The Purpose and Significance of the Methodology of the Social Sciences in the Age of Scientism

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This paper examines the status of the methodology of social sciences in the light of ideological debate between capitalism and socialism. The spirit of scientism was shared by both scientific socialism, which was raised by Engels, and scientific liberalism, which was raised by Popper, Mises and Hayek. In the age of scientism, issues of social science methodology were placed as final stage for the ideological battle over the institutional choice problem. But if we examine critically, scientific liberalism has not only lost its opponent with the decline of socialism, but has also been broken down through immanent criticism. Liberalism could not be justified by any scientific methodology.

1. Science as the “Spirit of Problem-Consciousness”

From the late nineteenth century to the late twentieth century, there exists one concept that every discipline studying society must confront: “science.” The following questions show the many kinds of considerations surrounding this concept, in regard to the appropriate method to reach true scientific knowledge:

Is dialectics or positivism the proper method of understanding?

What is the difference between the natural sciences and the sciences that study society and culture?

What is the proper criterion for demarcating the boundary between science and metaphysics (or ideology, myth, magic, art) ?

What kind of human influences are there on scientific research activity?

Are there influences such as those of a Weltanschauung, life-world, life (soe), Dasein, value-interest, sympathy, and so on?

How is a new field of research up-graded to become a “science”: does it become a science because it has become a paradigm or has an advanced research program?

What is the scientific way for evaluating theories properly?

Is the growth of scientific knowledge rational or relativistic?

The idea of “science” has been examined in various contexts, and it has
been discussed as a central issue of our age during the past hundred years. So it is possible to say that we will find the spirit of our age in this idea. That spirit, however, is not like the Zeit-Geist, which is presupposed by a Hegelian or Diltheyan approach. Rather, this spirit is embodied in a realm where people, who do not share common values, but share common key problems, and criticize each other's contributions to the growth of knowledge. This spirit seems to be the main device of our age and also be the foundation of all reasonable debate. I would like to call it the spirit of "problem-consciousness." In my opinion, the idea of science has been the main problem-consciousness of our age for the past hundred years.

It is important that we regard the span of our age as approximately a hundred years. If we followed the popular history of social ideas, our age would still be the age of the enlightenment that began with Rene Descartes.

Our problem-consciousness would thus concern the concept of "enlightenment," which has continued from the sixteenth century. It is true that our idea of the "enlightenment" is not complete, no matter how we have changed our concept of enlightenment and no matter how skeptical we have become of the age of enlightenment (post-modern skepticism). Michael Foucault (1966) argues that there is a deep gap between classicism in the eighteenth century and the era of science after the nineteenth century. He insists that the common ancestor of our age is not Descartes. Others have also criticized the interpretation of our age that has equated modernity with the eighteenth-century enlightenment.

These interpretations of how to constitute our historical period differ according to the value-interests we have. The popular interpretations of our modernity, however, do not focus on the intellectual history that we have experienced over approximately the last hundred years, which has been the history of a raging debate between capitalism and socialism. This debate has been the most important issue in the intellectual history of modern economic thought. If we focus on the intellectual background of socialism, we can trace it back to Thomas More's *Utopia* in the sixteenth century. But it is in the latter half of the nineteenth century that the socialist movement actually became a powerful force in society and came to occupy the interests of social philosophers. The idea of 'scientific socialism' has been persuasive and successful, and has become the origin of our problem-consciousness over the last hundred years.

It should be noted that Karl Marx was not the person who set forth scientific socialism, at the beginning of our age one hundred years ago. Let us look more into the concept of "science". The word "science" can be traced back to the Latin word "scientia", which was used to mean "knowledge", as distinguished from "opinion" (doxa), until the beginning of the seventeenth century.
In the eighteenth century the word science came to have another meaning, which was theoretical knowledge, as opposed to practical knowledge. But until that time the words “science” and “philosophy” were used interchangeably. Thus Adam Smith, who is regarded as the founder of the social sciences, was called a “moral philosopher.”

In the middle of the nineteenth century the word “scientist” first appeared in history. In the nineteenth century “science” came to have a new meaning, that of experimental knowledge in the broader sense. In this sense it meant the systematic and methodological observation of certain things, and it was distinguished from metaphysics and theology. So when Karl Marx uses the word science, he often means just theoretical knowledge based on systematic and methodological observation. For example, in Zur Kritik der politischen Oekonomie, Marx regarded the “upward method” as scientifically correct. This method meant roughly that we begin to search from abstract and simple concepts and end by describing concrete concepts in a systematic way. By this definition science is a certain systematic development of knowledge. In the postscript to the second edition of Das Kapital, Marx says that classical economics before him was scientific in the sense that it expanded the experimental inquiry of knowledge and met the changing demands of the social stages of development of its time. So when Marx uses the word “science” he is using the word in the accepted meaning it had in his time, that of being experimental knowledge. As far as the definition of “science” is concerned, we should distinguish between Marx and later Marxist theorists.

