The Sociology of Knowledge as a Tool for Research into the History of Economic Thought

Author(s): Jon D. Wisman

Source: The American Journal of Economics and Sociology, Jan., 1980, Vol. 39, No. 1

(Jan., 1980), pp. 83-94

Published by: American Journal of Economics and Sociology, Inc.

Stable URL: https://www.jstor.org/stable/3486778

JSTOR is a not-for-profit service that helps scholars, researchers, and students discover, use, and build upon a wide range of content in a trusted digital archive. We use information technology and tools to increase productivity and facilitate new forms of scholarship. For more information about JSTOR, please contact support@jstor.org.

Your use of the JSTOR archive indicates your acceptance of the Terms & Conditions of Use, available at https://about.jstor.org/terms



is collaborating with JSTOR to digitize, preserve and extend access to $\it The\ American\ \it Journal\ of\ \it Economics\ and\ \it Sociology$

The Sociology of Knowledge as a Tool for Research Into the History of Economic Thought

By Jon D. WISMAN

ABSTRACT. Hill and Rouse's formulation of Mannheim's framework for the sociology of knowledge as a means of examining the history of economic thought is rejected although it is held that they render an important service to economics by arguing the need for employment of the sociology of knowledge as a research tool. They have not appropriated Mannheim's categories authentically and they apply them in an overly simplified and undialectical manner. Even Mannheim's authentic formulation of the sociology of knowledge suffered limitations which more recent work enables us to overcome. What is believed to be a superior sociology of knowledge framework for investigating the evolution of economic thought is constructed by joining the Berger-Luckmann model of legitimation with Habermas's philosophical anthropology. Increasingly economists are recognizing that their discipline is in a state of crisis. The crucial issue is how we can better understand the sociological nature of economic thought -its social functioning-to enable us to formulate our own economic theory so as to maximize human welfare.

HILL AND ROUSE render an important service to economics by arguing the need to understand the evolution of economic thought in terms of the sociology of knowledge as a key element in understanding economic processes (1). In a discipline long dominated by positivistic thinking, too little attention has been given to the social genesis of economic ideas (the context of discovery) in favor of concentrating on the progression from lesser to greater scientific sophistication (the context of validation). The presumption that economic thought is scientifically progressive is at best problematic, and at worst, erroneous. And a consequence of such scant attention having been given to the dialectical relationship between economic thought and economic conditions is that a comprehensive understanding of the social nature of economic thinking has not come forth. economic thinking might be viewed as a victim of this intellectual imbalance: conceiving of itself as virtually socially-disembodied, much of contemporary economic theory might correctly be characterized as sterile and socially irrelevant. But worse yet, economic thinking appears, by and large, incapable of distinguishing the functioning of economic theory as social enlightenment from its functioning as ide-

American Journal of Economics and Sociology, Vol. 39, No. 1 (January, 1980).
0002-9246/80/010083-12\$00.75/0

1980 American Journal of Economics and Sociology, Inc.

ology. Given this sad state of the art, the plea by Hill and Rouse must be applauded.

However, when we go beyond their plea, to the actual framework which they propose for examining economic thought within the context of the sociology of knowledge, a number of problems arise: 1) They appeal to Mannheim's tripartite division of thought into the "realistic," the "ideological," and the "utopian." However, they appropriate these categories in a manner which violates the original meanings ascribed to them by Mannheim himself. 2) Their application of Mannheim's categories to the thought of specific economists and schools of economics oversimplifies the diversity, complexity, and richness of specific thought systems, thereby doing great (and unwarranted) violence to their progenitors. 3) Their treatment is undialectical in that they examine only one moment of the dialectical interaction between knowledge and socio-economic conditions; they consider only "the influence of economic thought on economic history" (2). 4) Finally, a great deal of work in the sociology of knowledge has been done since 1936, when Mannheim's important treatise became available in the translation from the German by Louis Wirth and Edward Shils (3) and whether his framework of analysis remains the most useful for understanding the sociological evolution of economic thought is questionable.

