

Heilbroner and Weber: The Crisis of Vision in Economics and the Potential of Weberian Sociology and Science¹

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Based on an intellectual-historical investigation in *The Crisis of Vision in Modern Economic Thought*, Robert Heilbroner has pointed out some of the factors at play in the troubled state of economics. According to Heilbroner, the twin issues consisting of (1) the search for scientificity through rational choice and (2) ahistoricity – along with other related issues – have been part and parcel of modern economic thought's crisis of vision. Based on this analysis, he has also made two key recommendations as to what a new economic vision must constitute at the very least, along with one related but secondary prescription. The first recommendation is "abandoning the natural law conception of economics" and the second is "reorienting the form of economic theory from prediction to policy guidance." The third prescription is that economic vision can benefit from contributions from other fields, particularly/including sociology.

However, Stephen Kalberg's analysis shows that the problems identified by Heilbroner in the crisis of vision in economics are also visible in postwar American sociology.³ A desire to become more like the natural sciences, a neglect of history, a dependency on a limited concept of the individual, a consequent failure to bring this individual into a relationship with society (or relating micro-analysis with macro-analysis), and a neglect of socially critical factors such as power and values are the problems which will be seen to be present in the crises of both the disciplines. It appears that sociology may have little to contribute to the development of vision in economics and thus, Heilbroner's prescription for economics may have to be re-interpreted.

However, this sharing of maladies may also mean the sharing of a potential antidote. Kalberg's work has pointed towards the potential benefits of exploring Max Weber's work in ways that have not been explored before. More specifically, Weber's *The Protestant Ethic and the Spirit of Capitalism* can be seen to possess methodological insights which directly address the issues listed above. Hence, the text could have contributed and still can contribute to the four debates in postwar American sociology outlined by Kalberg. By extension the methodological insights can also contribute to a solution of economics' crisis of vision as described by Heilbroner.

Furthermore, based on Weber's philosophy of science as it is presented in "Science as a Vocation" and interpreted by Basit Bilal Koshul, we will see that Heilbroner's philosophy of economics is underpinned by a Weberian philosophy of science. This will be done through a comparison of some central features of Weber's view of science and Heilbroner's view of economics. This line of argumentation should provide evidence that (1) Weber's philosophy of science can bring further clarity to Heilbroner's philosophy of economics, and that (2) Weber's philosophy of science may have influenced Heilbroner's philosophy of economics.

The paper is structured as follows. Section I conducts the literature review and introduces the sources which are central to this paper's main argument. Section II conducts an analysis of the relevant evidence obtained from these sources and is divided into subsections A to E. Subsections A, B and C discuss Heilbroner's identification of three key problems in the crisis of vision in modern economic thought. Subsections D and E analyze evidence from Kalberg's research and show (1) the presence of the same problems in sociology which were identified by Heilbroner in the case of economics, and (2) the potential of Weber's work in addressing these

problems. Subsection F compares Weber's philosophy of science with Heilbroner's philosophy of economics *qua* science. Section III discusses the paper's findings and revised claim. Sections IV and V summarize and conclude the paper respectively.

I. Literature Review

For evidence on Heilbroner's assessment of economics' crisis of vision, this paper will depend on an analysis of *The Crisis of Vision in Modern Economic Thought*. In this book, Heilbroner traces the history of economics in the United States and Britain, starting with Keynes and leading to discussions of the various schools which have vied for dominance that Keynesianism once enjoyed in economic thought. The two key contributions of this narrative are

not only to offer a plausible rationale for the disintegration of Keynesian hegemony of the past, but to suggest a general direction in which economic theory must move if it is to rediscover, or recreate, another such period of theoretical unity and development thrust.⁵

At the level of analysis, Keynes's work was characterized by "the displacement of price determination as the essential task of economics by the previously nonexistent task of determining the level of aggregate demand." This analytical difference was underpinned by a difference in the concept of behavior. Keynes moved away from the utility maximizing motivational basis to that of propensities. In doing so, Keynes moved "from an individual-centered to a group-centered conception of behavior" and introduced uncertainty into economic analysis. His work marks the birth of macroeconomics in the wake of the Great Depression:

After Keynes, market "failure" in the sense of insufficient effective demand, not externalities or price rigidities, was seen as a primary cause for unemployment, the crucial problem of the day. In this way, Keynesian economics laid the basis for the introduction of government as an active generator of economic activity, an expansion of its functions for which no possible justification appeared in the marginalist view. ¹⁰

A third related task of the book is to explain why a viable successor to the "Keynesian classical situation" did not appear out of the barrage of critique against Keynesianism. The central concepts being employed in this analysis are the Schumpeterian notions of "vision" and "classical situation," which warrant some explanation. By the word vision, Heilbroner

mean[s] the political hopes and fears, social stereotypes, and value judgments – all unarticulated, as we have said – that infuse all social thought, not through their illegal entry into an otherwise pristine realm, but as psychological, perhaps existential, necessities. ¹³

Furthermore, "our individual moral values, [and] our social angles of perception" are also part of our vision. Hence, vision precedes analysis and sets the analytical agenda. Classical situations are periods of time where, for one reason or the other, for better or for worse, we can see a general consensus at the level of vision within the discipline. ¹⁵

In concluding his analysis, Heilbroner makes a prescription which is related to the recurring theme of economics' desire to associate with the hard sciences. Economics should, according to him, let go of this desire and instead associate with its "half-sister 'soft' sciences".

Economics must come to regard itself as a discipline much more closely allied with the imprecise knowledge of political, psychological, and anthropological insights than with the precise knowledge of the physical sciences. Indeed, the challenge may require that economics come to recognize itself as a discipline that follows in the wake of sociology and political science rather than proudly leading the way for them.¹⁷

Discussing economic vision in *The Worldly Philosophers*, Heilbroner states:

Economic vision could become the source of an awareness of ways by which capitalist structure can broaden its motivations, increase its flexibility, and develop its social responsibility. ... and much of the learning needed to give substance to this vision belongs properly within the boundaries of other fields of knowledge, from psychology and sociology through political science. ... such a new economics will incorporate knowledge from the domains of other branches of social inquiry....¹⁸

Two separate points are being made in these two passages with regards to the potential relationship between a new economic vision and sociology. The first passage deals with a methodological issue. The move from a scientific naturalism to association with other social sciences is not a question of the subject matter of economics and of the social sciences, but one of their methodologies. This prescription itself is based on the premise that a science-like certainty and naturalism has not been sought in these "soft" sciences (including sociology). This premise, as we will see later in the paper, may not be entirely correct for the particular case of sociology, which is the case in point. The second passage, however, is dealing with content or subject matter. Having associated itself with the soft sciences, economics can incorporate the findings and the body of knowledge of the other social sciences, including sociology.

