

Even if political motivation is denied, another reason exists for claiming that the theory of consumer behavior plays a foundational role in neoclassical economics -- market analysis relies fundamentally on the notion that demand curves are negatively sloped. The theory of consumer behavior can be seen as an attempt to show that negatively

sloped demand curves are not merely arbitrarily assumed by economists.

In any case, the "economic man" of neoclassical economics is essentially a product of the theory of consumer behavior. It is this portrait of "economic man" that has been the main focus of criticism of neoclassical economics. Some of the criticism has been neutralized by advancements in the theory of consumer behavior, but the assumption of rationality remains a salient and very embattled feature of neoclassical economic man.

In this chapter, a review is presented of some of the methodological appraisals of the theory of consumer behavior, as well as a critique from a hermeneutical perspective. Special attention is given to the rationality postulate which, according to Caldwell, can be stated in its simplest formulation as "the assertion that atomistic economic agents pursue their own self-interest: that consumers (or households) seek to maximize utility and that firms seek to maximize profits" (p. 146).

From Utility Theory to Revealed Preference

Bentham's utilitarianism had a profound impact on the initial development of the neoclassical theory of consumer behavior. In his The Growth of Economic Thought, Henry Spiegel notes that, "Jevons's utility theory contained frequent references to Bentham, and in line with Bentham's

approach Jevons visualized economics as a 'calculus of pleasure and pain'" (p. 517). Jevons rejected the notion that the utility of a good is exclusively rooted in qualities of the good itself.

> Citing a number of forerunners, he argued that portions of the same commodity do not possess equal utility. Up to a certain quantity, a commodity may be indispensable. Further quantities have various degrees of utility, and beyond a certain quantity the utility gradually sinks to zero and may even become negative as further supplies become inconvenient and hurtful (Spiegel, pp. 517-8).

From this conception Jevons developed what came to be known as the "law" of diminishing marginal utility. He also developed the criteria for maximizing utility and for consumer equilibrium. A consumer maximizes utility and is in equilibrium when the ratio of marginal utility to price is equal for each good purchased.

This depiction of consumer behavior provided a fertile ground for applying calculus to economic theory. It also provided critics with a portrait of human nature that could be devastatingly caricatured. The most widely quoted, and the most sarcastic, caricature of neoclassical economic man was, of course, provided by Thorstein Veblen.

> [This] conception of man is that of a lightning calculator of pleasures and pains, who oscillates like a homogeneous globule of desire of happiness under the impulse of stimuli that shift him about the area, but leave him intact. He has neither antecedent nor consequent. He is an isolated definitive human datum, in stable equilibrium except for the buffets of the impinging forces that displace him in one direction or another.

> Self-imposed in elemental space, he spins symmetrically about his own spiritual axis until the parallelogram of forces bears down upon him, whereupon he follows the line of the resultant. When the force of the impact is spent he comes to rest, a self-contained globule of desire as before (Quoted in Hunt, p. 81).

Nevertheless, the rational utilitarian portrait of economic man became solidly embedded as a cornerstone of neoclassical economic theory. As neoclassical economic theory became more and more tightly woven into a logically consistent and mathematically precise formulation, demand analysis and the theory of consumer behavior took shape as an identifiable research programme within neoclassical economics. A. W. Coats has used Lakatosian terms to describe the "hard core" of the programme as follows:

> By the end of the 1920s the essential components of the hard core of orthodox demand analysis had emerged, by implication if not explicitly, in roughly the following form:
> (i) Basic economic theory is necessarily abstract, static and general in form.
> (ii) The fundamental assumptions must, therefore be simple, uniform and constant; they can neither be 'realistic' nor subject to falsification.
> (iii) It is assumed that consumers aim to maximize their satisfactions (total utility).
> (iv) They have limited incomes.
> (v) They have unlimited wants in general, but normally experience eventually diminishing marginal utility from consuming successive units of a given commodity.
> (vi) They have full (or perfect) knowledge of relevant market conditions, for example, prices, the range of available goods and services, etc.
> (vii) They make rational calculations of alternative uses of their income, especially by adjusting their expenditures at the margin.
> (viii) The individual's decisions are independent of those of other individuals (1976, p. 53).

The positive heuristic of this research programme, according to Coats, implicitly included the following instruction for researchers: "concentrate on the analysis of prices or exchange values (ignoring, as far as possible, such questions as the origin and nature of wants and satisfactions, the structure and stability of preferences, processes of valuation, etc.)" (1976, p. 54) . This "instruction" is incorporated into the neoclassical model, by some economists, as specific assumptions that wants are given and preferences are stable. For liberal economists who wish to maintain that a market economy is one in which the consumer is sovereign, the assumption that wants are exogenously determined is crucial. For economists who more modestly make no explicit political claims but instead suggest the use of neoclassical microeconomic theory for limited market analysis, the assumption of stable preferences is still crucial while the assumption of exogenously determined wants can be dispensed with.

During the formative years of this programme, the primary challenge was from the newly developing field of empirical psychology. Coats maintains that there were repeated attempts from the early 1880s to the late 1920s to establish an alternative research programme for consumer behavior theory based on the findings of empirical psychology.

> During the second half of the nineteenth century the development of new ideas and experimental methods in psychology led to the formulation of

> three major new approaches in the USA, each of which seemed directly applicable to economics: namely, William James's conception of the physiological and biological determinants of human behavior; William McDougall's instinct theory; and John Broadus Watson's behaviourism. At about the same time, the new 'subjective' theories of value commonly associated with the so-called 'marginal revolution' of the 1870s were being assimilated, not without difficulty, into the central corpus of economic theory. In retrospect it seems hardly surprising that the trend towards objectivism in psychology should clash with an apparently contradictory trend in economics (Coats, 1976, p. 46).

According to Coats, the main criticisms leveled at the neoclassical view of consumer behavior during this period included the following: (1) The assumptions regarding human behavior are blatantly unrealistic in that human wants are not exclusively exogenous variables, preferences are not stable, and human beings are neither inclined toward nor capable of the rational calculations performed by the neoclassical economic man; (2) In any case, neither cardinal measures of utility nor interpersonal comparisons of utility can be made; (3) And finally, it is not only unscientific but unnecessary to base economic theory on subjective notions, since the new field of psychology provides empirical evidence regarding consumer behavior. But regardless of the potency of these criticisms, the critics failed to displace the utility-based theory of consumer behavior. The failure, according to Coats, was due to the fact that the critics never succeeded in formulating a viable alternative research programme. "The critics had failed to offer any constructive proposals and they had 'made little headway in bringing

forth substitute principles'" (Coats, 1976, p. 52). Thus, Coats points out, "By the end of the 1920s it was already clear that the more ambitious efforts to infuse psychology into economics, or to reconstruct basic economic theory in terms compatible with the new psychologies, had manifestly failed" (1976, p. 52).

The challenge from empirical psychology did, however, produce some positive results, according to Coats. It forced an effort to find a more "objective" approach to consumer behavior, as well as an effort to rid the theory of "unnecessary and suspect propositions" (Coats, 1976, p. 53). The result was, of course, the replacement of utility analysis with indifference-curve analysis, and finally with revealed preference theory.

Actually the indifference curve had been introduced by Edgeworth in the early 1880s. But, Edgeworth used the indifference curve as a tool within utility analysis. It was Pareto who intentionally set out to eliminate the reliance on utility theory. Pareto made use of Edgeworth's indifference curve in establishing a new approach to the theory of consumer behavior. Spiegel points out that economists were not widely aware of this new approach until "...Hicks and Allen called attention to it under more favorable circumstances in the 1930s..." (p.557).

The indifference curve approach to consumer bahavior managed to eliminate any implication of reliance on cardinal measures of utility. It did nothing, however, to eliminate

the charge that the neoclassical theory of consumer behavior was unscientific because its subjective theory of value, whether based on utility analysis or indifference curve analysis, relied on introspection. As Mark Blaug puts it in his appraisal of the neoclassical theory of consumer behavior:

> Indifference theory, coming after a generation of hostile but ineffective criticism of marginal utility theory by the leaders of American institutionalism, reaffirmed the concept of economic man as possessed of what John Maurice Clark called an 'irrationally rational passion for dispassionate calculation,' while taking inordinate pride in deriving all the classical results from an ordinal rather than a cardinal utility calculus. The concept of 'indifference', involving as it does pairwise comparisons between commodity bundles that are infinitesimally close to each other, is just as introspective and unobservable as the concept of cardinal comparisons between marginal utilities (1980, p. 165).

In an effort to eliminate this problem, Paul Samuelson developed the revealed preference theory; a move which Blaug characterized as a move from introspective ordinalism to behaviorist ordinalism (Blaug, 1980, p. 162). Blaug summarizes the revealed preference theory (RPT) and its implications as follows:

> If consumers prefer more goods to less, choose only one definite bundle of goods in every budget situation, and behave consistently in successive choices, they will buy less of a good when its price rises if they would have bought more of that good when their incomes rose. This generalized law of demand, or, 'fundamental theorem of consumption theory' as Samuelson called it, includes all of the observable implications of indifference theory and, in addition, has the advantage of inferring consumers' preferences from their revealed behavior, not the other way round (1980, p. 166).

The Falsificationist Critique

So, neoclassical economists have made some progress in eliminating some of the criticisms of institutionalists regarding the theory of consumer behavior, but very substantial components of the institutionalist critique (especially the rationality postulate) remain as relevant as ever. A different sort of criticism has come from certain mainstream economists who are well trained in methodology. This criticism is exemplified by Blaug's appraisal of neoclassical economics from a falsificationist perspective.

It is patently obvious that the theory of consumer behavior, and the "law" of demand cannot be falsified by any empirical observation if utility theory is the basis for the theory. The advance to indifference curve analysis is subject to the same criticism. As Blaug points out,

> ...the apparatus of indifference curves is of no help in telling us beforehand which demand curves have negative rather than positive slopes: since we can never directly observe either the substitution or the income effect (the income effect being defined with reference to an original level of total utility), we cannot measure the size of one to add it to the other for purposes of predicting the total change in the quantity demanded resulting from a change in price. As before, the theory of consumer behavior remains an ex post facto rationalization of all final demand outcomes, whatever they are. We can confirm the law of demand, but we can never disconfirm it (1980, p. 165).

The advance to revealed preference theory fares no better from a falsificationist perspective. Certainly, we can observe whether an individual purchases less of a good

when the price rises. If the individual purchases more in the face of a price increase, does that indicate a positively sloped demand curve -- a Giffen good? In accordance with RPT, we can conclude nothing about the slope of the demand curve in this situation without making an assumption as to whether the income effect of the good is positive or negative. Thus, as the English economist E. J. Mishan has noted:

> We cannot fail to notice that such demand theorems are conditional theorems, not universal ones. If the income effect is not positive -- or, in the one derivable from the indifference map, the income effect is negative -- we can say nothing of the response of the individual to a change in the price of a single good (1967, p. 91).

Thus, in the eyes of a falsificationist, such as Blaug, "The predictive power of RPT in respect to demand relationships is...no better than the older theories of consumer behavior: it too is empirically nonfalsifiable because it relies on unrestricted universal statements" (1980, p. 167). But, Blaug is not totally pessimistic about the possibilities for empirically grounding the theory of consumer behavior. He sees the empirical work on demand as holding much promise for such grounding.