Ι

MANNHEIM'S "THREE DISTINCT TYPES OF THOUGHT"

IN HIS MONUMENTAL WORK Ideology and Utopia, Mannheim differentiated ideological from utopian thinking in seeking to create a conceptual framework for clarifying social thought both in terms of its socio-cultural origins and in terms of its impact on society. fortunately, however, for those who would hope to appropriate these terms, Mannheim refines and thereby changes the meanings of these terms in the course of the book. For instance on page 36, he posits that "There is implicit in the word 'ideology' the insight that in certain situations the collective unconscious of certain groups obscures the real condition of society both to itself and to others and thereby stabilizes it." In this case, the emphasis would appear to be on ideology as material in the unconscious. As Mannheim moved toward a more refined analysis he chose to distinguish "a particular from a total conception of ideology. Under the first we include all those utterances "the 'falsity' of which is due to an intentional or unintentional, conscious, semi-conscious, or unconscious, deluding of one's self or of others, taking place on a psychological level and structurally resembling lies" (4). On the other hand, for Mannheim, the total conception of ideology relates to the *total mental structure* and therefore becomes synonomous with the entire domain studied by the sociology of knowledge. To avoid confusion between the particular and the total, and because of the strong moral connotation attached to "ideology," Mannheim substitutes the term "perspective" for the total conception (5).

In their attempt to appropriate Mannheim's conception of ideological thought, Hill and Rouse ignore the distinction between partial and total conceptions of ideology and consequently leave unclear how the term is to be understood. Yet more problematic, whereas Mannheim consistently understood ideology as relating to both conscious and unconscious thought, Hill and Rouse interpret Mannheim as having meant only conscious thought:

His second type of thought is ideological thought, which he described as unrealistic because it is determined by a conservative desire to resist change. It is the thought of the people who have vested interests in the status quo and who, therefore, want to resist the change which threatens their interest (6). (Emphasis added)

By thus defining ideology as conscious deception, they rob the term of the richness and complexity which Mannheim ascribed to it. If ideology were merely conscious lies, our task—humanity's task—would be greatly facilitated. But, as all serious students of ideology have noted, such is not the case. In addition, the authors' viewing of ideology as conscious deception amounts to character assassination on honest thinkers of the past.

Hill and Rouse's understanding of Mannheim's concept of utopian thought is equally flawed. They argue:

His third type is utopian thought, which he defined as unrealistic or impractical thought dictated by wishful thinking concerning some imagined future utopia, as yet incapable of realization. It is the thought of the radical reformers who would like to transform the existing socio-economic structure completely, but whose plans for radical reform of the existing system are impossible to achieve at that time (7).

This definition of ideological thought distorts Mannheim's meaning both by omission and by misstatement. In regard to the former, Mannheim insisted that utopian thought must be understood as a cognitive reflex on the part of oppressed groups (8). This is important because utopian thought is not merely abstract (random,

willy-nilly) wishful thinking, but instead it is a specific form of wishful thinking that arises from concrete historical circumstance (9). For the latter, Hill and Rouse emphasize the unrealistic or impractical nature of utopian thought; or if you will, they play down its social importance. Mannheim's meaning was quite different:

... we should not regard as utopian every state of mind which is incongruous with and transcends the immediate situation (and in this sense, "departs from reality"). Only those orientations transcending reality will be referred to by us as utopian which, when they pass over into conduct, tend to shatter, either partially or wholly, the order of things prevailing at the time (10).

According to this formulation, ideas which are unrealistic or unrealizable are not, as Hill and Rouse would have it, utopian, but rather they are ideological in character (11). Contrary to the thrust of Hill and Rouse's interpretation, Mannheim accorded great importance to utopian thought, both in terms of its origins and in terms of its impact.

In light of the above, the meaning of the third type of thought, which Hill and Rouse credit to Mannheim-"realistic thought"-is far from clear. They define (or understand Mannheim as defining) realistic thought as "related to practical reality"; "accepted as true within a given social situation"; as "the thought of practical men, who know that change is inevitable, and who want to guide and direct change into constructive rather than destructive directions" (12). The problem with this definition is that it lacks precisely that which Mannheim's analysis insists upon as constituting that task of the sociology of knowledge: a linkage between thought and social existence. This can be clearly seen in the authors' use of the adjectives "constructive" and "destructive." Without a social grounding, such terms are mere abstractions. They are valuational terms that receive social content only when we specify a social context within which they are to be understood. For example, according to what, or whose, interests are specific changes to be viewed as constructive or destructive? Indeed, much of what passes today for "realistic" or "practical" thought, set forth by good-intentioned folk, may be revealed, when sufficiently subjected to critical analysis, to be the expression of hidden ideology.