In the presence of such explicit pronouncements there is little need for the student of economics to look for further evidence that Heilbroner is advocating an approach which not only leaves open the possibility of economics to be enriched through engaging with other social sciences to solve its crisis of vision, but almost makes it necessary. Given that sociology is explicitly mentioned in these prescriptions, the following questions arise: Is sociology in such a state so as to be able to contribute towards the synthesis of a new economic vision which could form the basis of a new classical situation? What if the history of sociological thought suggests that it has been plagued with some of the same issues seen in the breakdown of the Keynesian classical situation and the failure to find a successor? The evidence which can address these issues will be analyzed in the next section.

Besides mainly considering evidence from *The Crisis of Vision*, this paper will also occasionally refer to evidence from journal articles written by Heilbroner. These articles will be helpful in complementing evidence from *The Crisis of Vision*. Collectively, these sources will be used to flesh out a few central features of Heilbroner's philosophy of economics which will be analyzed near the end of the next section.

For evidence on the state of sociology, this paper will by and large depend on an article by Stephen Kalberg. Kalberg's review of four major debates in postwar sociological theory is from the vantage points of Weber scholarship and sociological theory. ¹⁹ Having outlined the schools of thought involved in each of these debates and the issues over which these schools are

at loggerheads, Kalberg proceeds to show that in each instance the debate has overlooked the potential of the "theoretical capital" of *The Protestant Ethic*. This theoretical capital includes methodological approaches as well as questions of scope and ideal types. Where each of these schools could have turned to this classic to look for contributions at the level of methodology to add greater depth and nuance to the debates, they did not do so.

This paper will also make use of an article pertaining to sociology as a discipline by Peter L. Berger.²¹ Berger's article provides a lead for the idea of differentiating between desirable and undesirable kinds of sociology. Berger's analysis also includes discussions about problems afflicting sociology in the postwar period and thus substantiates Kalberg's observations. However, his analysis is different from that of Kalberg in a few crucial ways. Firstly, it is much more brief and sweeping in its scope and thus acts as a complement to Kalberg's work which has a more narrow focus. Secondly, he analyzes sociology in relation to economics and the other social sciences. Thus, he also provides the lead to look at economics and sociology in relation to each other and within the larger context of the social sciences rather than in isolation.²²

On the issue of the possibility of Weber's philosophy of science bringing clarity to Heilbroner's philosophy of economics, a few important points need to be made about a paper by Anghel Rugina which analyzes, among other things, Weber and Heilbroner's views on value-freedom in science in the context of economic thought. Firstly, it is not within the scope of this study to either affirm or challenge Rugina's interpretation and critique of either Weber or Heilbroner. The only purpose is to look at the two authors from a perspective different from Rugina's and see what might come from such a line of inquiry.

This study departs from Rugina's in the following ways. Firstly, Rugina's critique of Weber is based on the issue of the nature of value-judgments. According to Rugina, "he [Weber] seems to have thought that all values were personal, even though the scientific community of his time refused to accept such a universal assumption." Rather than challenging or affirming Rugina's critique of Weber on this issue, this paper will depend on Koshul's reading of Weber which offers "self-consciousness" as a key characteristic of Weber's view of science. Secondly, in his reading of Heilbroner, Rugina has considered Heilbroner's ideas as present in "Economics as a "Value-Free" Science." However, he has not paid enough attention to the importance Heilbroner places in "painful self-scrutiny" in the very same paper, and which was to be expressed in the latter's written work with even greater force in the 1990s. It is to this aspect of Heilbroner's work that this paper pays greater attention.

Noting the stark similarities between Weber's philosophy of science and Heilbroner's philosophy of economics should also provide evidence that a strong influence of Weber's thought on that of Heilbroner should be explored, as it appears that it has not been explored yet. Robert W. Dimand has discussed the influence of Weber on Heilbroner on the subject of the "origins of the market economy" rather than that of philosophy of science. Even though Rugina has analyzed Heilbroner's philosophy of anti-positivist economics along with Weber's ideas about values-judgments and value in science, he does not explore the possibility of Weber's influence on Heilbroner. In Robert Pollin's review of Heilbroner's ideas, there is no mention of Weber at all. ²⁸

Weber's own view of science is seen on the basis of his essay "Science as a Vocation" and Koshul's study of Weber. Weber's essay serves as a worthy introduction to his philosophy of science as it provides a clear picture of the contributions of science, its relationship with values, and its place in culture at large. Koshul's study is directed towards showing that "Weber's understanding of 'science' makes a critical contribution to 'disenchanting disenchantment'." During the process of making this argument he offers an interpretation of Weber's view of science which is especially helpful for the purposes of this paper.

II. Theoretical Analysis

A. Scientificity in The Crisis of Vision

When one analyzes *The Crisis of Vision*, one finds a few central concerns or 'threads' running through the book. The first of these concerns, which will be referred to henceforth as "scientificity," is about the "natural law conception of economics." The natural law conception has, according to Heilbroner, come about due to the desire to make economics more like natural science rather than like the other social sciences. 33

This conception is expressed in the discipline's foundations in the form of the notion of the rational individual economic agent.³⁴ The shift from Marshallian to Keynesian vision constituted a shift in the conception of "motivational basis" from utility-maximization to propensities.³⁵ With Keynes, the scientificity of economics was lost: "economic behavior thus becomes less determinate from an analytical view, and economic explanations are accordingly stripped of their 'sciencelike' appearance." However, Paul Samuelson's *Economics*

overcame the gulf between Marshallian and Keynesian views by consigning the first to a "micro," and the second to a "macro" section. ... [T]he two approaches were presumably reconciled by being bundled into a single textbook.³⁷

Further down the years, scientificity reared its head again with Robert Lucas attacking Keynesianism.³⁸ For Lucas, economics was unique due to its scientificity, which in turn rested on the rationality of the individual economic agent.³⁹ As the discussion turns to the major potential successors to the Keynesian classical situation, we find Monetarism to be the first one.⁴⁰ One of the reasons why it failed to unify modern economic thought was that it was devoid of "rational-choice microfoundations" and thus was in direct conflict with the dominance of rational-choice theory in the 1970s and 80s.⁴² These microfoundations had lingered on from Marshall's work despite the fact that they were never properly reconciled with Keynes's work, as economists were unwilling to let go of the element considered responsible for the scientificity of economics.⁴³

The second potential successor was the New Classical School which failed to argue for a role for government in the economy – let alone an important role – as was the case with Keynes. ⁴⁴ This too was because of the school's dependence on rational-choice microfoundations, as "individual preferences and technology are considered 'natural'." ⁴⁵ The third potential successor, the New Keynesian School, though not doing away with government, ⁴⁶ agreed on rational-choice microfoundations. ⁴⁷

The problem then is not that of internal disagreement, but of confusion and failure at the level of vision. For all its analytical brilliance, the retreat into rational choice has also revealed the absence of a conceptual center able to hold sway both within and outside the economics profession. Preanalytical shortcomings reflect the fragility of theories with respect to economic problem solving. ... The absence of a well-defined consensual core in modern economics has placed the burden of generating new ideas on the extremely malleable precepts of rational choice. 48

Therefore, scientificity is one of the pegs around which Heilbroner's argument pivots. The scientificity of Marshallian marginalism was never banished as the Marshallian vision was supposedly reconciled with Keynes's work which, in reality, did not lend itself to such scientificity due to an absence of rational-choice microfoundations. With the downfall of Keynesianism, at least three major attempts were made to replace it. While Monetarism did not have rational-choice microfoundations to begin with, New Classical theories made government irrelevant to economic policy based on the said microfoundations. The New Keynesian School's shortcomings were in the domain of policy, again based on rational-choice microfoundations. Hence, the thread of rational-choice microfoundations and the scientificity associated with them runs through the author's argument.