Mishan, on the other hand, is admittedly cynical. In his article entitled "Theories of Consumer's Behaviour: A Cynical View", he states that:

> My aim is to convince the reader that, after all the display of technical virtuosity associated with such theorems, there is nothing the prac-

> tising economist can take away with him to help him come to grips with the complexity of the real world. Indeed, he would be no worse off if he remained ignorant of all theories of consumer's behaviour, accepting the obviously indispensable 'Law of Demand' on trust (1967, pp. 82-83).

The Rationality Postulate

Since, in the words of Lawrence Boland, "neoclassical economics is a discipline which is primarily concerned with the consequences of 'rational' decision-making" (p. 2), it is important to clarify the notion of rationality. For even if one accepts the "Law of Demand" on trust as Mishan suggests, the significance of neoclassical economics itself still hinges on what one means by "rational" and the way rationality is employed in economic analysis.

In a general sense, the hypothetico-deductive neoclassical economics model requires the assumption that decision-makers are logically consistent in pursuing their goals; otherwise there would be no basis for the logical deductions which constitute the bulk of the model. Rationality as logical consistency in the pursuit of goals is consistent with the way rationality has been used in technical philosophical and scientific literature from the earliest stages of our western scientific tradition. Although this general notion of rationality has been uncontroversial, there have been many methodological disputes about the assumption of rationality in economic analysis. These disputes have mainly been about the realism of the assumption of rational economic man.

There have been some curious tests of the rationality postulate. Caldwell discusses the results of an experiment in which a token economy was set up in a mental ward. At least half of the chronic psychotics involved in the experiment exhibited a high degree of logical consistency in that their preferences were transitively ordered. In another study, rats were given the possibility of pressing levers to get dipper cups filled with root beer or collins mix. The "budget set" could be altered by changing the number of lever presses necessary for a reward or by changing the size of the dipper cup. Caldwell noted, "The experiments showed that the rats changed consumption patterns in response to changes in the budget set, consuming more of the lower priced commodities and less of the higher priced commodities" (pp. 152-153). Other studies have involved the ranking of commodity bundles by subjects in different age groups, and consistency in household food purchases.

Caldwell notes that initially such studies "seem to support the hypothesis that transitively ordered preferences are commonly encountered, be the subjects adolescents, households, female psychotics, or albino rats" (p. 153). On closer examination of the confirming instances, however, he points out that, "The strongest result we can claim is that in some of the studies most of the subjects chose consistently" (Caldwell, p. 153). In any case, the broader significance of the confirming results is not clear-cut. For instance:

> ...which of the following conclusions follows most naturally from the results of the experiments with rats?
>
> a. Consumer theory is so general, it applies even to nonhuman populations.
>
> b. Consumer theory is so restrictive, it works only in extremely simple two-good cases in which all outside disturbances are held constant.
>
> c. For consumer theory to work, a subject must be ratlike, something like Veblen's 'lightening calculator of pleasures and pains, who oscillates like a homogeneous globule of desire of happiness under the impulse of stimuli that shifts him about the area...' (Caldwell, p. 154).

The disconfirming instances, on the other hand, can never force the rejection of the rationality assumption. All of the studies discussed by Caldwell reported some disconfirming results, but as he pointed out:

> ...in the face of disconfirming results, one can assert that the consumer still chose rationally in each case, but that his preferences had changed.
>
> One need not assume schizophrenic behavior on the part of the consumer to argue that changing preferences can explain observed intransitivities in choice. Hirshleifer argued convincingly that children's preferences may change as they grow and gain experience, but why should we assume that such a growth process comes to an end at the age of majority? Certainly there are other periods in our lives when changing circumstances might bring even drastic changes in our tastes -- leaving school, changing jobs, changing marital status, having children, 'finding' God, or discovering the joys of gardening are but a few of these (p. 155).

The point Caldwell tries to drive home is that there is no clear-cut way of testing the rationality postulate. Revealed transitivities are confirming results if unchanging preferences are assumed, but disconfirming results if changed preferences are assumed. Revealed intransitivities, on the other hand, are disconfirming results if unchanging

preferences are assumed, but confirming results if changed preferences are assumed. According to Caldwell, "Neither a confirming nor a disconfirming test result...is unambiguously interpretable" (p. 156).

In the view of Fritz Machlup, all of this empirical ambiguity is of no consequence. Economists, according to Machlup, would be wise to consider rational economic man (homo economicus) as an "ideal type" instead of a real type -- a mental construct designed strictly to facilitate the completion of the abstract economic model. Rational economic man is not intended to be real. As summarized by Caldwell, Machlup views economic theory as "primarily an aid to thinking, a heuristic device in which we trace out the predicted responses of imagined agents to imagined changes in the environment they face" (p. 163). The applicability of the theory to the real world, in this view, is not universal but dependent on whether preferences and information can be taken as given. "He [Machlup] provides examples of situations in which such assumptions are unwarranted, and concedes that 'if the bulk of all cases were of this kind, the usefulness of our theoretical system would be much reduced'" (Caldwell, p. 163).

Rationality as a Psychological Process

Lawrence Boland, in The Foundations of Economic Method, has provided an in-depth exploration of the role of rationality in the logical structure of the neoclassical economic

model. As seen in the last chapter, Boland maintains that the overriding objective of neoclassical economists is to provide an individualistic explanation of how market economies work. The explanation provided by the model has eliminated any determinate role for institutions by assuming that the only exogenous variables are the given psychological states of individuals and natural constraints. The assumptions used in the model thus include the notion that rationality is a psychological process.

The view that rationality is a psychological process, however, is chock-full of methodological difficulties. These difficulties involve the theory of knowledge and the problem of induction.

The neoclassical model is often formulated with the specific assumption of perfect and complete knowledge on the part of decision-makers. It is easy to see how such an abstract world is characterized by widespread equilibrium. Any disturbance of equilibrium (consumer equilibrium or market equilibrium) would be met with instantaneous adjustments at the margin which would result in a new equilibrium. It is also obvious that any application of the model to the real world -- which is characterized by extensive and prolonged disequilibrium -- must relax the assumption of perfect knowledge. Once this assumption is relaxed, the idea of rational decision-making cannot be separated from implications about the accumulation of knowledge. Rationality must, in this case, be tied to a theory of learning.

The extension of neoclassical economics that has explicitly dealt with incomplete knowledge on the part of decision-makers without compromising the basic conclusions of the model is, of course, the theory of rational expectations. Disequilibria are explained away in this theory by the assumption that decisionmakers rationally minimize expectational errors. That is, decision-makers incur additional costs to obtain additional information so long as the marginal benefits (based on increased probability that acquired "knowledge" is true) are greater than marginal costs. The idea is that the more information one gathers within the relevant information set, the greater is the probability of forming correct expectations. As Boland points out, this is a restatement of the old inductivist learning theory: "Briefly stated, this old theory said that individuals learn by collecting (objectively provable) facts and when they have enough of them they are able to induce the true theory which would explain the phenomena encompassed by those facts" (p. 69).

The methodological problem, especially for a profession that is overtly concerned with logical justification, is that Hume demonstrated some 200 years ago that there is no logic of induction (Blaug, 1980, pp. 11-12). In Boland's words, "What is really surprising about rational expectations models is that they employ a 500 year-old theory of knowledge and at the same time ignore the 200 year-old refutation of that theory" (p. 67)!

A Radical (Hermeneutical) Perspective on Rationality

The debates among economic methodologists about the rational economic man of consumer theory have tended to revolve around the issues of whether or not the rationality postulate is (or should be) realistic. Economic methodologists have not demonstrated any significant concern about the concept of rationality itself. In fact, one could legitimately claim that western civilization (at least since the Enlightenment) has identified rationality with the logical, analytical, calculative thought processes employed in science and in technical philosophical argumentation. Irrationality, on the other hand, has been used to refer to the absence of technical rationality.

The exclusive identification of human reason with technical rationality has, however, come under scrutiny by phenomenologically- and hermeneutically-oriented philosophers such as Calvin Schrag.

> Reason is no longer, and probably never has been, an unproblematic vocation of man. 'What does it mean to be rational?' is a question that needs to be reopened time and again; and it is a question that becomes particularly urgent when methodological and technological rationality seem to be the only candidates on the slate (Schrag, 1980, p. 108).

In his Radical Reflection and the Origin of the Human Sciences, Schrag explores the inadequacies of the concept of technical rationality for the social sciences, and he

fleshes out an expanded (hermeneutical) notion of reason and rationality based on the seminal works of Heidegger and Gadamer. A review of Schrag's expanded notion of human reason should provide an excellent vantage point for a hermeneutical appraisal of the "rational man" concept embodied in the consumer theory of neoclassical economics.

In his expanded notion of reason, Schrag is fundamentally concerned with the formation of human meaning and its role in life activities. He is concerned that the human sciences tend to employ a technical concept of reason that excludes too much of significance in human life. He is concerned that the perpetuation of such a truncated portrait of "Man" endangers our ability to cope with the contemporary problems facing humanity.

The concept of reason with which Schrag is in vehement disagreement is that of the Enlightenment.

> In the classical Enlightenment concept of reason, which already defined the direction of the current technical view of reason, tradition itself was placed outside the domain of the rational. The Enlightenment ideal of reason came into its own through an alleged liberation from all tradition and authority. Contextless and objectivistic, reason was to recognize no authority but itself. In its philosophical expression, the Enlightenment concept of reason sought its foundations in an isolated epistemological subject; in its socio-political expression, it made its appearance in a declaration of the individual rights of a radically individualized rational man, liberated from the sanctions of all governmental and ecclesiastical institutions. Cut off from tradition, the Enlightenment model of reason, and its further narrowing in contemporary philosophical positivism, assumed the stance of a detached objectivity (Schrag, 1980, pp. 113-14).

This technical concept of reason excludes the role of tradition, the "irrational", and mytho-poetic symbols and language in human life activities. All of these, in Schrag's view, play very significant roles in the generation and transmission of meaning. He thus sets for himself the task of deriving an expanded notion of reason which incorporates these essential elements.

Schrag builds on the hermeneutical view that interpretation is an ongoing basic aspect of human existence. Interpretation plays a major role in all conscious deliberative thought processes, as well as in the more primordial preconscious, precategorial web of life activities. The concepts of technical reason have meaning and significance only in conjunction with the elaborate matrix of meaning that is carried forward in everyday language, thought and praxis.

The matrix of human meaning, which is always in flux, is carried forward by tradition, according to Schrag.

> The historical as a feature of the experienced life-world registers its significations by delivering a world of predecessors. Tradition insinuates itself into the text of everyday life through a matrix of social memories. The weight of tradition, which the Enlightenment concept of reason sought to suppress, leaves its inscriptions on the language, the thought, and the praxis of everyday life. The motives and actions of contemporaries are surrounded with the fringes of a historical past which continue to impinge on the present (Schrag, 1980, p. 116).

Common memories, however, are not the only source of tradition that is carried forward. Schrag points out that

much that has been forgotten continues to be carried forward in the tradition that shapes our perspective on the present. "Forgotten events direct deliberations on socio-political planning, forgotten langauage exerts its influence in the linguistic operations of everyday communication, and a forgotten sense of being infects the project of human self-understanding" (Schrag, 1980, p. 116). In fact, as Schrag claims, even the suppressed may contribute to the structure of meaning that ongoingly informs life activities.