II KNOCKING THE GREATS

HAVING BASTARDIZED MANNHEIM'S ANALYSIS by rendering his concepts abstract and no longer dialectically "sociological," Hill and

Rouse then move on to demonstrate the merit of their (supposedly Mannheim's) framework by surveying the past 273 years of economic thought in something short of seven pages. The result is a disaster. John Stuart Mill is labeled "the greatest of the ideological classical economists" (13). As they imply that ideological thought is consciously formulated, Mill comes off as one of Satan's finer accomplishments. Mill may not always have been sufficiently critical of his economic theory, but he was certainly not a conscious purveyor of lies and deceptions. Of course, much of Mill's synthesis of classical economics might justly be viewed as ideology, and undoubtedly it was used as such. But this is quite different from suggesting that Mill was among those who expressed a "conservative desire to defend that status quo against change" (14). From the vantage point of the sociology of knowledge, the relevant questions might be: How can we understand why Mill, who was otherwise a progressive and generally critical thinker, reformulated rather uncritically a body of economic doctrine possessing such ideological import? How might we understand the impact of Mill's so-called "ideological economics" on social history? Answers to these questions will not come easily. Adequate answers will require painstaking critical labor.

It also is not the case that Mill's work was lacking in utopian content, at least in the Mannheimian sense of the term. In the first place Mill's theory liberated (or attempted to do so) the laws of distribution from the laws of nature (to which the laws of production must conform). At a time when natural law cosmology still ruled social thinking, this might be viewed as a rather revolutionary bit of theory since it posited that society might distribute the goods as it Furthermore, Hill and Rouse overlook the fact that Mill was a staunch advocate of: personal income taxation with exemptions for the working poor, high and progressive inheritance taxes, sumptuary taxes, cooperative workshops and low interest rates for their establishment, nationalization or regulation of industries where returns to scale led to monopoly; and that for a number of years he served as president of the Programme of the Land Tenure Reform Association which campaigned for the government to buy land in order to turn it over to small cultivators and cooperatives. Although these ideas were certainly not revolutionary in a total sense (not a Mannheimian requirement to qualify as utopian), and not always original, at Mill's hand they received intellectual respectability and they occupied reform movements and legislators for years to come.

Issue could be taken with practically every categorization made by

Hill and Rouse as to which economists or schools were ideological, utopian or realistic. However, salvaging reputations need not concern us here. The point is that when applied in a rough and ready manner, Mannheim's analysis might impede and distort rather than enhance our sociological understanding of the history of economic thought.

Ш

THE NEED FOR A DIALECTICAL APPROACH

HILL AND ROUSE SET FORTH to examine "the influence of economic thought on economic history" (15). They argue that this dimension has been largely ignored in favor of studies of the influence of history on economic ideas. However, by giving attention to the purportedly ignored dimension alone, their approach is undialectical and consequently unlikely to bear fruit.

The problem is that there is no regular, clearly-discernible manner in which social ideas, economic or other, affect the course of history. Social ideas are a part of history, inextricably and dialectically interrelated to other aspects of social reality. Of course, ideas do affect the course of history. But the manner in which they do so is exceedingly complex. Social ideas which attain widespread currency are generated by, and reflect, the social conditions and needs of a specific period. They bear the indelible stamp of their social birth and nurture. Consequently, it is unlikely that we will succeed in adequately understanding social ideas, not to mention their impact on the course of history, without an appropriate grasp of the nature of the soil from which they sprang.

If social ideas survive infancy and develop the strength to influence the course of history, then the necessary nutrients must have been present in the social soil. The problem facing those who would strive to trace the impact of ideas on history is to differentiate the extent to which social ideas were active and positive forces rather than merely passive symptoms of transformations occurring within the total social reality (16). This is obviously no mean task, and if not carried out with the greatest of care, the result will likely be distortion rather than enlightenment.

Social thought is replete with attempts by vulgar materialists and vulgar idealists to trace, rather unidirectionally, the evolution of all social ideas from material social conditions in the first instance, or the evolution of social history from social ideas in the latter. Equally undialectical, both approaches betray a mechanistic view of social

reality. Often, one or the other of these approaches will be employed by researchers who disavow either a materialist or an idealist orientation for the express purpose of constructing a view of social reality from one angle at a time. The presumption is that the economies of the division of labor are thus captured and that when sufficient pieces have been formulated, a whole, causally undistorted picture will emerge. This view is not merely mechanistic, but atomistic as well: The whole is equal to the sum of its parts.