B. Ahistoricity in The Crisis of Vision

The second thread that can be seen running through the argument of the book is the issue of the consideration (or lack thereof) of history in economic vision. This issue is closely related to the issue of scientificity and rational-choice microfoundations. The issue of "ahistoricity" constitutes the failure of economic thinkers to take history into account in the formation of their vision. The complement to Keynes's notion of propensities and economic analysis at the macro level was his notion of "uncertainty":

With Keynes, a margin of uncertainty is an ineradicable aspect of the social process examined by economics, and therefore one that cannot be overlooked in its theoretical clarification.⁵⁰

However, this central idea in Keynes's vision was later weakened, to say the least. The IS/LM diagram, a visual representation of Keynesian analysis, did away with this uncertainty. John Hicks, who made the diagram, himself said that "it reduces *The General Theory* to equilibrium economics; it is not really *in* time." This timelessness of Keynesianism – a misrepresentation of Keynes's view – is directly a matter of ahistoricisation of Keynes's work in as much as considerations of time are considerations of historical process. In fact, "Keynesian economics" was guided by a historical awareness of the particularity of the attributes of capitalism as it existed in the twentieth century. Nevertheless, this was not how his work was interpreted:

[Keynes's] followers – which means the profession at large – elaborated his history-bound analysis into a timeless and spaceless set of universal principles, sacrificing in the process much of his subtlety, and so established Keynesianism as an orthodoxy ripe for counter-attack.⁵⁴

After Keynesianism, this ahistoricity was manifest in the acceptance of rational-choice microfoundations by the contenders for the vision of a new classical situation. ⁵⁵

Central to the argument of the book is the importance of recognizing the historical particularity of the capitalist socio-political system. ⁵⁶ Capitalism – the social order which economics tries to explain ⁵⁷ – has three key characteristics. The first is the accumulation of capital as the guiding principle which is "the end on which its dominant class depends for power and prestige." ⁵⁸ This is a "political" feature. ⁵⁹ The second feature is "organizational": "the coordination of production and the regulation of distribution by the largely unregulated competitive striving for advantageous purchase or sale called 'the market'." ⁶⁰ The third feature – an "administrative" one – is a division of the capitalist socio-political order "into a 'private' and a 'public' realm."

C. Culture: Values and Beliefs in The Crisis of Vision

Does *The Crisis of Vision* have anything to say about the place of culture, values and beliefs in economics? Yes and no. Although Heilbroner points out the importance of recognizing the social context of behavior, specific references to the role of beliefs and values are few and far in-between. However, where and when they do occur, these references are critical in making clear that in Heilbroner's view, beliefs and values are something which people in the economics profession will do well to pay attention to. One of these instances occurs during the discussion of why Monetarism failed to establish a new classical situation:

What seems ultimately of crucial importance is the capacity of a consensual model to embody the sociopolitical values and the historical prospects of the period in question. Here we find a striking difference between the Keynesian situation and that of Monetarism.⁶²

Another instance where he speaks specifically about values is in his criticism of the New Classical depiction of the individual economic agent:

Thus in formalizing and placing the individual – the so-called representative agent – at the center of the analysis, the New Classicals have eliminated all those aspects of behavior that are social, such as power, commitment, and values. For all practical purposes, they have eliminated the individual him- or herself. An insistence on the sociality of agents implies a very different approach to economics. ⁶³

Both these instances reflect Heilbroner's concern about the recognition of the significance of the place of beliefs and values in the formation of vision. As we approach the review of Kalberg's analysis, it will become clear that a neglect of beliefs and values – of culture – has also been seen in theoretical trends in postwar American sociology.

D. Kalberg's Intellectual-Historical Analysis

Kalberg "examines *The Protestant Ethic* through the lens of four familiar controversies [that is, debates] in postwar American sociological theory." By doing so, Kalberg also attempts "to demarcate a number of major parameters of postwar American sociological theory." Each debate analyzed by Kalberg shows signs of being afflicted with the problems associated with

scientificity and ahistoricity, on the grounds of which the dominant school faced criticism from another school of thought. In the first of these debates the structural functionalists faced criticism at the hands of conflict theorists and neo-Marxists in the late 1950s and 1960s respectively. ⁶⁶ The point of contention was that the structural functionalists were "downplaying power, rulership, conflict, social change, economic interests and class" in their analysis. Their predisposition towards a holistic view of society was an immediate contributing factor towards this short-sightedness. ⁶⁸

In the second of these debates, history takes centre stage. Comparative-historical sociologists' criticism of the structural functionalist modernization theorists began in the 1960s and the ensuing debate lasted for more than ten years and was centered on the latter's neglect of history. This neglect meant less empirically grounded theorizing and more "general theory." Consequently, the abstract theorizing of the structural functionalists was found wanting in its ability to help sociologists grasp historical empirical reality.

In the third debate, the inclusion of culture was the point of contention. The early 1980s saw a change in the direction of criticism. Now the neo-Marxists and comparative-historical sociologists were the subject of the ire of sociologists of culture, for having failed to acknowledge the importance of the cultural domain – dealing with values and beliefs held dear by people – in their attention towards the economic and political factors. As has been seen in previous sections of the paper, ahistoricity and the neglect of social factors such as power and values in the context of economics are issues of significance for Heilbroner.

In the fourth of these debates, the issue of rational choice takes centre stage. Kalberg has shown how the criticism of rational choice theory at the hands of sociologists of culture has overlooked the immense diversity that is present in Weber's notion of rationality, its multiple types and intensities, and its varied empirical effects. In Kalberg's judgment, rational-choice theorists were looking at rationality only as *practical* rationality, which is governed by meansend considerations. Heilbroner recognizes that "marginalism per se is a theory of decision making, in which costs and benefits are weighed precisely, and no net benefit is ever forgone." To the degree that the influence of the marginalist conception of the rational individual has subsisted, a narrow view of rationality limited merely to practical rationality may be considered common to sociological and economic thought.