Schrag attempts to make clear, however, that he is not advocating a displacement of technical reason. Scientific and philosophical developments contribute very significantly to the continually changing tradition. But, so have mythic events. "The signs and symbols of mytho-poetic language conspire in a genesis and giving of meanings as they develop in the fabric of everyday sociohistorical existence" (Schrag, 1980, p. 122). Schrag maintains that the matrix of meaning which colors our perceptions of everyday life have been influenced by the social, political, psychological, moral, artistic, and religious significations of myths. Schrag mentions the works of certain people in philosophy, anthropology, sociology, psychology, political theory, and theology which share the recognition...

> that mythic consciousness is a constitutive feature of the story of man in all stages of his socio-historical development. They no longer see myth as a prescientific distortion of the thought of primitive man. The mythopoetic is viewed as an ingredient within the thought and praxis by which men in all ages live (1980, p. 119).

So, according to Schrag, "The tradition that surrounds and contextualizes everyday life unites scientific-historical reports with mytho-symbolic interpretation" (1980, p. 118). The concept of reason developed by Schrag to encompass the range of human meaning creation and deployment is variously described by him as the performance of "insight", "vision", "commemoration", and "foresight". It is a performance that, according to hermeneutical theory, happens prior to the mental act of technical reason. "It is at work in the illumination of possibilities already entertained and enacted within the tradition of thought and praxis, as well as in the illumination of possibilities projected against the horizon of the future" (Schrag, 1980, p. 105). This expanded notion of reason has the virtue of illuminating the limits of technical reason. It also has a very significant positive function:

> ...this expanded notion of reason allows the disclosure of a precategorial self-understanding within the drama of everyday life in which human agents, always in transit, endow their perceptions and actions with meaning as they respond to their past and anticipate their future. It makes possible the search for the significations of the irrational, the ideological, and self-deception, for they too shape the course of everyday life (Schrag, 1980, p. 126).

World Capitalism and Cultural Production

The hermeneutical concept of reason developed by Schrag is profoundly at odds with the rationality of neoclassical

economic man. Before turning to a critical analysis of its implications for price theory, however, it will be useful to take a cursory look at certain recent developments in cultural anthropology which seem to support Schrag's contention that: "The tradition that surrounds and contextualizes everyday life unites scientific-historical reports with mytho-symbolic interpretation" (1980, p. 118).

The last two decades have witnessed a growing crisis in the methodology of cultural anthropology: a crisis not unrelated to the crises in philosophy of science and foundational philosophy in general. The more traditional approach to cultural anthropology implicitly assumed that primitive societies were essentially ahistorical, in that they were regulated by rituals and ceremonies based on age-old myth. The more traditional approach also implicitly assumed that the anthropologist could, via objective observation, uncover the fixed structure and meaning of primitive life. In short, the traditional approach to cultural anthropology was based on epistemological foundationalism and natural science methodology.

In the last two decades, however, a wave of methodological criticism has swept the field, sparked in part by a growing sense by many younger anthropologists that "culture" is disappearing. As Louis Sass puts it in an article entitled "Anthropology's Native Problems":

> Rituals, myths, and kinship systems no longer appear so stable and distinct, or so regulative of human life, as they did in an earlier era. In-

> tense reevaluation of the field's traditional subject matter -- and also of its methods of observation and explanation -- has plunged cultural anthropology into a profound state of crisis (p. 50).

A very significant outcome of the methodological re-evaluation was the development of a hermeneutically-informed alternative approach to cultural anthropology. The new approach, known as "interpretive anthropology", has been strongly influenced by the hermeneutical approach to literary criticism. Thus, in the words of anthropologist Clifford Geertz, a leader of the new approach, "society is less and less represented as an elaborate machine or a quasi-organism and more as a serious game, a sidewalk drama, or a behavioral text" (p. 23). Interpretive explanation, according to Geertz, "trains its attention on what institutions, actions, images, utterances, events, customs, all the usual objects of social-scientific interest, mean to those whose institutions, actions, customs, and so on they are" (p. 22).

The upshot of all this is that cultures, primitive or otherwise, cannot legitimately be viewed as static and ahistorical. Culture, in the interpretive view, is a continually unfolding improvisational drama. In accordance with this view, "many anthropologists have described the native as actually operating in accordance with abstract cultural laws -- when in fact these laws are the intellectual constructions of the observer" (Sass, p. 54). As a result, "Ethnographies are being scrutinized like literary works --

as 'allegories of subjectivity' that reveal as much about the interpreter and his cultural assumptions as about the society under investigation" (Sass, p. 57).

This may all seem totally unrelated to the neoclassical economist's theory of consumer behavior. To the contrary, however, the "interpretive turn" in cultural anthropology has resulted in an experimental trend that may have some significance for a hermeneutical critique of the theory of consumer behavior.

As interpretive anthropologists began to explore the problems inherent in ahistorical ethnographical studies, they came to the realization that the major force of historical change impinging on third world societies was the spreading force of world economic markets. As stated by George Marcus and Michael Fischer in their Anthropology as Cultural Critique, "The contemporary third world, or any other part of the globe, had to be understood in the context of the history of a capitalist world economy developing since the sixteenth century" (p. 80). Ethnographical studies thus inspired recognize that cultural meaning, symbols and practices are constantly evolving in response to new situations in such a way that the influence of spreading world capitalism is not simply superimposed on traditional cultures, but is literally incorporated via the ongoing process of cultural production.

Outstanding examples of such studies cited by Marcus and Fischer are Michael Taussig's The Devil and Commodity

Fetishism in South America (1980) and June Nash's We Eat the Mines and the Mines Eat Us (1979). "Both deal with the impact of capitalism in shaping South American laboring classes, and both emphasize cultural analysis" (Marcus and Fischer, p. 88).

These developments in cultural anthropology tend, in an indirect way, to support Schrag's expanded (hermeneutical) notion of reason. They indicate a potential approach for criticizing the theory of consumer behavior and the rationality postulate. Specifically, hermeneutical theory contradicts the assumption that wants and preferences can be taken as given, and the cited developments in cultural anthropology tend to support hermeneutical theory in this sense. The developments referred to provide support for the notion that changes in the economic system may not only result in changes in wants and attitudes, but also in changes in the way the world is understood and thought about.

Implications for the Applicability of Price Theory

The relevance of the hermeneutical perspective for a critique of consumer theory is most obvious in the area of welfare economics theory. The driving notion behind the pure theory of welfare economics appears to be the possibility of deriving conclusions about the desirability of market outcomes. The satisfaction of the wants and preferences of

individual consumers are taken as the ultimate benchmark against which to gauge the performance of an economic system. The pure theory of welfare economics attempts to prove that under certain extremely simplifying assumptions a perfectly competitive economic system will generate the highest possible level of satisfaction with a given amount of available resources. The relevance of the considerations raised in this chapter are most obvious in three respects: (1) If wants and preferences are unstable, then no definitive conclusion can be drawn concerning the level of satisfaction achievable over some time period; (2) If wants and preferences are not exogenous, but are somehow influenced by the market system itself, then any conclusions about the desirability of market outcomes are conditional upon some specifications about what kinds of wants and preferences should be generated; (3) And finally, if wants and preferences are derivative from the structure of human meaning itself, then one cannot draw any conclusions about the desireability of any set of outcomes without reference to cultural context.

It is obvious that the hermeneutical perspective tends to undermine each of these crucial assumptions. If one accepts the hermeneutical perspective as descriptively accurate, then one cannot, without extensive qualification and reservations accept the assumption of rational economic man with stable exogenously derived wants and preferences as realistic.

This line of criticism is, of course, old stuff to neoclassical economists. Yet many economists, while agreeing that welfare economic theory is built on very unrealistic assumptions, defend the perpetuation of the theory on the grounds that it is a good device for sharpening the skills involved in economic analysis. On the surface, this attitude appears to be politically neutral. All too often, however, the theory of welfare economics seems to be used in an oblique fashion to legitimate market outcomes.

In any case, neoclassical welfare economics does not stop at theoretical classroom exercises. Some of the most powerful public policy concepts and tools come directly from welfare economic theory. Consider the concept of consumer surplus. This concept is perhaps the most fundamental and powerful concept used in applied welfare economics. It is the foundation for most economic analyses of antitrust issues, excise tax issues, and issues involving externalities. It is also the core of the powerful and widely-used cost/benefit analysis. Yet consumer surplus appears to be the most sensitive of all microeconomic concepts to the sort of criticisms discussed in this chapter. Consumer surplus rises and falls with the demand curve which, in turn, is supposed to be a reflection of consumer wants and preferences. Thus, the legitimacy of using predicted changes in consumer surplus as a measure of change in social welfare rises and falls with the degree of realism

attached to the assumption of rational consumers with stable exogenously determined wants and preferences.

A hermeneutical critique of consumer theory, then, indicates the following types of conclusions. Price theory should not be used as the sovereign authority regarding the virtues of market arrangements. Price theory does not demonstrate that consumer sovereignty is a characteristic of market systems. Nor does price theory demonstrate that a market system results in an efficient use of resources -- at least, not when efficiency is defined as the derivation of maximum welfare (utility, satisfaction, or whatever) from a given amount of resources. And finally, regarding applied price theory, predicted changes in consumer surplus cannot conclusively be equated with changes in social welfare.

These conclusions are not significantly different from the criticisms leveled against neoclassical economics from other perspectives. The significance of a hermeneutical critique is primarily due to the fact that it is rooted in an ontologically-oriented philosophy. If the ontological perspective of philosophical hermeneutics is accepted, there will be less likelihood of allowing the shortcomings of consumer behavior theory to be glossed over.

All of this does not mean, of course, that there is no legitimate role for neoclassical price theory. The above criticisms do not disclaim a legitimate use of price theory for predicting price and quantity changes in specific markets as a result of specific changes in market conditions.

The criticisms discussed have to do with the association of welfare judgements with predicted price and quantity outcomes.

The author suspects that there are many neoclassical economists -- especially those who eschew long-run, general equilibrium analysis -- who share (from a different perspective) these same criticisms. It is also suspected by the author that practitioners of cost/benefit analysis may be the most aware of the difficulties involved in associating consumer surplus with social welfare.

CHAPTER VIII

THE NORMATIVE/POSITIVE DISTINCTION

It is patently obvious that economics is thoroughly intertwined with public policy issues. The author suspects, therefore, that non-economists would find it quite strange that there has been a lengthy and hotly-debated issue within the profession concerning whether economics is or is not a value-free social science dealing with "what is" and not with "what ought to be". The issue has been thoroughly aired, but the hermeneutical perspective holds promise for shedding new light on the controversy. In fact, it shall argued that the hermeneutical perspective justifies setting the issue aside altogether. But first, a brief review of the major strands of the argument is in order.

The Is/Ought Dichotomy and the Possibility of Value-Free Science

Mishan begins his Introduction to Normative Economics with a discussion of the distinction between "normative economics" and "welfare economics". He points out that the two terms are often used synonymously. "The designation normative economics, however, is the less ambiguous, inas-

much as it implies 'ought' propositions...whereas welfare economics can, in principle, also be a descriptive study..." (Mishan, 1981, p. 3). There tends to be a basic agreement among neoclassical economists that positive economics deals with "what is" while normative economics deals with "what ought to be". There has, however, been an extensive debate as to whether Paretian welfare economics belongs to positive economics or normative economics. In this section the broader issues involving the normative/positive distinction shall be reviewed, reserving the debate about the status of welfare economics for the next section.