In large measure, the sociology of knowledge has developed as a response to the severe limitations of the atomistic-mechanistic approaches to the relationship between thought and social reality. Mannheim captured and attempted to work forward from Marx's understanding of the dynamically-dialectical interrelationship between social reality and social consciousness. Accordingly, social reality and social consciousness must be viewed as intertwined in a seamless web (17). The primary goal is not to uncover clear and neat lines of causality, but rather to grasp the subtle, exceedingly complex interplay between an ever dynamic social reality and an ever dynamic social consciousness. The appropriate stance is not principally causal-explanatory, but rather interpretive-hermeneutical (18).

IV AN ALTERNATIVE FORMULATION

Undoubtedly, Mannheim's framework of analysis, if appropriately deployed, could shed important light on the evolution of economic thought. Nevertheless, there is a major problem to be reckoned with in making use of Mannheim's framework, one which suggests that the utilization of more recent formulations of the sociology of knowledge might be more fruitful.

The problem is one of relativity; specifically, how might we distinguish between progressive and regressive thought? This, of course, is a valuational question and one which Mannheim intentionally tried to avoid. He did so by letting ideological thought stand for thought which acted to preserve the status quo, while utopian thought acted to disrupt it (19), making no judgment as to which is positive, which negative (20). However, it is questionable whether such Wertfreiheit or value neutrality is either possible or desirable. In a sociological sense, knowledge is not sought for its own sake. Rather, what is sought and identified as knowledge is dependent upon socially expressed needs and aspirations. This holds for the products of the sociology of knowledge as well as for the subject of its investigation.

An alternative sociology of knowledge approach to economic thought is to view the latter in terms of legitimation. Legitimation refers to the process by which social knowledge serves to explain and justify social behavior and social institutions. Legitimation per se is neither good nor bad, but rather anthropologically unavoidable (21). However, specific modes of legitimation might be seen as positive or negative depending on whether they further or impede human welfare. Thus, an important concern for economists must be whether, as legitimation, specific ideas or doctrines serve to further the unfolding of human and social potential or not. That is, legitimation may be rational or irrational. It is irrational when it serves to reify social institutions. Such reification masks human creative responsibility for prevailing social institutions and conditions. As Peter Berger and Thomas Luckmann express this:

... reification is the apprehension of the products of human activity as if they were something else than human products—such as facts of nature, results of cosmic laws, or manifestations of divine will. Reification implies that man is capable of forgetting his own authorship of the human world, and further, that the dialectic between man, the producer, and his products is lost to consciousness. The reified world is, by definition, a dehumanized world. It is experienced by man as a strange facticity, an opus alienum over which he has no control rather than as the opus proprium of his own productive activity (22).

Reified thought, in the above sense, might be viewed as false-consciousness or ideology. On the other hand, legitimation which is rational demystifies social institutions and conditions to reveal their existence as human artifacts. Once social institutions are viewed as human creations they can more readily be transformed, if appropriate, to further human aspirations.

Of course, functioning as legitimation, economic doctrines might often be expected to possess both rational and irrational elements. For instance, Natural Law Theory, the worldview fundament of classical economics, served as a powerful force for the dereification of feudal institutions. At the same time, however, it reified certain social institutions by depicting them as "natural," thereby, masking their human genesis, and impeding humans from transforming these institutions when they ill served human welfare.

If contemporary economics were to be examined within this framework, it might be noted that unlike traditional and Natural Law legitimation schemes, contemporary economic thought does not act to reify social institutions in a direct sense. However, guided principally by

positivistic norms of scientific procedure, current economics is restricted in scope and is methodologically precluded from addressing questions of ends or values. Consequently, positivism in economics acts to impede the dereification or demystification of social institutions in two related ways: Economics is methodologically restricted from fully investigating the social rationality of institutions (due to the fact that institutions are ultimately founded upon values); and positivism's self-promotion as the sole scientific, and therefore legitimate, mode of investigation serves to discredit all non-positivist economic study of institutions. Thus, although positivist economics does not reify social institutions as such, it acts to reify social praxis (23).

The foregoing approach in terms of the legitimation function of social thought possesses the advantage over the Mannheimian ideology-utopia classification in that it can be deployed to uncover the human liberation potential of thought. Examining economic ideas and doctrines in terms of their legitimation functions makes possible an assessment of their actual and potential impacts on human welfare. This does, of course, pose a valuation problem. But in an ultimate sense the valuation problem cannot be avoided. Although various formulations for the sociology of knowledge may strive for value neutrality, the very pursuit of the sociology of knowledge, not to mention the specific questions asked, appears to be unavoidably founded on a value judgment: specifically, that an attempt to disentangle the complex relationship between thought and social reality is a worthwhile endeavor. It would be unduly naive and unsociological to argue that such knowledge is sought for its own sake alone. Sociologically. specific forms of knowledge are sought in response to specific human What would appear to be needed, then, is a philosophical anthropology, a groundplan as to what constitutes authentic existential human needs.