E. The Potential of Weberian Sociology

Kalberg also shows that in its methodology and scope, *The Protestant Ethic* contains guidelines which address the issues pertaining to scientificity, ahistoricity, rationality and culture. As these potential contributions are discussed, we will also see how in his own discussions, Heilbroner already stands close to a Weberian methodology. As we review this theoretical capital here, it would be useful to keep in mind the outlines of the four debates to see how this capital relates to each of them.

Firstly, Weber's method is uncompromisingly historical: "he scrupulously avoids all abstract, nonempirical formulations and concepts ... and offers an empirically informed analysis." More specifically, his analysis is always context specific. Unwarranted abstraction does not sit well with Weber. In this, his "contextual methodology" is opposed to "a positivist

sociology that defines the formulation of ahistorical, general laws as its goal."⁷⁷ In as much as Heilbroner has called for the recognition of the specific capitalist historical context with which economics deals, he is in agreement with a Weberian methodology.

Secondly, as has been discussed before, Heilbroner has identified the association rational choice microfoundations have had with scientificity in economics. Rationality is a central concern for Weber and as Kalberg shows, the variety that is part of Weber's view of rationality and its relationship with action has not been fully utilized. Weber begins with four ideal types of rationality: practical, substantive, formal and theoretical. Each of these is then associated with specific kinds of thought processes and types of social action which can be of different intensities. ⁷⁸ However, Weber's employment of these ideal types is "always grounded empirically."⁷⁹ This is significant for two reasons. Firstly, it affirms Weber's aversion to ahistoricity and abstraction and his commitment to empirically informed analysis. Secondly, since his ideal types are a reflection of empirical reality as seen by him, it follows that his view of the individual is diverse. Besides a diverse view of rationality, Weber also affirms the importance of culture. The neglect of the diversity of the individual is one of the concerns that Heilbroner has. In his reference to "power, commitment and values," he has already moved towards a Weberian methodology which gives immense importance to the diversity of the individual and to culture as a "crucial causal dimension." More specifically, "The Protestant Ethic offered a notion of culture that recognized the religious realm's independent causal significance."81

Weber can also help in addressing failed attempts to establish individual-society and micro-macro relationships which have also been part and parcel of the story of economics' crisis. So, how does he establish the individual-society relationship?

Indeed, even though he takes the individual's social action as the basic unit of his sociology, the question "within what carrier status group or organization social action occurs" remains fundamental in all of his studies. For Weber, the social action of individuals becomes sociologically significant *only* in demarcated groupings of individuals.⁸²

Again it is context that does the trick and helps establish the micro-macro relationship: "Weber links his 'mircrosociology' unequivocally to a 'macrosociology' that emphasizes social contexts." Heilbroner would himself agree with such a method:

From this point of view, "micro" and "macro" merge, in that microbehavior cannot be understood without taking cognizance of its social origins, and social forces remain empty abstractions unless they enter into the motivational concreteness of one or more individuals.⁸⁴

Therefore, in *The Protestant Ethic*, Weber offers a theoretical framework for social scientific inquiry which can potentially offer more along the lines on which Heilbroner is already thinking. What Weber offers is what Berger would describe as

a sociology in the classical vein, grounded in a knowledge of history, methodologically flexible, and imbued with a cosmopolitan spirit endlessly curious about every manifestation of human life. 85

F. The Potential of Weberian Science

We will now see how Heilbroner's philosophy of economics appears to be underpinned by a Weberian view of science. We will first see three characteristics of Weberian science (though these are not the only ones): that it offers clarity, that it is based on presuppositions which are not provable by science's own methods, and that it ought to be self-conscious in that it is aware of these presuppositions. We will then see instances in Heilbroner's work which suggest that he himself is not willing to say that economics need not be scientific. In fact, he stands by economics as a science but illuminates the meaning of this scientificity along Weberian lines.

In "Science as a Vocation," Weber offers us the three contributions of science. The one most pertinent to the issue at hand is the third one: science helps us "gain clarity." The scientist sets out for others a choice map of sorts. Rather than saying that you ought to aim for this end, he instead tells us that if you wish to obtain this end, you have at your disposal such and such different paths. Each path brings with it such and such implications. That is, "if you take such and such a stand, then, according to scientific experience, you have to use such and such a means in order to carry out your conviction practically." In doing so, the scientist can give a person "an account of the ultimate meaning of his own conduct."

However, science itself must first begin somewhere, and it begins with certain presuppositions. Besides presupposing the validity of its method, science also presumes that the things it wishes to know are "worth being known." According to Weber:

In this, obviously, are contained all our problems. For this presupposition cannot be proved by scientific means. It can only be *interpreted* with reference to its ultimate meaning, which we must reject or accept according to our ultimate position towards life. ⁹¹

Furthermore, each specific science will have its own specific presuppositions. For example, the physician will presuppose that the patient's life is worth saving. ⁹² Without this presupposition, the physician cannot even proceed with his work. However, it is not only the case that it is not the physician's job to ask whether the patient's life is worth saving or not, the physician *qua* scientist is not equipped to answer this question either way.

The third key characteristic of science as conceived by Weber is that it ought to become "self-conscious" aware of its own limitations which are imposed on it by its inability to prove its own presuppositions. In as much as Weber is exploring this issue in "Science as a Vocation," he embodies the self-conscious scientist. For Weber, "science today is a 'vocation' organized in special disciplines in the service of self-clarification and knowledge of interrelated facts." In fact, it is only in a state of self-consciousness and self-clarification that science becomes 'objective.' In as much as science lends its assent to its presuppositions as an act of faith, does it not become value-laden when it should be value-free? How, then, is it possible to

have value-free science? This point is clarified in a passage by Koshul which depends on Karl Lowith's interpretation of Weber:

Weber seems to be saying that, while science is based on certain subjective factors and value judgments, it is at the same time free of certain subjective factors and value judgments. This apparent contradiction in Weber's thought is clarified by Lowith in these words.

What Max Weber's call for a value-*free* science sought none the less to demonstrate was that, in spite of science's emancipation, its "facts" were underpinned by specific preconceived value-judgements of a moral and semi-religious type, some of which even approximated to fundamental principles. Science was to become free, in the sense that its value-judgements were to become decisive, logically consistent and self-reflexive, rather than remaining concealed, both to others and to science itself, under the cloak of "scientific knowledge." Weber's call for the value-freedom of scientific judgement does not represent a regression to pure scientificity; on the contrary, he is seeking to bring those extrascientific criteria of judgement into the scientific equation ⁹⁶

For Weber, the value-free character of science is not related to the fact that it is free of subjective factors and value judgments of a "moral and semi-religious type." Science is value-free in the sense that its "moral and semi-religious" dimension has become "decisive, logically consistent and self-reflexive, rather than remaining concealed."