The foundation of the normative/positive distinction was laid down by David Hume over 200 years ago. Hume's foundational contribution has been succinctly summarized by Mark Blaug as follows:

> It was David Hume in his Treatise on Human Nature who long ago laid down the proposition that 'one cannot deduce ought from is,' that purely factual, descriptive statements by themselves can only entail or imply other factual, descriptive statements and never norms, ethical pronouncements, or prescriptions to do something. This proposition has been aptly labeled 'Hume's guillotine,' implying as it does a watertight logical distinction between the realm of facts and the realm of values (1980, p. 130).

Most of the positive/normative debate in economics has implicitly accepted "Hume's guillotine". The prevalent view has been that a positive, value-free, economics is both possible and desireable. The major issue, in this view, concerns the economist's role with respect to values. The

extreme view is that economists, as economists, do not concern themselves with values. The moderate view is more in line with Max Weber's view on the legitimacy of value discussion in the social sciences. This view, as summarized by Blaug, is that discussions of value "could take the form of (1) examining the internal consistency of the value premises from which divergent normative judgments are derived; (2) deducing the implications of those value premises in the light of the practical circumstances to which they are applied; and (3) tracing the factual consequences of alternative ways of realizing normative judgments..." (1980, p. 135).

Tracing the factual consequences of alternatives is the key link, in the apparently predominant view, between positive and normative economics. In "The Methodology of Positive Economics," Friedman asserts that the task of positive economics "is to provide a system of generalizations that can be used to make correct predictions about the consequences of any change in circumstances" (p. 4). Positive economics, in his view, is thus independent of normative economics. Normative economics, on the other hand, depends in a very fundamental way on positive economics. This is so, says Friedman, because, "Any policy conclusion necessarily rests on a prediction about the consequences of doing one thing rather than another, a prediction that must be based -- implicitly or explicitly -- on positive economics" (p. 5).

Friedman also downplays the significance of differences in basic values. "I venture the judgment...that currently in the Western world, and especially in the United States, differences about economic policy among disinterested citizens derive predominantly from different predictions about the economic consequences of taking action -- differences that in principle can be eliminated by the progress of positive economics -- rather than from fundamental differences in basic values, differences about which men can ultimately only fight" (Friedman, p. 5). This viewpoint appears to be widely shared by neoclassical economists.

One of the major criticisms of neoclassical economics, however, has been the very assumption that such a thing as value-free economics is even possible. Most of the criticisms of this assumption are covered by Heilbroner in a 1973 article entitled "Economics as a 'Value-free' Science". He points out, "There is an obvious political bias observable in the choice of research tasks arrogated to itself by the profession..." (Heilbroner, 1983, p. 33). This is, however, a relatively minor consideration. His main point has to do with profound differences between the social sciences and the natural sciences.

Heilbroner contends that the vital element in social inquiry is the ascription of meaning to observed social data. This is an unavoidable element in social inquiry. Social scientists cannot achieve the objectivity of natural scientists because "...the objects observed by the social

scientist all possess an attribute that is lacking in the objects of the natural universe. This is the attribute of consciousness -- of cognition, of 'calculation', of volition" (Heilbroner, 1983, p. 30). This, he maintains, necessitates behavioral assumptions. "Without assumptions about behavior, no conclusions whatsoever can be drawn from any set of social facts" (Heilbroner, 1983, p. 31). Behavioral assumptions, he contends, intrinsically contain value-components. He points to the assumption of maximizing behavior by economists as a fundamental behavioral assumption which "generally accords with the prevailing orientation of most economists that 'more is better'" (Heilbroner, 1983, p. 32). Maximization thus becomes, according to Heilbroner, "a prescription for conduct" (Heilbroner, 1983, p. 32).

In any case, however, the social scientist is psychologically entwined with the objects under investigation in a radically different way than the natural scientist. The legitimacy of the natural universe is never in question. For social inquiry, however, "...the discovery of unexpected results in the social universe almost invariably threatens or confirms the legitimacy of the social system of which the social investigator is unavoidably a part" (Heilbroner, 1983, p. 34).

Recent developments in philosophy of science tend to support Heilbroner's contention regarding the impossibility of value-free economics. Those same developments, however,

make Heilbroner's notion that the natural sciences can achieve value-free objectivity seem a bit naive. As Mark Blaug points out, the work of Kuhn and Lakatos has led to the conclusion that "value impregnation is now a universal feature of all theoretical propositions and hence not a special problem of the social sciences" (1980, p. 137). He rejects the implication that philosophical, social and political undertones are unique characteristics of hypotheses in the social sciences. Regarding Heilbroner's contention that social scientists' assessment of data is colored by their inherent interests in the system under investigation, Blaug points out that basically the same thing can be said of natural scientists. For instance, "...when natural scientists express views on such policy issues as biological warfare, the use of hydrogen bombs, nuclear energy, sterilization, vivisection, etcetera, they are just as likely as anyone else to mix facts and values and to misrepresent the actual state of the evidence" (Blaug, 1980, pp. 153-4).

Blaug does concede, however, that there are special problems in economics with bias in the assessment of evidence. He attributes these special problems to the fact that economics has a special branch of study -- welfare economics -- which deals in seemingly normative propositions while appearing to be a positive science. Thus, according to Blaug, the special problems of objectivity in economics "stem principally from the fact that the theorems of welfare

economics are forever spilling over from normative economics into the appraisal of evidence in positive economics" (1980, p. 154).

Paretian Welfare Economics: Positive or Normative

Welfare economics was built on the foundational notion of a "Pareto optimum," a situation in which there is no change that could make anyone better off without making someone else worse off. This is the notion on which welfare economists base their case that, under certain conditions, perfect competition will yield the highest possible level of satisfaction of wants.

It is generally recognized by economists, however, that the idea of "Pareto optimality"

> ...rests on three fundamental postulates: (1) only self-chosen preferences count as individual preferences or yardsticks of individual welfare (in popular parlance: an individual is the best judge of his welfare); (2) social welfare comprises the welfare of every individual member of society (except children and lunatics) and nothing else but the individual members of society; and (3) only unanimous reallocations of resources count as improvements in social welfare (Blaug, 1980, p. 144).

These three postulates allow welfare economists to demonstrate that a perfectly competitive equilibrium is a Pareto optimum situation with respect to the allocation of resources. Samuelson, according to Blaug, dubbed this correspondence the "invisible hand theorem" (Blaug, 1980,

pp. 144-145).

The basis for applying the notion of Pareto optimality to non-equilibrium situations was provided by John Hicks and Nicholas Kaldor in the 1930s. They developed the idea of a compensation test for a potential Pareto improvement (PPI). Roughly stated, a PPI exists when any contemplated change would produce large enough gains for one group (the winners) to allow them to compensate the losers and still be better off than before the change. This notion was the basis for the "new welfare economics".

The issue to be dealt with here concerns whether or not the new welfare economics (which has had a very significant impact on the analysis of many public policy issues) is a part of positive economics or normative economics. Regarding Pareto's optimality principle, Blaug notes that Pareto himself considered it to be "a proposition of pure economics, which was completely independent of any ethical value judgments" (1980, p. 142). Mishan notes that Kaldor considered the compensation test to be "an objective test of economic efficiency; prescriptions based on it were deemed to have a scientific status detached from any value judgments" (1981, p. 303).

In 1959, G. C. Archibald presented a rigorous argument for the inclusion of welfare economics within the scope of positive economics. His argument is summarized by Blaug as follows:

Paretian welfare economics investigates the effic-

> iency of alternative arrangements for satisfying given wants in the light of the choices that individuals themselves make in their own interests; thus, no evaluation of these wants is required for the Paretian theorems. An individual's preference map is identical with his welfare map, and to say that his welfare is higher in state B than in state A is simply to say that he would choose B rather than A were he free and able to do so. Paretian welfare economics simply asks: under what arrangements will this individual's choice be expanded from A to B without a contraction in someone else's choices, or alternatively expressed, under what arrangements will a PPI materialize? Value judgments only come into the picture when the crucial step to prescription is taken. Provided we do not prescribe, our arguments do not rest at any point on approval or disapproval and are hence subject to empirical refutation like all other propositions in positive economics (1980, pp. 143-144).

Blaug suggests that Archibald's argument is logically valid but unrealistic noting that "it requires simply superhuman detachment not to slip in the 'simple' assumption that the elimination of a PPI is desirable..." (1980, p. 146). Blaug also claims that Archibald's position promotes a paradoxical use of language. "Welfare economics is, after all, that branch of economics concerned with the ethical criteria by which we decide that one economic state of the world is more desirable than another, and to speak of positive welfare economics is literally to revel in paradoxical language" (Blaug, 1980, p. 146).

Possibly the most thorough and technical criticism of the notion that welfare economics belongs to positive as opposed to normative economics has come from the right-wing of the economics profession in a book-length argument. The book referred to is Welfare Economics: A Liberal Restatement

by Charles K. Rowley and Alan T. Peacock. Their argument is concerned with the domination by Paretian welfare economics in public policy analysis.

Rowley and Peacock mount a tirade against the pretense of ethical neutrality which, in their view, has allowed Paretian welfare economics to establish a near dictatorship in the public policy arena.

> ...[W]e charge those who deal in Paretian welfare economics with being implicated, in greater or lesser degree, knowingly or in ignorance, in a professional misdemeanour which forms the basis for the established dictatorship. In its most serious form, the misdemeanour amounts to a policy of presenting a value-based dogma as value-free, immutable and incontestable in the hope that those who endorse its internal logic will not inquire too closely as to its fundamental assumptions -- this the oldest technique of the religious fanatic. Less seriously, but more commonly, the Paretian principles are endorsed and defended as a set of ethically neutral propositions, tolerant of all ethical systems and the product of 'consensus among reasonable men,' phrases that are designed to capture the favour of the unwary scholar, but which, in our view, are misleading within the welfare economics context (Rowley and Peacock, p. 1).

The value assumptions of Paretian Welfare Economics are carefully delineated by Rowley and Peacock. The theory is radically individualistic. It is concerned with the welfare of all individual members of society. "Commodities are relevant to social welfare only in so far as they influence the welfare of individual members of society" (Rowley and Peacock, p. 8). Welfare judgments are not granted legitimacy unless they spring from the individuals concerned. "No individual may impose his/her own preferences upon any other

individual, no matter how well founded those preferences may appear in terms of prevailing ethical standards" (Rowley and Peacock, p. 8). No legitimacy whatsoever is granted to interpersonal welfare comparisons. Thus, "If any change in the allocation of resources increases the welfare of at least one individual without reducing the welfare of any other individual, then this change is treated as improving social welfare" (Rowley and Peacock, p. 9). All in all, then, in contrast to its image of value-neutrality, Paretian welfare economics is shown to rely fundamentally on an elaborate set of value assumptions.

It is not that Rowley and Peacock are opposed to value advocacy. Quite the contrary, they make no bones about the fact that they are pushing a value system -- the value system of classical liberalism -- which they openly admit is "a missionary philosophy" (Rowley and Peacock, p. 97). They summarize their mission in the following terms: "We are concerned...to assist in the development of a society that encourages individuals to want to exercise free will, which assists them in their efforts so to do, and which confronts them with the responsibility for their decisions" (Rowley and Peacock, p. 80).