Why is knowledge sought, often at considerable personal and social cost? In a fundamental sense knowledge has always been viewed as a tool for abetting human liberation. But liberation from what? The German philosopher-sociologist Jürgen Habermas has found heuristic value in identifying three existential "cognitive interests" or "knowledge-constitutive interests" which underlie, motivate and guide the human search for knowledge (24). From the vantage point of mere physical survival there is a universal need to overcome material privation and want. Habermas terms the interest which this need generates a "technical" or "instrumental" interest. A second uni-

versal need is to live in harmony, or at least some basic degree of concord, with others in society. The interest which this need generates Habermas terms a "practical" interest in arriving at consensus as to the appropriate norms for social behavior. A third need is to be free of ideology or false-consciousness, which generates an "emancipatory" interest, made possible, and expressed through, the capacity of human consciousness to be critically self-reflective. Although there might be disagreement as to whether an emancipatory need is universal or existential to the human condition, most would probably agree that an emancipatory interest has at times, and perhaps always should, steer our pursuit of knowledge. Indeed, might it not be that the sociology of knowledge itself is principally steered by this emancipatory interest? Of course, these three human interests are socially intertwined and may never be purely expressed individually.

Habermas' philosophical anthropology provides a framework for transcending the relativity problem. Value questions, contrary to positivistic dogma, cannot be eschewed. And by grounding them anthropologically, they need no longer stand as arbitrary. When this anthropological framework is combined with the legitimation analysis discussed earlier, it sheds light on which legitimation functions might ideally be identified and analyzed. And it appears especially useful for clarifying the sociological nature of economic thought. All three cognitive interests identified by Habermas would appear to have played an important role (albeit unconsciously for the most part) in the evolution of economic thinking. The technical interest in liberation from material scarcity has been, and remains, the dominant steering interest for economic thinking. However, a substantial body of economic thinking might be viewed as guided by a practical interest in arriving at consensus as to the appropriate norms for the good and just social order. And, although the emancipatory interest in liberation from false consciousness has received relatively little expression, it was highly important in the work of both Marx and Veblen. nally, the dominance of the technical interest might be seen as having impeded and distorted the expression and realization of the other two cognitive interests.

In the tradition of Mannheim, extending back to Marx, the scope of the sociology of knowledge has been dialectical, examining the dynamic interrelationship between changing social consciousness and changing social reality. Focused more narrowly, the task ahead for examining the evolution of economic thought would appear to be the

following: On the one hand the task is to uncover the social forces which impinged upon various economic thinkers and schools so as to help clarify why they set forth their specific theoretical formulations. Why, for instance, did they at times conceive of the economic problem as principally a physical, technical, or engineering problem? Why at other times was the problem seen as a broader social problem (a "practical" problem in Habermas' framework), and in still other instances as a problem of ideology? On the other hand (or the other side of the dialectic), what has been the impact of economic ideas and thought schemes, and how has this influence been exerted on social reality or social history? As suggested above, a fruitful mode for this investigation might be to examine specific doctrines in terms of their functioning as legitimation, utilizing Habermas' philosophical anthropology both to identify what most merits investigation and to render the findings relevant to human welfare.

But regardless of whether the methodological scheme suggested here is found to be the most fruitful, the deployment of the sociology of knowledge to clarify the evolution of economic thought is not a mere exercise in taxonomy or in rewarding and punishing the discipline's great minds. Rather, the goal is unashamedly the pursuit of enlightenment as to the sociological nature of economic thought for the purpose of better enabling us to formulate our own economic theory so as to maximize human welfare. This issue is of crucial importance today. Increasingly, economists themselves are recognizing that their discipline is in a state of crisis (25). It is of little help that the terms "ideology" and "utopia" are flung about as epithets without sound philosophical or sociological grounding. If economics is to transcend its current woes, it must rise above facile categorization to penetrate to the core of the social functioning of economic knowledge.