Having seen these three key characteristics of science as conceived by Weber, we now turn to looking at the instances where Heilbroner's work reflects these three characteristics in the case of economics as a science. Heilbroner proposes that "the conventional predictive orientation of economics must change to what Adolph Lowe has called an 'instrumental' – that is, means-end directed – purpose." That is, "the use of analysis [will be] to infer the policy best suited to attain a necessary end result." Thus, economics becomes the science which *clarifies* for policy makers as to what can be done and what the implications will be if such and such end is targeted:

A society whose economic activity is guided by politically self-conscious visions, and that utilizes means-end analyses, will not exacerbate the ever-present dangers of a politicization of its life. It will only incorporate politics into the agenda of a society that wishes itself to be governed by its own choices, not by blind obedience. ¹⁰⁰

That is, economics will not make recommendations in an absolute sense as to "what should be done." Instead, it will be given certain parameters with a certain end in mind (as to what is desired as far as economic conditions are concerned) and then it will set out for the inquirer as to what his/her options are in terms of the different means which may be employed to reach that end, and what costs and benefits each particular means will bring.

What, then, are the presuppositions of economics as a science? At the very least, everything part of "vision" should serve as at least part of economics' presuppositions. It was seen that for Weber, science cannot prove the validity of its own presuppositions. Likewise for

economics as conceived by Heilbroner, "the validity of underlying visions cannot be inferred from the success of prognoses built on them. Rather, visions remain beyond objective testing." ¹⁰¹

In as much as he is aware of these presuppositions, Heilbroner embodies the selfconscious economist:

The fundamental usefulness of these visions therefore lies not in their power to illumine the future—even though that is what we unthinkingly use them for—but in our own power to perceive that visionary preconceptions underlie analytic work itself. An awareness of these preconceptions forces us to recognize that the world we analyze is not just unambiguously there, but displays the characteristics that we project into it. ¹⁰²

Thus, it is in awareness of these presuppositions that the economist can differentiate those elements which are unambiguously there from those which he projects into the world. It is only when the economist can make these distinctions that his analysis can become fruitful. Otherwise, he continues to engage in "an unknowing deception of the self." What Heilbroner wishes is for economics to stop deceiving itself and "again become what it once was—the self-conscious means by which a capitalist order explains itself to itself." ¹⁰⁴

III. Findings and Revised Claim

From the above analysis, a number of findings emerge. Firstly, the presence of a classical situation in postwar American sociology seems unlikely. One key criterion for the recognition of a classical situation was evidence of a general consensus within the discipline at the level of vision. Kalberg's work does not give the sense of a general consensus in American sociological theory. As dominant schools have changed over the decades, an opposing camp has always been around, highly critical of the dominant school either in its reductionism, its omissions of a crucial aspect of sociological inquiry or both. It is difficult if not impossible to see "consensual core[s]"¹⁰⁵ in sociological theory when it is observed through the lens of Kalberg's analysis. Secondly, by "demarcate[ing] a number of major parameters of postwar American sociological theory" 106 Kalberg has shown us "the unique contours and dichotomies of American sociological theory." Without having to identify the key vision(s) in sociology, one can still say that there are indeed symptoms of a crisis of vision. According to Heilbroner, "vision constitutes the allimportant terrain over which intellectual contest is waged in political and sociological controversy." That the intellectual contests waged in sociological controversy in the United States have been so shallow so as to neglect the theoretical capital of a classic may very well point to a problem with the terrain of vision itself.

Kalberg's conclusion is telling. As early as the 1940s and 50s, sociology was already looking to the natural sciences as its model of imitation, and did not wish to be associated with the other so-called "soft" sciences. 109 This led to a trend of high theorizing and construction of all-encompassing laws without recourse to history. Attempts to replace this "vision" were by and large unsuccessful. One of the instances in which an attempt was made to counter this trend was the case of the sociologists of culture. However, they too were unable to benefit from Weber's methodology and ended up at the other end of the spectrum. Specifically, "an atheoretical route: to conduct empirical studies underinformed by rigorous sociological theory." 112

Peter Berger's analysis corroborates Kalberg's. Sociology deals with "big questions ... in exceedingly abstract fashion." He observes that "today many sociologists take pride in the abstract, antiseptic quality of their work, comparable to the fine model building of the economists." He considers the evidence that four major events in the postwar period "completely surprised most, if not all sociologists." Even in the wake of these events, they could not explain them. In light of this evidence he concludes that there are four symptoms of "what ails sociology today." These are "parochialism, triviality, rationalism, and ideology." Like economics, sociology also adopted rational choice as a methodological basis and ended up "confusing its own rationality with the rationality of the world." The "triviality" which is present in sociological theory has its origins in "a futile and theoretically misguided effort to ape the natural sciences."

Hence, the second finding to emerge is that sociology and economics share a host of problems. In particular, in their desire to be more scientific, both sociology and economics have looked towards natural science as a model to be emulated. This allows us to claim that Heilbroner's premise – that social sciences other than economics do not aspire to a scientific naturalism – seems untenable, at the very least in the specific case of sociology. Furthermore, if Heilbroner recognizes that the other social sciences look up to economics due to its "scientific" status, then he implicitly recognizes that the disease of the search for scientificity inflicts the other social sciences as well. If economics was to abandon the search for scientificity and follow in the wake of its half-sister soft sciences, it may very well cause a crisis in the social sciences at large: economics' sister sciences will have been left in a state of utter confusion, with the discipline supposedly leading the way for them having declared that it doesn't know where it is going, or that it is going in the wrong direction. Sociology, in particular, is itself inflicted by problems very similar to those of economics. The purpose of this line of argumentation is not to insist that Heilbroner's insistence on the association of economics with the other social sciences rather than the hard sciences is unwarranted. Rather, a distinction between worthwhile and less useful approaches to sociology should be made. Berger would agree that economics requires "a good dose of sociology,"¹²² but it cannot be a sociology which shares economics' own problems.

Therefore, the third finding is that when Heilbroner suggests looking towards sociology (and other social sciences) to seek contributions to a new vision for economics, he has in mind a particular view of the natural and social sciences and of science in general. Having seen the shortcomings common to sociology and economics, we can now claim that indeed, economics must move towards *a particular kind* of sociology. Specifically, towards a sociology which is successful in utilizing the latent theoretical insights and methodology of *The Protestant Ethic*. In this sense, it also must move away from the kind of sociology which has been caught up in abstraction and suffers from serious shortcomings which also plague economics.

Fourthly, the evidence reviewed in the previous section shows a stark similarity between Weber's philosophy of science and Heilbroner's philosophy of economics *qua* science. These similarities support this paper's claim that Heilbroner's philosophy of economics seems to be underpinned by a Weberian philosophy of science. Thus, the possibility of Weber's philosophy of science helping clarify Heilbroner's philosophy of economics shows itself to be an exciting prospect. However, Weber's influence on Heilbroner remains plausible – even likely based on

the limited evidence analyzed above – but cannot be conclusively determined within the limited scope of this study.