Their complaint about Paretian welfare economics is that it rests on a different set of values, which they claim has led to a wide-spread condoning of collective intervention in the name of cost-effectiveness and individual preferences, while disregarding the pattern of political

institutions. "Liberalism", they point out, "is not concerned...with the primacy of individual preferences, but rather with the maintenance and extension of individual freedoms, defined as the absence of coercion of certain individuals by others" (Rowley and Peacock, p. 2). Furthermore, in regard to their mission, Rowley and Peacock note, "It is inevitable that in many important respects the political and social arrangements in modern societies will be incompatible with liberalism, implying that to achieve a liberal society requires a change in the existing order of individual preferences" (p. 97).

It should be obvious that Marxists would likewise maintain that to achieve a socialist society requires a change in the existing order of individual preferences. In short, in the way the normative/positive dichotomy is usually delineated, welfare economics is obviously based on a value judgment in terms of the welfare index to be considered. As Blaug puts it, it is "difficult to resist the conclusion that welfare economics is avowedly and unashamedly normative, a point of view which may be said to be the dominant view" (1980, p. 143).

A Hermeneutical Perspective on the Origin of Fact and Value

All sides of the debate on the role of values in economics have tended to accept the notion of a fundamental dichotomy between fact and value. Blaug notes that Gunnar

Myrdal has suggested that the economist should state his or her values openly and clearly at the beginning of any economic analysis (1980, pp. 139-140). Heilbroner, similarly, wants economists to record "with all the honesty and fidelity of which he is capable, not only his data and his processes of reasoning, but his initial commitments, hopes, and disappointments" (1983, p. 36). Heilbroner's objective is "to make a virtue of necessity, exposing for all the world to see the indispensable and fructifying value-grounds from which it begins its inquiries so that these inquiries may be fully exposed to -- and not falsely shielded from -- the public examination that is the true strength of science" (1983, pp. 36-37).

Mishan argues for the legitimacy of normative Paretian welfare economics from a different perspective. He points out that there may be a number of broad ethical notions that have widespread assent. If such notions are so basic and obvious that they are not written into the constitution,

> They can be said to form part of a virtual constitution. And if, among these ethical propositions that comprise a virtual constitution, there are several on which a welfare economics can be raised then...its guiding rules can truthfully claim to rest on a widely accepted ethical base (Mishan, 1976, p. 385).

Mishan maintains that both a Pareto improvement and a distributional improvement appear to qualify for inclusion in a virtual constitution.

A Pareto improvement takes place if some economic

> rearrangement makes one or more people better off without making anyone worse off. A distributional improvement takes place if there is near-unanimity that the distribution resulting from the economic rearrangement is an improvement (Mishan, 1976, p. 386).

Mishan thus claims legitimacy for the values inherent in cost-benefit analysis and other optimizing techniques of welfare economics.

Finally, Blaug points out that values play a very crucial role in inquiry. The important consideration, he maintains is that the role of values be kept within acceptable bounds.

> The mutual interplay of facts and values is precisely the fuel that fires scientific work, no less in the social than in the physical sciences. Scientific progress comes only when we strive to maximize the role of facts and minimize the role of values (1980, p. 156).

It is no coincidence that all of these viewpoints sound so similar. As Calvin Schrag points out, our notion of value is shaped in conjunction with our notion of fact. Positivist as well as antipositivist social scientists have tended to accept the positivist-empiricist conception of fact. He summarizes this conceptual framework as follows:

> The conceptual framework which occasioned the abstracted empiricism of positivism was one in which facts were viewed as discrete, atomistic, and nonintentional. In this conceptual framework, the physico-neurological model of perception became paradigmatic; and perception was understood as the reception of discrete, isolated, and contingent physical properties. Consequently it was necessary for positivism to construct a theory of meaning and a theory of language which would be

> able to accommodate these facts by ordering them within the propositional forms of a truth-functional logic. This uncritical use of truth-functional logic in the service of an abstracted empiricism further contributed to the picturing of facts as discrete, isolated, contingent, and nonintentional (Schrag, 1980, p. 86).

The positivist-empiricist view, according to Schrag, has been abstracted from our preconceptual, preanalytical world of originary experience. The "facts" generated in our preconceptual experience -- "world-facts" in Schrag's terms -- are profoundly different from the facts in the positivist-empiricist conceptual framework. World-facts never arise in isolation; they are configurative. They arise in relation to a background -- natural facts in relation to a natural background and social facts in relation to a social background. World-facts also are never independent of an "experiencer". The events giving rise to world-facts are experienced -- given shape -- in accordance with the personal history of the experiencer; the meaning of world-facts is given shape by the experiencer. Finally, world-facts are never independent of the intentionality of the experiencer. The intentionality of the experiencer, together with the "fact" experienced and the background against which the "fact" is experienced, imbues facts with meaning at the point of origin.

This hermeneutical viewpoint regarding facts contrasts radically with the positivist-empiricist viewpoint.

> On the abstracted level, facts are split off from meanings; but in the sphere of world-facts,

> meaning and fact mix and mingle. Every world-fact of perception is already a comprehension of the world in some manner. The world-facts that become manifest in man's use of tools and utensils appear within a field of practical concerns. The world-facts of socio-political action are facts which already endow the action with meaning. Here the sphere of action is at the same time the sphere of sense. Clearly the meaning or sense at issue is not that of an abstract verification theory of meaning which necessarily follows from an abstract localization of fact, but rather a precategorial and preobjective deployment of meaning within the synthetic totality of experiencer, figure, and background (Schrag, 1980, p. 90).

As mentioned above, the way facts are conceived sets the stage for the way values are conceived. The bifurcation of fact and value can accordingly be seen as derivative of the widespread acceptance of the positivist-empiricist conception of fact. If facts are considered to be independent and pre-existing things or states of affairs, then it follows that values "remain extrinsic to the order of things and actions and enter into relation with things and human actions only via the instrumentation of human desires, volitions, and appetitions" (Schrag, 1980, p. 93). Values are thus accidental predicates that might or might not be attached to a given thing or state of affairs by any given human being. Within this conceptual framework it makes perfect sense that science should attempt to eliminate, or at least minimize, the role of values. On the other hand, if the positivist-empiricist conceptual framework is wrong, then the role of values must be reconsidered.

In the hermeneutical perspective, values are not added after the fact, but originate simultaneously with facts. As

Schrag points out, the intentionality associated with the origin of facts necessarily involves valuation.

> The originary setting or milieu of human thought, language, and action is at the same time a horizon of world-values. Patterns of satisfaction and dissatisfaction, approval and disapproval, the obliging and the nonobliging are inseparable from the being and behavior of man and the life of an historical culture. These patterns of valuation are situated in the lived-through experiences of self and society (Schrag, 1980, p. 94).

According to the hermeneutical perspective, as represented by Schrag, Heilbroner is correct when he says that values are inevitably introduced at the point where meaning is ascribed to social facts, but he is wrong about where that point is located. Meaning is introduced at the point of origin of world-facts in the precategorial matrix of life experience. As Schrag points out, "The meaning-formation that is at work in the configurative presence of world-facts is at the same time a process of value-formation" (1980, p. 92).

This process of precategorial value-formation is not, however, a process that is unique to the individual. Facts and values generated via everyday life experience become embedded in ordinary language. According to Schrag,

> ...the genesis of meaning in the precategorial life-world, with its multiple horizons of perceptual profiles and perspectives of action, is set forth by language. But this language is itself precategorial and preobjective. It is the language of everyday discourse in the workday world of human concerns (1980, p. 90).

The relationship between ordinary language and the

facts and values generated by our life experiences is not a one-way street. The language we are born into and grow up in plays a powerful role in determining the horizon against which facts and values are allowed to take shape. At the same time, however, as new circumstances give rise to new facts and values, adjustments are made in ordinary language to accommodate these new facts and values.

Furthermore, neither science nor scientists themselves originate without connection to the ordinary world of human concerns and the influence of the ordinary language by which those concerns are shared and dealt with. Schrag, in agreement with Michael Polanyi, explains that a logic of tacit knowing which precedes the formalized logic of explanation is operative in scientific endeavor (1980, p. 89). The tacit knowledge referred to is the knowledge that is generated by the precategorial life-world and transmitted via ordinary language. From the hermeneutical perspective then, the world-values generated by the precategorial life-world are also operative in the project of science. Hence, value-free science is impossible.

Beyond the Positiave/Normative Distinction

The fact/value dichotomy can be seen from a hermeneutical perspective as an artificial dichotomy that has arisen out of scientific methodology considerations. The methodological viewpoint that fostered the dichotomy rested, in

turn, on the notion that it is possible to ground knowledge on an epistemological foundation that is logically necessary and certain. Positivistic scientific methodology sought prescriptions that would demarcate scientific knowledge claims from all other sorts of knowledge claims in such a way that scientific knowledge claims were the only ones resting on a logically certain epistemological foundation. The value-freedom issue can be seen as a manifestation of the attempt to demarcate science from other sorts of human endeavor. Science was thought to be concerned with "what is" and not with "what ought to be".

The conclusion that the fact/value dichotomy is an artificial construct (as discussed in the previous section) together with the rejection of the notion that an epistemological foundation is necessary (as argued in Chapter III), generates an initial impression that the fact/value dichotomy can be set aside as a methodological issue. Before that can be done, however, the fact/value issue must be considered from another angle. In the previous section, Schrag's argument that on the "originative level of precategorial meaning-formation...fact and value are equiprimordial" (1980, p. 92) was reviewed. It could still be argued, however, that at the level of conscious and deliberate methodological decision-making there is a very significant degree of difference between dealing with "what is" versus "what ought to be". This sort of argument must be addressed from a hermeneutical perspective before leaving the fact/

value issue.

The hermeneutical perspective on this line of argument can be summarized quite briefly. In his search for the origin of the human sciences, Schrag observes that:

> The psychologist, sociologist, anthropologist, [economist,] and political scientist...constitute a perspective on the life-world in such a manner that the investigatable data are human agents who endow their own gestures, speech, and actions with signification. What is at issue for the human scientist is human actions, motives, purposes, and concerns, which directly and indirectly inform the self-understanding of the agents and actors under investigation (1980, p. 69).

Unlike the objects under investigation by the natural sciences, the human agents and actors under investigation by the human sciences may, in turn, incorporate the findings of the human sciences into their future plans and actions.

Indeed, this is the purpose of the human sciences. As Gadamer observes:

> [The human sciences]...are 'moral sciences'. Their object is man and what he knows of himself. But he knows himself as an acting being, and this kind of knowledge that he has of himself does not seek to establish what exists. An active being, rather, is concerned with what is not always the same as it is, but can also be different. In it he can discover the point at which he has to act. The purpose of his knowledge is to govern his action (1985, p. 280).

Clearly then, from a hermeneutical perspective, there is no fact/value issue nor a positive/normative dichotomy. The economist "as economist" can engage in value advocacy as well as "value-free" description and prediction.

So, where does that leave us methodologically? The answer is: it leaves us with rhetoric -- rhetoric in the positive connotation of the word. In Gadamer's words:

> Rhetoric from oldest tradition has been the only advocate of a claim to truth that defends the probable...and that which is convincing to the ordinary reason, against the claim of science to accept as true only what can be demonstrated and tested! Convincing and persuading, without being able to prove -- these are obviously as much the aim and measure of understanding and interpretation as they are the aim and measure of the art of oration and persuasion. And this whole wide realm of convincing "persuasion" and generally reigning views has not been gradually narrowed by the progress of science, however great it has been; rather, this realm extends to take in every new product of scientific endeavor, claiming it for itself and bringing it within its scope.
>
> The ubiquity of rhetoric, indeed, is unlimited. Only through it is science a sociological factor of life, for all the representations of science that are directed beyond the mere narrow circle of specialists...owe their effectiveness to the rhetorical element they contain (1976, p.24).