The American University Washington, D.C. 20016

- 1. Lewis E. Hill and Robert L. Rouse, "The Sociology of Knowledge and the History of Economic Thought," *American Journal of Economics and Sociology*, Vol. 36, No. 3 (July 1977), pp. 299-309.
 - 2. Ibid., pp. 300-01.
- 3. Karl Mannheim, Ideology and Utopia (New York: Harcourt, Brace, and World, 1936).
 - 4. Ibid., p. 238.
 - 5. *Ibid*. See also, pp. 50-51.
 - 6. Hill and Rouse, op. cit., p. 300.
 - 7. Ibid.
 - 8. Mannheim, op. cit., p. 36.
 - 9. Ibid., p. 179.

- 10. Ibid., p. 173. See also pp. 184ff.
- 11. *Ibid.*, p. 184. 12. Hill and Rouse, op. cit., p. 300.
- 13. Ibid., p. 303.
- 14. Ibid., p. 301.
- 15. Ibid., pp. 300-01.
- 16. Debate surrounding the so-called Keynesian Revolution provides a case in point. On the one hand, it is often argued that Keynes' insights initiated a historical transformation on governmental stances toward capitalist economies. On the other hand, it is argued that Keynes merely gave theoretical formulation to what was already taking place and that the new governmental stance would have evolved without Keynes. Of course the latter view acknowledges that Keynes provided theoretical legitimacy and hence facilitated the transformation.

 17. And this interrelationship must be viewed as a dialectical one. As Peter
- Berger and Thomas Luckmann put it: "The important point for a theoretical sociology of knowledge is the dialectic between knowledge and its social base." The Social Construction of Reality (Garden City, New York: Anchor Books, 1967), p. 200. See also, p. 80. Although I have not found it stated so concisely in his work, Mannheim repeatedly appealed to the need to view the subject matter of the sociology of knowledge dialectically. 18. See Mannheim, op. cit., pp. 17ff, 246.

 - 19. Ibid., p. 184.
- 20. Mannheim maintained a certain confidence in the intellectual's capacity to be objective, based on his view that increasingly intellectuals were free from distinct class roots and membership. They were, using a term which he borrowed from Alfred Weber, *freischwebende* (free-floating). However, although Mannheim's reasoning is clear as to how this special social status might provide them with a higher degree of freedom from what he viewed as particular ideology, it is less clear as to how it might free them from what he viewed as "perspective" or the "total mental structure" of society. Also, in light of intellectual trends since Mannheim, it is doubtful that many sociologists of knowledge would concur with his belief in the existence of a freischwebende Intelligenz.
- 21. Berger and Luckmann, op. cit., p. 48. See also Peter L. Berger, The Sacred Canopy (Garden City, New York: Doubleday and Co., Inc., 1967); Roberto Mangabeira Unger, Knowledge and Politics (New York: The Free Press, 1975).
 - Berger and Luckman, op. cit., p. 89. 22.
- 23. For a more extensive discussion of the manner in which economic thought has served the function of legitimation, see my "Legitimation, Ideology-Critique, and Economics" Social Research, 46 (Summer 1979), pp. 291-320.
- 24. Jürgen Habermas, Knowledge and Human Interests (Boston: Beacon Press, 1968), Toward a Rational Society (Boston: Beacon Press, 1971), Theory and Practice (Boston: Beacon Press, 1973), and Legitimation Crisis (Boston: Beacon Press, 1974).
- 25. In recent years, a large and increasing number of prominent economists 25. In recent years, a large and increasing number of prominent economists have commented on the sorry state of our discipline. For a sampling, see Walter W. Heller, "What's Right with Economics?", American Economic Review, 65 (March 1975), pp. 1-26; F. H. Hahn, "Some Adjustment Problems," Econometrica, 38 (January 1970), pp. 1-17; Harry G. Johnson, "The Keynesian Revolution and the Monetarist Counter-Revolution," American Economic Review, 61 (May 1971), pp. 1-14; E. H. Phelps Brown, "The Underdevelopment of Economics," The Economic Journal, 82 (March 1972), pp. 1-10; G. D. N. Worswick, "Is Progress in Economic Science Possible?" The Economic Journal, 83 (March "Is Progress in Economic Science Possible?", The Economic Journal, 82 (March 1972), pp. 73-86; Robert Aaron Gordon, "Rigor and Relevance in a Changing Institutional Setting," American Economic Review, 66 (March 1976), pp. 1-14; Wassily Leontief, "Theoretical Assumptions and Non-Observed Facts," American Economic Review, 61 (March 1971), pp. 1-7.