IV. Summary

Thus, when we see the crisis of vision in modern economic thought in relation to (1) postwar intellectual trends in sociology, (2) varying understandings of sociology arising from within sociology and (3) a Weberian philosophy of science, we see how Heilbroner's ideas can be further refined. Understanding the crisis in relation to the problems and debates in sociology helps illuminate not only the problems within economics but also those in sociology. That sociology has been suffering from problems very similar to those involved in economics' crisis of vision suggests that there may be a crisis in the social sciences at large. As Berger observes from the vantage point of a sociologist,

In diagnosing the condition of sociology, one should not view it in isolation. Its symptoms tend to be those afflicting intellectual life in general. Other human sciences are in no better shape. Most economists are captive to their rationalist assumptions, large number of political scientists seem to fall, *mutatis mutandis*, into the same trap. Anthropologists are probably more ideologized than any other social science discipline, and people in history and humanities seem to fall to every doctrinal fashion that comes flying over the Atlantic, usually via Air France, each more obscurantist and intellectually barbaric than its predecessor. ¹²³

In light of this possible crisis of the social sciences, Heilbroner's prescription for economics to consider a move towards sociology and the other social sciences becomes problematic at the least and harmful at the worst. After all, as Schumpeter recalls, "as an eminent economist once observed, cross-fertilization might easily result in cross-sterilization." Nevertheless, there can be little doubt that conversations between economics and the other social sciences are necessary and given the right resources and enough time, should prove beneficial. Sociology can indeed contribute to help economics solve its crisis of vision. However, economics must be careful in paying heed to certain voices from within sociology and being wary of others. It should also be careful as to what kind of scientificity it tries to achieve. Is it a scientificity which aims to both gain and provide clarity and self-consciousness or is it a scientificity which is tied (down) to ahistoricity?

V. Conclusion

In conclusion, we turn to a more recent essay¹²⁵ published in late 2002 in which Heilbroner revisits *The Crisis of Vision* in light of the developments in economics since the first publication of the book. He has noted that methodologically, economics is now very strongly oriented towards analysis of empirical evidence. However, this has been in the form of "sophisticated measurement and statistical analysis" rather than looking at empirical evidence with reference to mathematical theoretical models. ¹²⁶ Though a certain leaning towards pragmatism can be seen, ¹²⁷ born of the need for economics to be relevant, the trend is something similar to what was seen in Kalberg's analysis. As was mentioned before, sociologists of culture were not able to utilize Weber's methodology in *The Protestant Ethic*. This should come as no surprise since the balance of the work does not lend itself to compartmentalization in schools.

Unable to emulate this balance, sociologists of culture ended up taking empirical evidence into account, but at the cost of theory. Heilbroner is able to see something similar happening in economics. As empirical studies become more and more important, "the methodological development constitutes a rejection of theory." Though Heilbroner is "optimistic" about the move towards pragmatism, he also recognizes the potential for the subsistence of the crisis of vision. ¹³⁰

The article says little about whether the vision of science has been let go of or not. Heilbroner mentions pragmatism "in the longstanding American philosophical tradition of Pierce and Dewey," but that is no indicator of the degree of scientificity of the discipline. Given that Peirce also has a philosophy of science, it may mean a subsistence of the "scientific" vision based on how Peirce's philosophy of science may be interpreted. Furthermore, the article says nothing about the progression of the relationship between economics and other social sciences. This is not surprising since this was not a point of focus in the book in the first place.

Since the publication of this article, other articles have appeared in the wake of the global recession and offer similar prognoses. With specific reference to the recent financial crisis:

These internal critics [of macroeconomics, such as Nobel Laureate Paul Krugman] argue that economists missed the origins of the crisis; failed to appreciate its worst symptoms; and cannot now agree about the cure. In other words, economists misread the economy on the way up, misread it on the way down and now mistake the right way out. 132

On the issue of analysis of empirical evidence, John Kay writes that

modern economists make no observations at all. Empirical work in economics, of which there is a great deal, predominantly consists of the statistical analysis of large data sets compiled by other people. ¹³³

He is also in agreement with Heilbroner on the issue that far from being universal, the knowledge that economics gives us has to be context specific. ¹³⁴ The paper had begun with the premise that Heilbroner's insights from the mid-1990s still hold today and such articles lend themselves as evidence to the validity of this premise. Hence, it would seem that in light of these developments, the case for the potential contributions of Weber's theoretical and methodological capital to economics becomes even stronger. If economics is indeed now moving from a trend of high theorizing to a trend of atheorizing (which may be likened to jumping into the ocean of empirical evidence without the boat of theory as a vehicle to navigate the waters) then it is swinging from one end of the spectrum to another in the manner of the dichotomous schools of postwar American sociology. ¹³⁵ All the more reason that economics can benefit by engaging with a sociology grounded in the methodology of *The Protestant Ethic*.

As for the possible source of the potential influence of Weber's thought on Heilbroner's, we may, in conclusion, propose a line of inquiry. Even if Weber did not exercise an influence on Heilbroner directly, we may consider the possibility of this influence having come through Schumpeter. Schumpeter's influence on Heilbroner is well known and the fact that Schumpeter's *History of Economic Analysis* (often described by Heilbroner as "magisterial" was the result of his intention to translate, revise, and bring up to date the 'little sketch of doctrines and

methods' (*Epochen der Dogmen- und Methodenge-schichte*) written for the first volume of Max Weber's *Grundriss*, which was published in 1914," lends plausibility to this hypothesis. Furthermore, Schumpeter explicitly mentions Weber in a discussion of economics as a science and its relationship with value-judgments. That Heilbroner's philosophy of economics can be clarified by Weber's philosophy of science and that the former may have been influence by the latter should be a reminder of the continued relevance of one of the masters of the social sciences.

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VII. Endnotes

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² Robert Heilbroner and William Milberg, *The Crisis of Vision in Modern Economic Thought* (Cambridge: Cambridge University Press, 1997), 128.

³ Stephen Kalberg, "On the Neglect of Weber's Protestant Ethic as a Theoretical Treatise: Demarcating the Parameters of Postwar American Sociological Theory," *Sociological Theory* 14, no. 1 (March 1996): 49-70, http://www.jstor.org/stable/202152 (accessed November 22, 2011).

⁴ Heilbroner's focus is specifically on "American and British economic thought." See Heilbroner and Milberg, *The Crisis of Vision*, 8.

⁵ Heilbroner and Milberg, *The Crisis of Vision*, 10.

⁶ Heilbroner and Milberg, *The Crisis of Vision*, 31.

⁷ Heilbroner and Milberg, *The Crisis of Vision*, 32.

⁸ Heilbroner and Milberg, *The Crisis of Vision*, 32.

⁹ Heilbroner and Milberg, *The Crisis of Vision*, 34.

¹⁰ Heilbroner and Milberg, *The Crisis of Vision*, 35.