As discussed in Chapter II, this view regarding rhetoric and economics has been analyzed by economist Donald McCloskey who claims that economic discourse is unavoidably a rhetorical discourse. His view of rhetoric (which he has borrowed from Wayne Booth) is totally consistent with Gadamer's. It is worth quoting again:

> Rhetoric is 'the art of probing what men believe they ought to believe, rather than proving what is true according to abstract methods'; it is 'the art of discovering good reasons, finding what really warrants assent, because any reasonable person ought to be persuaded'; it is careful weighing of more-or-less good reasons to arrive at more-or-less probable or plausible conclusions -- none too secure but better than would be arrived at by chance or unthinking impulse'... (McCloskey,

p. 482).

As noted in Chapter II, McCloskey views the examination of the rhetoric of economics as a move toward greater rationality in economic discourse. "The invitation to rhetoric ...is an invitation to leave the irrationality of an artificially narrow range of arguments and to move to the rationality of arguing like human beings" (McCloskey, p. 509).

Does this mean, then, that "anything goes?" Not necessarily. It means that anything may be attempted, in the sense that there is no dogmatic apriori exclusionary criterion. But where evaluation of economic inquiry is involved, as in faculty evaluation or editorial evaluation, it does not follow that the elimination of dogmatic apriori criteria eliminates the legitimacy of negative appraisal. What it does mean is that it is incumbent upon appraisers to support their appraisal with reasoned argument.

Specifically, with respect to values in inquiry, there is no apriori basis, from a hermeneutical perspective, for excluding values from economic inquiry. Prevailing social and cultural values obviously play a major role in shaping the economic world being investigated, and inquiry concerning those values and their impact would surely enhance, rather than detract from, the usefulness of economic inquiry. This is probably not a very controversial claim. The author would extend the same sort of claim, however, to value advocacy.

The persuasive essay is generally believed to fall within the academic domain of language and literature. Within that domain some essays are judged to be more scholarly than others, and reasoned arguments for and against such judgments are openly aired. Scholarly essays may legitimately deal with values concerning economic and political issues, or with novels, films, drama, etc. which deal with such issues. Arthur Miller's Death of A Salesman is an excellent example of a probing examination of the values inherent in American business society.

The question to be put to economists, then, is: Should economists, as economists, be precluded from scholarly discussion of values concerning economic arrangements, leaving that important area to non-economists? The answer from a hermeneutical prespective is a resounding "No!" Economics as a discipline will be much more valuable to society if economists themselves are encouraged to engage in scholarly exchange regarding the virtues of various economic arrangements. Philosopher Abraham Kaplan has argued that, "allowing a role to values is not what makes for bias; what makes for bias, rather, is allowing them only a role that insulates them from the test of experience..." (p. 396). In a similar vein, it could be added that the conduct of economic inquiry under the guise of value-free social science has the effect of insulating the values of the inquirer from the test of exposure to scholarly scrutiny. This is surely not desireable. Just as McCloskey argues that economics

would be improved if economists became more conscious of their use of rhetoric through open examination, it could be argued that economics would also be improved if economists became more conscious of the role of values in their inquiry by bringing values into the open for scholarly examination.

CHAPTER IX

ANOTHER LOOK AT FRIEDMAN'S ESSAY: EXPLANATION VERSUS PREDICTION IN ECONOMICS

Milton Friedman's "The Methodology of Positive Economics" (1953) has been hailed by Mark Blaug as "the centerpiece of postwar economic methodology, the one essay on methodological questions that virtually every modern economist has read at some stage in his or her career..." (Blaug, 1980 p. 103). This alone would be sufficient to mandate a review of the essay in a book-length appraisal of neoclassical economic methodology. There is, however, another justification for writing a chapter dealing with Friedman's essay, namely that his primary issue -- explanation versus prediction in economics -- has not yet been dealt with. He contends that economists need not be concerned with whether the assumptions of economic models are realistic, because the overwhelming purpose of economics is prediction, not explanation.

The Role of Assumptions in Economic Theory

As mentioned in the previous chapter, Friedman down-

plays the importance of normative economics. In his view, the major differences of opinion on economic policy in Western society can be largely boiled down to different predictions about the outcomes of various policies. Prediction is what positive economics is all about: "The ultimate goal of a positive science is the development of a 'theory' or 'hypothesis' that yields valid and meaningful (i.e., not truistic) predictions about phenomena not yet observed" (Friedman, p. 7).

Friedman is exercised by the persistence of criticism of neoclassical economic theory on the grounds that it employs unrealistic assumptions. The notion that the realism of assumptions can be used to test the validity of a theory "only confuses the issue, promotes misunderstanding about the significance of empirical evidence for economic theory, produces a misdirection of much intellectual effort devoted to the development of positive economics, and impedes the attainment of consensus on tentative hypotheses in positive economics" (Friedman, p. 14). In fact, Friedman suggests that there are strong reasons for expecting the most useful theories to employ "unrealistic" assumptions. "A hypothesis is important if it 'explains' much by little, that is, if it abstracts the common and crucial elements from the mass of complex and detailed circumstances surrounding the phenomena to be explained and permits valid predictions on the basis of them alone" (Friedman, p. 14).

Friedman elaborates several examples to illustrate his

point. One of these concerns the density of leaves on various sides of a tree: "I suggest the hypothesis that the leaves are positioned as if each leaf deliberately sought to maximize the amount of sunlight it receives, given the position of its neighbors, as if it knew the physical laws determining the amount of sunlight that would be received in various positions and could move rapidly or instantaneously from any one position to any other desired and unoccupied position" (Friedman, p. 19). He suggests that this hypothesis would likely yield accurate predictions. If it does yield accurate predictions, then we are not justified in rejecting it on the basis that "leaves do not 'deliberate' or consciously 'seek', have not been to school and learned the relevant laws of science or the mathematics required to calculate the 'optimum' position, and cannot move from position to position..." (Friedman, p. 20).

From examples such as this, Friedman maintains, "It is only a short step...to the economic hypothesis that under a wide range of circumstances individual firms behave <u>as if</u> they were seeking rationally to maximize their expected returns (generally if misleadingly called 'profits') and had full knowledge of the data needed to succeed in this attempt..." (p. 21). Just as the unrealism of the assumptions about leaves does not invalidate the hypothesis, neither is the theory of the firm invalidated by the fact that businessmen don't solve the equations used in that theory.

Friedman does not, however, claim that no basis exists for judging the assumptions used in theories. He points out that any given theory can be generated with more than one set of assumptions. The relevant considerations for judging alternative sets of assumptions, he maintains, include such things as their contributions to clarity, economy, precision, and so forth. But in no case is the theory itself tested by the realism of the assumptions. (Friedman, pp. 40-41)

Explanation versus Prediction

Friedman's essay generated a flood of (mostly critical) articles. According to Caldwell, "Never before has one short article on methodology been able to generate so much controversy" (p. 173). Much of the controversy concerned what Friedman meant. Was he talking about behavioral assumptions, assumptions regarding initial conditions, assumptions regarding boundary conditions, or all of these? The issue of realism could be argued differently depending on which assumptions he was talking about. What did he mean by realism? Was he talking about the testability of assumptions, the believability of assumptions, the truth status of assumptions, or did he mean realism in the sense that all relevant background variables are taken into account? All of these issues were taken up from various angles, as well as the question of whether or not Friedman was a positivist. Caldwell points out that even though most of the criticism

has been negative, "the methodological prescriptions advanced in his essay have become widely accepted among many working economists. And this has happened without Friedman ever having directly responded to his critics" (p. 173)!

The methodological prescriptions advanced by Friedman have apparently been less widely accepted by economists dealing with methodological issues. As the methodological dust has settled, the major issues of the essay are seen more clearly as revolving around the question of whether or not Friedman is an instrumentalist and the implications of instrumentalism regarding the purpose of science.

Instrumentalists, strictly speaking, are not concerned with the truth or falsity of theories. They consider theories to be instruments that are useful for dealing with particular problems. "Just as a hammer is an adequate instrument for certain tasks, and not for others, theories are evaluated for their adequacy, which is usually measured by predictive power" (Caldwell, p. 178). As Caldwell points out, much of the confusion surrounding Friedman's essay dissolves if Friedman is read as an instrumentalist.

Instrumentalism in philosophical argumentation is often contrasted with realism: "realists claim that theories and theoretical terms should make real references, instrumentalists deny it" (Caldwell, p. 178). Caldwell maintains that Friedman is not concerned with the existence or non-existence of entities or other aspects of the philosophical debate over instrumentalism versus realism. Caldwell thus

labels Friedman a "methodological instrumentalist" (p. 179).

Reading Friedman as an instrumentalist may dissolve much of the confusion about his essay, but it certainly does not render it less susceptible to criticism. For one thing, as Caldwell points out, "the acceptance of instrumentalism rules out disconfirmation in science: a theory that is neither true nor false can be found inadequate, but not disconfirmed" (p. 182). Neither realists nor falsificationists are willing to accept the notion that scientific theories can be neither confirmed nor disconfirmed.

A criticism of Friedman's instrumentalism that is even broader, however, is that it rules out any role for explanation in science. The idea that science is not concerned with explanation seems to offend almost everyone. Caldwell even claims that, since the 1940s, philosophers of science have unanimously rejected the notion that prediction is the only goal of science. "Even such positivist philosophers as Carl Hempel have claimed that explanation, not prediction, is the goal of science..." (Caldwell, p. 179).

The crux of the argument against prediction as the exclusive goal of science is that it nullifies the role of causal explanation. If comparison of predictions with experience is the only legitimate way to test a theory's legitimacy, as Friedman maintains, then it does not matter if a causal mechanism is specified or not. According to this perspective, a theory that specifies no causal mechanism but predicts well has a higher degree of validity than a

theory that predicts less well but provides an elaborate causal explanation. The root problem with this perspective is that it legitimizes spurious correlation. In Caldwell's words, "the instrumentalist preoccupation with predictive accuracy forces scientists to prefer statistical correlation over causal explanation if the former provides better predictions" (p. 181). As Blaug puts it, this makes it "impossible to distinguish between genuine and spurious correlations..." (1980, p. 110).

Explanation versus Descriptivism

Paul Samuelson's response to Friedman's essay was one of the most visible and controversial. Samuelson disagreed in no uncertain terms with Friedman's contention that unrealistic assumptions do not matter. Friedman, Samuelson maintains, "...is fundamentally wrong in thinking that unrealism in the sense of factual inaccuracy even to a tolerable degree of approximation is anything but a demerit for a theory or hypothesis" (Quoted in Blaug, 1980, p. 111).

In making his case, however, Samuelson muddied the methodological waters further by conflating explanation with descriptivism. He claimed that:

> ...a description (equational or otherwise) that works to describe well a wide range of observable reality is all the 'explanation' we can ever get (or need desire) here on earth....An explanation, as used legitimately in science, is a better kind of description and not something that ultimately goes beyond description (Quoted in Blaug, 1980, p. 113).