¹¹ Heilbroner and Milberg, *The Crisis of Vision*, 25.

¹² Heilbroner and Milberg, *The Crisis of Vision*, 69.

¹³ Heilbroner and Milberg, *The Crisis of Vision*, 4.

¹⁴ Heilbroner and Milberg, *The Crisis of Vision*, 4.

¹⁵ Heilbroner and Milberg, *The Crisis of Vision*, 20.

¹⁶ Heilbroner and Milberg, *The Crisis of Vision*, 126.

¹⁷ Heilbroner and Milberg, *The Crisis of Vision*, 126.

¹⁸ Robert L. Heilbroner, *The Worldly Philosophers: The Lives, Times, and Ideas of the Great Economic Thinkers*, Rev. 7th ed. (New York: Simon and Schuster, 1999), 320-321.

¹⁹ Though Kalberg recognized that there were other important debates in post-WWII sociological theory, these are nonetheless four major debates. See Kalberg, 50n3.

²⁰ Kalberg, 50.

²¹ Peter L. Berger, "Sociology: A Disinvitation?," *Society* (November/December 1992): 12-18.

²² We might also take this lead from Schumpeter, who in the introduction of his *History of Economic Analysis* identifies sociology as one of economics' "neighboring fields" in which he observes "contemporaneous developments" over the course of his study. See Joseph A. Schumpeter, *History of Economic Analysis*, eds. Elizabeth Boody Schumpeter (New York: Oxford University Press, 1954), 25-27.

²³ Anghel N. Rugina, "The problem of values and value-judgments in science and a positive solution: Max Weber and Ludwig Wittgenstein revisited," *International Journal of Social Economics* 25, no. 5 (1998): 805-854, http://www.emeraldinsight.com/journals.htm?issn=0306-8293&volume=25&issue=5&articleid=1502486&show=pdf (accessed January 13, 2012).

²⁴ Rugina, 812.

²⁵ Basit Bilal Koshul, *The Postmodern Significance of Max Weber's Legacy: Disenchanting Disenchantment* (New York: Palgrave Macmillan, 2005), 42.

²⁶ Robert L. Heilbroner, "Economics as a "Value-Free" Science," *Social Research* 40, no. 1 (Spring 1973): 142, http://socsci.wikispaces.com/file/view/Heilbroner+-+Economics+as+Value-free+Science.pdf (accessed January 13, 2012).

²⁷ Robert W. Dimand, "Heilbroner and Polanyi: A Shared Vision," *Social Research* 71, no. 2 (Summer 2004): ?, http://www.thefreelibrary.com/Heilbroner+and+Polanyi%3A+a+shared+vision.-a0120779383 (accessed January 13, 2012).

²⁸ Robert Pollin, "Robert Heilbroner: Worldly Philosopher," *Challenge* 42, no. 3 (May-June 1999): 34-52, http://www.jstor.org/stable/40722750 (accessed December 21, 2011).

²⁹ Max Weber, "Science as a Vocation," in *From Max Weber*, trans. and ed. H.H. Gerth, and C. Wright Mills (1958; repr., New York: Oxford University Press, 1969).

³⁰ Koshul, 7.

³¹ Heilbroner and Milberg, *The Crisis of Vision*, 87.

³² Heilbroner and Milberg, *The Crisis of Vision*, 127.

³³ Also see Heilbroner, *The Worldly Philosophers*, 314-319.

³⁴ Heilbroner and Milberg, *The Crisis of Vision*, 7.

³⁵ Heilbroner and Milberg, *The Crisis of Vision*, 32-33.

³⁶ Heilbroner and Milberg, *The Crisis of Vision*, 33.

³⁷ Heilbroner and Milberg, *The Crisis of Vision*, 42.

³⁸ Heilbroner and Milberg, *The Crisis of Vision*, 53.

³⁹ Heilbroner and Milberg, *The Crisis of Vision*, 55.

⁴⁰ This paper is only reviewing Heilbroner's treatment of three of these major contenders, namely Monetarism, New Classical and New Keynesian. The other important ones are rational expectations, Post Keynesian and New Institutional. See Heilbroner and Milberg, *The Crisis of Vision*, 9.

⁴¹ Heilbroner and Milberg, *The Crisis of Vision*, 71.

⁴² Heilbroner and Milberg, *The Crisis of Vision*, 71.

⁴³ Heilbroner and Milberg, *The Crisis of Vision*, 65-66.

⁴⁴ Heilbroner and Milberg, *The Crisis of Vision*, 83.

⁴⁵ Heilbroner and Milberg, *The Crisis of Vision*, 83.

⁴⁶ Heilbroner and Milberg, *The Crisis of Vision*, 88.

⁴⁷ Heilbroner and Milberg, *The Crisis of Vision*, 92.

⁴⁸ Heilbroner and Milberg, *The Crisis of Vision*, 92.

⁴⁹ Heilbroner and Milberg, *The Crisis of Vision*, 116.

⁵⁰ Heilbroner and Milberg, *The Crisis of Vision*, 34.

⁵¹ Heilbroner and Milberg, *The Crisis of Vision*, 41.

⁵² John R. Hicks, "Some Questions of Time in Economics," in *Evolution, Welfare and Time in Economics: Essays in Honor of Nicholas Georgescou-Roegen*, eds. Anthony Tang et al. (Lexington, MA: Lexington Books, 1976), 140-141, quoted in Robert Heilbroner and William Milberg, *The Crisis of Vision in Modern Economic Thought* (Cambridge: Cambridge University Press, 1997), 61.

⁵³ Heilbroner and Milberg, *The Crisis of Vision*, 64.

⁵⁴ Harry G. Johnson, "The Keynesian Revolution and the Monetarist Counter-Revolution," *American Economic Review* 78 (May 1968): 1-14, quoted in Robert Heilbroner and William Milberg, *The Crisis of Vision in Modern Economic Thought* (Cambridge: Cambridge University Press, 1997), 64.

⁵⁵ Heilbroner and Milberg, *The Crisis of Vision*, 116.

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<sup>56</sup> Heilbroner and Milberg, The Crisis of Vision, 109.
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⁵⁷ Heilbroner and Milberg, *The Crisis of Vision*, 112.

⁵⁸ Heilbroner and Milberg, *The Crisis of Vision*, 106.

⁵⁹ Heilbroner and Milberg, *The Crisis of Vision*, 106.

⁶⁰ Heilbroner and Milberg, *The Crisis of Vision*, 107.

⁶¹ Heilbroner and Milberg, *The Crisis of Vision*, 108.

⁶² Heilbroner and Milberg, *The Crisis of Vision*, 72.

⁶³ Heilbroner and Milberg, *The Crisis of Vision*, 84. In another instance, Heilbroner relates the issue of power in economics with the "humanist" nature of the discipline. See Robert Heilbroner, "Taking the Measure of Economics," *Challenge* 37, no. 6 (November-December 1994): 4, http://www.jstor.org/stable/40722761 (accessed January 2, 2012).

⁶⁴ Kalberg, 49.

⁶⁵ Kalberg, 50.

⁶⁶ Kalberg, 50.

⁶⁷ Kalberg, 50.

⁶⁸ Kalberg, 50.

⁶⁹ Kalberg, 52.

⁷⁰ Kalberg, 52.

⁷¹ Kalberg, 55.

⁷² Kalberg, 58.

⁷³ Heilbroner and Milberg, *The Crisis of Vision*, 25.

⁷⁴ Kalberg, 53.

⁷⁵ Kalberg, 53.

⁷⁶ Kalberg, 53n7.

⁷⁷ Kalberg, 53n7.

⁷⁸ For a detailed analysis of Weber's ideal types of rationality, see Stephen Kalberg, "Max Weber's Types of Rationality: Cornerstones for the Analysis of Rationalization Processes in

History," *American Journal of Sociology* 85, no. 5 (March 1980): 1145-1179, http://www.jstor.org/stable/2778894 (accessed August 9, 2011).

⁷⁹ Kalberg, 53n7.

⁸⁰ Kalberg, 55.

⁸¹ Kalberg, 57.

⁸² Kalberg, 51.

⁸³ Kalberg, 58.

⁸⁴ Heilbroner and Milberg, *The Crisis of Vision*, 87.

⁸⁵ Berger, 14.

⁸⁶ Max Weber, "Science as a Vocation," in *From Max Weber*, trans. and ed. H.H. Gerth, and C. Wright Mills (1958; repr., New York: Oxford University Press, 1969), 151. The first contribution is that it "contributes to the technology of controlling life by calculating external objects as well as man's activities." The second is that it gives us "methods of thinking, the tools and the training for thought." See Weber, 150.

⁸⁷ Weber, 151.

⁸⁸ Weber, 151.

⁸⁹ Weber, 143.

⁹⁰ Weber, 143.

⁹¹ Weber, 143.

⁹² Weber, 144.

⁹³ Koshul, 42.

⁹⁴ Koshul, 41-42.

⁹⁵ Weber, 152.

⁹⁶ K. Lowith, "Max Weber's Position on Science," in *Max Weber's "Science as a Vocation*," ed. Peter Lassman, Irving Velody, and Herminio Martins (London: Unwin Hyman, 1989), 146, quoted in Basit Bilal Koshul, *The Postmodern Significance of Max Weber's Legacy: Disenchanting Disenchantment* (New York: Palgrave Macmillan, 2005), 47.

⁹⁷ Koshul, 47.

⁹⁸ Heilbroner and Milberg, *The Crisis of Vision*, 125.

⁹⁹ Heilbroner and Milberg, *The Crisis of Vision*, 125.

¹⁰⁰ Heilbroner and Milberg, *The Crisis of Vision*, 127-128.

¹⁰¹ Robert Heilbroner, "Analysis and Vision in the History of Modern Economic Thought," *Journal of Economic Literature* 28, no. 3 (September 1990): 1112, http://www.jstor.org/stable/2727102 (accessed December 9, 2011).

¹⁰² Robert Heilbroner, "Analysis and Vision in the History of Modern Economic Thought," *Journal of Economic Literature* 28, no. 3 (September 1990): 1113, http://www.jstor.org/stable/2727102 (accessed December 9, 2011).

¹⁰³ Robert Heilbroner, "The Nature of Economics," *Challenge* 38, no. 1 (January-February 1995): 26, http://www.jstor.org/stable/40722719 (accessed December 9, 2011).

¹⁰⁴ Robert Heilbroner, "Taking the Measure of Economics," *Challenge* 37, no. 6 (November-December 1994): 8, http://www.jstor.org/stable/40722761 (accessed January 2, 2012).

¹⁰⁵ Heilbroner and Milberg, *The Crisis of Vision*, 92.

¹⁰⁶ Kalberg, 50.

¹⁰⁷ Kalberg, 50.

¹⁰⁸ Heilbroner and Milberg, *The Crisis of Vision*, 4.

¹⁰⁹ Kalberg, 64.

¹¹⁰ Kalberg, 64.

¹¹¹ Kalberg, 66.

¹¹² Kalberg, 66.

¹¹³ Berger, 12.

¹¹⁴ Berger, 12.

¹¹⁵ These events are (1) "cultural and political upheaval" of "the late 1960s and early 1970s ... in the major Western industrial societies," (2) the rise of East Asian economies, (3) a resurgence of religion and (4) the fall of the Soviet Union. See Berger, 13-16.

¹¹⁶ Berger, 13.

¹¹⁷ Berger, 13.

¹¹⁸ Berger, 16.

¹¹⁹ Berger, 16.

- ¹²⁰ Berger, 17.
- ¹²¹ Berger, 17.
- ¹²² Berger, 18.
- ¹²³ Berger, 18.
- ¹²⁴ Schumpeter, 27.
- ¹²⁵ Robert Heilbroner and William Milberg, "Revisiting *The Crisis of Vision in Modern Economic Thought*," *Post-Autistic Economics Review*, no. 16 (September 16, 2002): article 5, http://www.paecon.net/PAEReview/issue16/HeilbronerMilberg16.htm (accessed December 2, 2011).
- ¹²⁶ Robert Heilbroner and William Milberg, "Revisiting."
- ¹²⁷ Robert Heilbroner and William Milberg, "Revisiting."
- ¹²⁸ Robert Heilbroner and William Milberg, "Revisiting."
- ¹²⁹ Robert Heilbroner and William Milberg, "Revisiting."
- ¹³⁰ Robert Heilbroner and William Milberg, "Revisiting."
- ¹³¹ Robert Heilbroner and William Milberg, "Revisiting."
- ¹³² "The other-worldly philosophers," *The Economist*, July 16, 2009, http://www.economist.com/node/14030288 (accessed December 28, 2011).
- ¹³³ John Kay, "John Kay: The Map Is Not the Territory: An Essay on the State of Economics," INET Blog, entry posted October 4, 2011, http://ineteconomics.org/blog/inet/john-kay-map-not-territory-essay-state-economics (accessed December 28, 2011).
- ¹³⁴ John Kay, "John Kay: The Map Is Not the Territory: An Essay on the State of Economics," INET Blog, entry posted October 4, 2011, http://ineteconomics.org/blog/inet/john-kay-map-not-territory-essay-state-economics (accessed December 28, 2011).

¹³⁵ Kalberg, 66.

¹³⁶ Heilbroner and Milberg, *The Crisis of Vision*, 10.

¹³⁷ Elizabeth Boody Schumpeter, editor's introduction to Joseph A. Schumpeter, *History of Economic Analysis*, eds. Elizabeth Boody Schumpeter (New York: Oxford University Press, 1954), v.

¹³⁸ Schumpeter, 540.