Equating description and explanation allowed Samuelson to demonstrate that false assumptions necessarily imply that the theory is false. Caldwell describes Samuelson's refutation of Friedman as follows:

> ...Samuelson undertakes an exercise in symbolic manipulation in which he asserts that theories are merely equivalent restatements of assumptions and conclusions, that is, A = B = C, where A is defined as 'assumptions', B as 'a theory', and C as 'consequences or predictions'. By this view, if either the assumptions or the theory itself are unrealistic, then the deduced consequences about reality are bound to be false... (p. 193).

This position led to an encounter between Samuelson and Machlup. Machlup pointed out that Samuelson's view was tantamount to a rejection of any explanatory role for theory: "If the consequences were to imply the 'theory' just as the theory implies the consequences, that theory would be nothing but another form of the impirical evidence (named 'consequence') and could never 'explain' the observed empirical facts" (Quoted in Caldwell, p. 193). Samuelson responded that Machlup's deduction was, indeed, correct.

> Scientists never 'explain' any behavior, by theory or any other hook. Every description that is superseded by a 'deeper explanation' turns out upon careful examination to have been replaced by still another description, albeit possibly a more useful description that covers and illuminates a wider area. (Quoted in Caldwell, pp. 193-194)

Few economists, it seems, were in agreement with Samuelson. According to Blaug, Samuelson's descriptivism "left most of the combatants with the feeling that

Friedman's methodology might be objectionable but Samuelson's new methodology was worse" (1980, p. 111).

The author suspects that the view of explanation and prediction that would be most widely accepted by neoclassical economists is that expressed in the so-called "covering law model of explanation" as developed by the philosophers of science, Carl Hempel and Peter Oppenheim. According to the covering law model, a scientific explanation for an event is provided when we find a universal law which, together with a specified set of initial conditions, allows the statement of the event to be logically deduced. This is what we are doing when we offer a causal explanation. As Blaug put it, "to cite a particular cause as an explanation of an event is simply to subsume the event in question under some universal law or set of laws..." (1980, p. 3).

The author also suspects that the covering law model of explanation would be widely acceptable to most neoclassical economists because it allows for both explanation and prediction as goals of economic science. Since the covering law model is based on the logical structure of scientific explanation, it is possible to view prediction as working through the same logical steps as explanation, simply going the other way. "In the case of prediction...we start with a universal law plus a set of initial conditions, and from them we deduce a statement about an unknown event; the prediction is typically used to see whether the universal law is in fact upheld" (Blaug, 1980, pp. 3-4).

The Nature and Functions of Explanation

Caldwell points out that Hempel's view of scientific explanation has been widely challenged in the philosophy of science. Alternative formulations, he maintains, have not been descriptivist. On the contrary, they have "gone in the other direction by giving an even broader scope to explanation in science than did Hempel and other logical empiricists" (Caldwell, pp. 194-195).

The eminent philosopher of social science, Abraham Kaplan, has made one of the most significant contributions in the move to broaden the scope of explanation. In his influential book, The Conduct of Inquiry: Methodology for Behavioral Science, Kaplan devotes an entire 43 page chapter to the matter of "explanation". What makes his work especially relevant for the present chapter is the affinity between his ideas about explanation and the role of understanding in philosophical hermeneutics.

Kaplan broadens the scope of scientific explanation in the behavioral sciences by claiming legitimacy for the pattern model of explanation as well as the deductive model (of which the covering law model is a subset). The pattern model is a holistic approach. "According to the pattern model...something is explained when it is so related to a set of other elements that together they constitute a unified system" (Kaplan, p. 333). Kaplan gives the following simple illustration:

> There is a figure consisting of a long vertical straight line with a short one branching upwards from it near the top, and a short curved line joining it on the same side near the bottom; the figure is meaningless until it is explained as representing a soldier with fixed bayonet, accompanied by his dog, disappearing around the corner of a building (the curved line is the dog's tail). We understand the figure by being brought to see the whole picture, of which what is to be explained is only a part (p. 333).

Kaplan points out that gestalt psychology has generated much of the literature on cognitive patterns which has been influential in the development of the pattern model of explanation. This literature has placed much emphasis on relationships, unity, wholeness, and integration. The explanatory role of relationships is especially fundamental. For example,

> We explain a surmise that a certain letter in the cryptogram is an M: because the letters following are ESSAGE, so that together they spell a word, and this word in turn combines meaningfully with its successor RECEIVED. We explain a sequence whose successive members are 2, 4, 8, and 16 by observing that these numbers are increasing powers of 2 (Kaplan, p. 334).

In examples like these we experience a "click of relation", the sense of understanding. "The perception that everything is just where it should be to complete the pattern is what gives us the intellectual satisfaction, the sense of closure, all the more satisfying because it was preceded by the tensions of perplexity" (Kaplan, p. 335).

No explanation ever provides complete closure, however. It is more appropriately thought of as a tentative "cogni-

tive map" that is always open for adjustment.

> Every explanatory pattern is a fragmentary map of a limited territory; we aim to fill in details, and to fit it together with other fragments. As we pursue these aims, moving always into new territories, we subject the map to continuous test. A sound explanation is one that grows on us as our knowledge grows (Kaplan, p. 336).

In all of this, the fundamental link is between explanation and understanding -- "explanations provide understanding" (Kaplan, p. 350). This is as true for deductive models as for pattern models. In Kaplan's terms, the deductive and the pattern models are "two accounts of the reasons which provide understanding, and thereby explanation" (p. 332). It should also be noted that deductive and pattern models are not mutually exclusive. "The pattern model of explanation can be applied to systems of deductive relations as well as to patterns constituted by other sorts of relations" (Kaplan, p. 336). On the other hand, Kaplan elaborates, "...we can subsume pattern explanations under the deductive model. Fitting something into a pattern has explanatory force in so far as thereby we are enabled to show how what is being explained can be deduced from more general considerations" (p. 338).

Returning to the issue of prediction versus explanation, Kaplan maintains that prediction without explanation is possible and that explanation without prediction is also possible. As an example of the former, he notes that "the periods of certain pulsating stars are very well known even though we do not have any firm explanations of their beha-

vior" (Kaplan, p. 349). Good explanations, on the other hand, may have considerable explanatory force, without making prediction possible. In terms of necessary and sufficient conditions, this is easily seen.

> Our knowledge, especially in behavioral science, is often limited to what is necessary for a certain kind of event to occur but does not comprise what is sufficient to produce it. In that case, what we can explain on the basis of that knowledge is not strictly deducible from it, and surely not predictable (Kaplan, p. 347).

Kaplan does not deny that prediction is a goal of science in general, or social inquiry in particular. Nor does he deny that predictive capability is a good reason for accepting an explanation: "if we can predict successfully on the basis of a certain explanation we have good reason, and perhaps the best sort of reason, for accepting the explanation" (Kaplan, p. 350). Kaplan is very much opposed, however, to the idea that predictive capability is the only criteria for scientific work:

> ...recognition of the difference between explanation and prediction may help relieve the pressure on theorizers to meet the immediate test of prediction or stand condemned of unscientific speculation. It is surely not too much to say that some good work has been done in behavioral science, and that not all of it has been marked by the power to predict. To arrive at some understanding of what is going on is hard enough, without having also to meet the demand that we anticipate what will happen next (Kaplan, p. 351).

Kaplan laments the fact that "for some time behavioral science has been too much concerned with weeding out 'pseudo

explanations' and not enough concerned with making the most for inquiry of what any explanation is capable of" (p. 358). That the range of capability extends considerably beyond enabling predictions can be seen by a brief review of the technological, instrumental and heuristic functions that Kaplan associates with explanations.

The technological function of explanations refers to their adaptive usefulness: "...they are used for a better adaptation to the environment, a more effective adjustment of available means to desired ends" (Kaplan, p. 356). It is in this technological function that the predictive capability is important. The importance of controlling and/or preparing to deal with events is obvious. And disastrous economic events such as the Great Depression make it apparent why economists have placed such overwhelming emphasis on prediction.

Another aspect of the technological function of explanations is that they help us to act by providing a basic orientation toward events. "In so far as explanation provides understanding we can better orient ourselves, choose more wisely among the courses of action open to us" (Kaplan, p. 356). In economics, then, understanding is provided by economic explanation, and economic policy is chosen or supported in accordance with such understanding.

Another function of explanation has to do with the communicative effect. This function, which Kaplan calls the instrumental function, is described as follows:

> We can produce results...not just by applying knowledge but even by merely communicating it. An effect can be produced by helping others see an explanation....We call this the instrumental function of explanation....When someone has been brought to see an explanation he will in general behave otherwise than he would without an explanation, or with a different one. A particular explanation, therefore, may be adduced in a certain context because it is expected to have such an effect. This expectation is of obvious importance in the practice of politics, psychotherapy, salesmanship, education, counseling, administration, and even religion (pp. 356-357).

This communicative effect of explanation is obviously what disturbs many critics such as Galbraith that the neoclassical economic explanation is the predominant one that is taught to several hundred thousand students each year.

Finally, Kaplan points out that one of the roles of explanation is to guide inquiry. He refers to this as the heuristic function. New problematic situations arise in light of the explanation that the scientist already has. And this explanation tends to provide a guide for inquiry into the new situation. This viewpoint is reminiscent of Kuhn's claim that research problems pursued tend to be those which are seen as holding the most promise for extending the explanatory power of the accepted theoretical framework.

A Hermeneutical Perspective

So, Kaplan obviously would find Friedman's viewpoint -- that prediction is the exclusive goal of science -- to be fundamentally wrong. A hermeneutical perspective would align with Kaplan's perspective. In fact, Kaplan's views on

explanation are so in-line with the hermeneutical viewpoint that the latter could essentially be seen as a rewrite of the former.

According to Gadamer, the object of the human sciences "is man and what he knows of himself...[and the] purpose of his knowledge is to govern his action" (1985, p. 280). This is essentially the instrumental function of explanations that Kaplan discussed.

According to Gadamer, we act in accordance with our understanding; and our understanding is constantly undergoing adjustment as we encounter new situations that do not conform to our expectations. To paraphrase Kaplan, we act in accordance with our understanding; and understanding [in social inquiry] is provided by explanations. Furthermore, according to Kaplan:

> Every explanatory pattern is a fragmentary map of a limited territory; we aim to fill in details, and to fit it together with other fragments. As we pursue these aims, moving always into new territories, we subject the map to continuous test. A sound explanation is one that grows on us as our knowledge grows (p. 336).

Substitute Kaplan's "cognitive map" for Gadamer's "horizon", and it becomes apparent that the "growing of a sound explanation" in Kaplan's terminology is very nearly the same as the "fusion of horizons" in Gadamer's terminology.

There is no need to pursue this analysis of similarity further. However, one more point needs to be made in regard to Friedman's essay. If one takes Kaplan's perspective (or

a hermeneutical perspective) on the explanatory role of theories, then one must obviously disagree with Friedman about his "irrelevance of assumptions" thesis. In terms of the pattern model, the "economic picture" generated by a model built on false assumptions has to be, to some extent, a false picture. In this sense, then, the critics of neo-classical economic theory are quite justified in attacking the theory on the grounds of unrealistic assumptions.

CHAPTER X

SUMMARY AND CONCLUSIONS

The recent turmoil in philosophy of science and the resulting uncertainty regarding the foundations for economic methodology have given rise to a call for methodological pluralism. Bruce Caldwell and Lawrence Boland have been particularly outspoken concerning the desirability of a pluralist perspective. Caldwell has suggested that from a pluralist perspective it is incumbent upon the appraiser to explicitly state the point of view being used to evaluate the strengths and weaknesses of the programme in question. The methodological appraisal of neoclassical economics developed in the preceding chapters has been carried out in the spirit of Caldwell's suggestions.

The point of view used to guide this appraisal was philosophical hermeneutics as developed by Hans-Georg Gadamer. Gadamer's hermeneutics was developed out of the phenomenological tradition in western philosophy; a tradition which is considerably different from the epistemological tradition which spawned philosophy of science. While neoclassical economics has been thoroughly appraised from a philosophy of science perspective, it has not been systematically appraised from a hermeneutical perspective. An

appraisal from the hermeneutical perspective was deemed appropriate because, as William Outhwaite has noted, "...it is clear that his [Gadamer's] radicalisation of the hermeneutic approach has had and is having a powerful influence in Anglo-Saxon social theory" (p. 37).

Gadamer's hermeneutics is essentially a theory of human understanding which stresses the role of preconceptual experience. According to hermeneutical theory, human beings can never achieve a presuppositionless foundation for knowledge (as is the goal of epistemological philosophy). Human beings, according to Gadamer, have already interpreted the world in many ways prior to conscious reflection. We always have a perspective (an understanding) that has been shaped, in part, by culture, tradition, and personal circumstances. Our understanding, however, is never fixed; it is constantly undergoing adjustment as we are faced with new situations. When we are faced with a situation that doesn't conform to our expectations, questions are raised, the resolution of which results in an adjustment of our understanding.

The implications of Gadamer's hermeneutical theory for methodological appraisal stem from his ideas about the way questions are generated by new situations. Since he maintains that the purpose of the human sciences is to provide assistance in guiding human action, the appropriate questions to be pursued are those generated by the contemporary problematic situations facing humankind. Gadamer claims that a failure to be open (in the sense of willingness to

suspend one's existing perspective) to new situations may result in a failure to understand the questions being generated by the situation.

Summary of Major Findings

Most of the aspects of neoclassical economic methodology that were dealt with in this appraisal were aspects that have been previously appraised from various perspectives (Marxist, institutionalist, and others). The most unique aspect of the present (hermeneutical) appraisal concerned the effectiveness of the neoclassical economic approach to inquiry with respect to issues raised by the contemporary problematic situation (Chapter V). The appraisal in this chapter relied primarily on Gadamer's model of conversation to explore the source of questions addressed by neoclassical economists and their apparent openness (or lack thereof) to issues raised by the contemporary human situation.

According to Gadamer, any explanation is implicitly or explicitly an answer to some question. In Chapter V, the case was developed that the neoclassical economic model is a very sophisticated set of answers to questions that were relevant during Adam Smith's time, some 200 years ago. It was argued, in Chapter V, that neoclassical economics has all the appearances of being a normal science in the Kuhnian sense -- the neoclassical economist seems to be engaged in trying to force the economic world into the preformed box of neoclassical economic theory. If this is indeed the case,

then the effectiveness of neoclassical economics in dealing with issues raised by the contemporary situation is called into question.

The most pressing issues facing humanity today, according to Gadamer, have to do with a loss of control over the forces of science and technology. Our civilization, he maintains, is founded on modern science. It is a civilization characterized by the extensive domination made possible by scientific technology. The problem, he maintains, is that our capacity for technical reason has dangerously outpaced our capacity for social reason.

A cursory exploration was made in Chapter V of the way neoclassical economists have approached the issue of technology and other related issues. The conclusion was reached that the inquiry concerning these issues was basically an attempt to extend the explanatory power of the neoclassical economic paradigm. This, of course, is a characteristic of Kuhnian-type normal science. This conclusion, in and of itself, however, does not necessarily mean that the neoclassical approach was inadequate for dealing with these types of issues. In one article reviewed in Chapter V, however -- "How Fast Should We Graze the Global Commons?" by William Nordhaus -- a major inadequacy was alluded to. After suggesting a model to determine a carbon dioxide shadow price which could be applied in the form of a global carbon tax, Nordhaus noted that this sort of approach to global environmental problems must overcome monumental real-

istic problems in agreeing on global policy. In Gadamer's terms, the problem Nordhaus alluded to is, at least in part, a manifestation of what Gadamer refers to as the lack of an adequate level of social reason.

Gadamer's notion of social reason can be thought of as "insight into the suitability of any means to commonly willed ends..." (Gadamer, 1982, p. 77). According to him, our identity is inseparably rooted in a common reality and anything that atomizes common experiences is destructive of our sense of common reality and our capability for social reason.

Gadamer's notion of social reason provided a unique approach to the appraisal of methodological individualism. Chapter VI explored questions concerning the effectiveness of methodological individualism for fostering a capability for social reason. Neoclassical economics and its methodological cornerstone of individualism were shown to be rooted in philosophical liberalism which fosters the expansion of the private political world and the contraction of the public political world, while an expansion of the public sphere was argued to be essential to an expansion of social reason.

In Chapter VI, the neoclassical economics conception of "public goods" was characterized as a weak conception growing out of the commitment to methodological individualism. A stronger (hermeneutical) conception of public goods and public interests was discussed. Common value, public goods and public interest, in the stronger conception, do not have

some independent existence prior to and separate from social interactions. They are created; they grow out of a sense of commonality, mutuality, and participative citizenship, which, in turn, is dependent on and nurtured by political conversation. While the neoclassical conception of public goods is certainly useful for technical economic analysis of many issues, it is an inadequate explanatory conception.

Neoclassical economic theory provides an explanation of the economic system that is ineffective for the development of a sense of commonality, mutuality and participative citizenship. Neoclassical economics perpetuates the notion that the market system automatically works to transform private interests into social harmony. In the cases of market failure, conceptual tools such as cost/benefit analysis can be applied. What the perspective of the neoclassical economist does, in other words, is to propagate the idea that "public ends" deserving of collective action can be determined by the appropriate analysis of marketplace decisions about private goods. It minimizes the need for community participation regarding collective action. From a hermeneutical perspective, however, such participation plays a crucial role in the development of a citizenry capable of social reason.

Other aspects of the appraisal -- the theory of consumer behavior and the rationality postulate in Chapter VII, the normative/positive distinction in Chapter VIII, and explanation versus prediction in Chapter IX -- did not yield

conclusions that were notably different from those reached by previous appraisals done from other perspectives. The appraisal from a hermeneutical perspective is significant in these cases, not only because it bears out the conclusions drawn from other perspectives, but also because it grounds the conclusions in a single, well-developed philosophical perspective.

In Chapter VII the underlying assumptions of the theory of consumer behavior -- that consumers are rational in their pursuit of exogenously determined wants and preferences -- were found to be unrealistic from a hermeneutical perspective. This is, of course, an old criticism that has been levied against neoclassical economics by Marxists, institutionalists and others. The uniqueness of the hermeneutical criticism is that it traces the origins of human wants and preferences to the preconscious and preanalytical web of life activities. This web is always in flux. And, it is profoundly influenced by the workings of the economic system itself. Furthermore, the concepts of technical reason were also shown to be rooted in the matrix of human meaning that is formed at the preconscious and preanalytical level of life activities. The concepts of technical reason have meaning and significance only in conjunction with the elaborate matrix of meaning that is carried forward in everyday language, thought and praxis. From a hermeneutical perspective, then, no conclusions can be drawn regarding the desirability of any set of outcomes without reference

to cultural context.

The analysis in Chapter VIII concluded that the notion of a positive/normative dichotomy, or even a fact/value dichotomy, is illusory from a hermeneutical perspective. This conclusion is in line with the views of Marxists and institutionalists, and many others (including Mishan, Blaug, Heilbroner, Peacock and Rowley) that economics as a value-free social science is not possible. These others, however, still seem to accept the idea of a fact/value dichotomy, with major points of contention over precisely where and in what form values should be allowed to enter the inquiry. An acceptance of the idea of a fact/value dichotomy is, in the author's opinion, the source of much of the confusion about the issue of values in inquiry. The uniqueness that the hermeneutical perspective brings to this issue is the claim that there is no distinct realm of either facts or values. Philosopher Calvin Schrag's excavation of the roots of fact and value (discussed in Chapter VIII) showed that valuation as well as fact originates in the precategorial and preanalytical matrix of human activities and concerns. Valuation is not something that is originally interjected into inquiry at some discrete point in the process; it is ineradicably part of the horizon within which inquiry is initiated. Just as McCloskey argues that economics would be improved if economists became more conscious of their use of rhetoric through open examination, the author suggests that economics would also be improved if economists became more conscious

of the role of values in their inquiry by bringing values into the open for scholarly examination.

Finally, the analysis in Chapter IX found that, contrary to the claims of Milton Friedman, prediction could not be claimed as the exclusive, or even the primary, goal of economics when considered from a hermeneutical perspective. The purpose of the human sciences, from a hermeneutical perspective, is to generate understanding to assist in guiding human action. Understanding (in social inquiry) is provided by explanations. In the author's opinion, the importance of stressing the role of explanation in economic inquiry is heightened by the fact that Friedman's famous essay on economic methodology has been so influential. In his essay Friedman argues essentially that the unrealism of assumptions is not a relevant criticism, because the exclusive goal of positive economics is prediction. This argument can thus serve to insulate neoclassical economics from otherwise powerful criticism (of the sort discussed in Chapter VII). If explanation is a major goal of economics, then the realism of assumptions can be very important.

Microeconomics in a Broader Perspective

This appraisal has culminated in some strong negative judgments about neoclassical economic methodology. These negative judgments do not, however, represent a wholesale denial of legitimacy to neoclassical economics. The findings of this appraisal simply deny legitimacy to neoclassical

economics as the explanation of economic society: the view of microeconomics that is so grand and sweeping that it subsumes, in Martin Shubik's words "a goodly part of general behavioral science and philosophy as a subset of economics" (Shubik, p. 407).

There are, of course, numerous important and legitimate applications for traditional neoclassical microeconomics. For explanatory purposes, however, the author contends that a different approach would be more appropriate -- an approach that allows the virtues of holistic (hermeneutical) explanation as well as rigorous microeconomic analysis. The new microeconomics that Shubik anticipates in his wonderfully rambunctious article, "A Curmudgeon's Guide to Microeconomics", would seem appropriate:

> Since the defeat of the institutionalists, there have been many new developments in economics that I believe are going to result in the joining together of detailed institutional studies, advanced mathematical economic theory and political economy. I expect that a new microeconomics is about to emerge. It can be described (in a rather ponderous manner) as mathematical-institutional-political economy (p. 407).

The author agrees with Shubik in his recognition of the need for microeconomics courses to provide a map for a variety of issues involving choice at the micro level. "Why and how microeconomic theorizing is relevant to the future lawyer, legislator, economist, manager, operations researcher, banker, bureaucrat, or citizen, are important questions" (Shubik, p. 409). The provision of such a map that

stresses realism and relevance would be quite compatible with the hermeneutical perspective.

In conclusion, the hermeneutical perspective is one which calls for an "opening up" of economic inquiry incorporating approaches possibly less rigorous and elegant than the traditional formal model of neoclassical economics, but potentially more useful and relevant for understanding the scope and complexity of economic reality. Heilbroner has suggested, "What is needed is a new paradigm that will permit a major enlargement of economics -- not one that discards the relationships that economics can often usefully reveal, but one that absorbs them into a much larger and more complex system of social cause and effect" (1970, p. xv). Hermeneutics is a philosophical perspective which would encourage such a development.

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VITA 2

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