With Friedrich Engels “science” came to have another significant meaning, and the movement of “scientific” socialism has begun. In his Anti-Dühring (Hern Eugen Umwalzung der Wissenschaft 1877-78), Engels made his original distinction between metaphysics and science. Metaphysics is a method that regards any object as permanent, unchanging, or lacking any relation to other objects. On the other hand, Engels held that science means the dialectical method. Science conceives an object in its motion, growth, and ceasing to be, and in its relation to other objects. If we accept Engels’ distinction, it follows that classical economics is metaphysics and Marx’s economics is science.

According to Engels, socialism became scientific because Marx made materialism a science and unmasked the enigma of surplus value production in capitalism. So Engels insisted that Marx and Engels’ socialism was the only one that could be scientific. Following this, we can find an additional meaning to the word “science”: the distinction between science and non-science within methodological and systematic theoretical knowledge comes to a distinction between correct knowledge (science) and incorrect knowledge (non-science).

It should also be noted that Engels implies by this distinction that “cor-
rect scientific knowledge leads us to correct thought and ideas” or “correct scientific knowledge is the same as correct thought and ideas.” After Engels the meaning of “science” become a very controversial topic, concomitant with the emergence of ideological problems between socialism and capitalism. Any statement such as “Marxism is science” or “The idea of Socialism has advanced to the stage of science” is not only a cognitive problem, but also becomes an ideological problem. So the situation came about that those in the opposite ideological camp sought to respond to this problem by examining the concept of “science” seriously, as a result of the Marxists’ claims to scientific correctness. Thus, we can say that after Engels the debate on capitalism and socialism came to center on the concept of “science.” So we should regard Engels as the founder of the “problem-consciousness” of our age.

To avoid misunderstanding, we should add that Engels did not argue that the economics of Marx was the only one truth of the social sciences. The contrary is the case: Engels was a historical relativist. He believed that truth changed according to each stage of history. So even if his idea of socialism had many difficulties, it can be regarded as scientific truth only in his historical period.

After Engels, however, various attempts to describe scientifically the future development of socialism unfolded in many directions. Attempts to conceive the development to socialism from certain scientific points of view were seen in orthodox Marxism, Oskar Lange’s market socialism, Otto Neurath’s logical positivism, Schumpeter’s economic theory, and the Uno Kouzo school of Marxist theory in Japan. On the other hand, attempts to conceive the development to socialism negatively from other scientific points of view were seen in the writings of Sir Karl Popper, Ludwig von Mises, and Friedrich von Hayek, whom we have examined critically (Hashimoto 1994). Furthermore, attempts to set the problem in a different way and avoid a radical choice between capitalism and socialism were seen in the writings of Karl Polanyi, Frank Knight, and Gunnar Myrdal.

In these attempts by social thinkers the word “science” has got great significance in many points. It constituted a significant constellation of problems in which the fundamental problem of choosing between capitalism and socialism was laid out as the basic issue, and other problems were transformed and defined more clearly in the light of this basic issue. In the context of political economy this basic issue has been transformed into the problem of the proper mix of state planning and free market activity in a welfare state economy. In the context of the methodology of the social sciences this basic issue has been transformed, for example, into Max Weber’s Wertfreiheit problem concerning objective argumentation in social and economic theory.


Another example of an important problem arising from the basic issues of the meaning of "science" and the choice between capitalism and socialism was that of the methodological differences between the natural and social sciences. These differences became important because examination of them contributed to understanding the extent to which the methodology of the natural sciences was effective in legitimizing the idea of "scientific" socialism. For philosophers such as Otto Neurath, Karl Popper and Imre Lakatos, the problem of demarcation between the sciences and metaphysics and the problem of the growth of scientific knowledge became important. For Neurath, Popper and Lakatos these problems mattered because examination of them contributed to the study of the problem of whether Marxist economics could be recognized as a science.

Finally, another problem that arose from the basic issues of the meaning of "science" and the choice between capitalism and socialism concerned critical examination of "scientific" activity. Critical examination of "scientific" activity appeared in studies of themes such as "science and the autonomous subjectivity of man" and "scientism and subjectivist reasoning." We can regard these themes as arising or branching out from the basic issue of the choice between capitalism and socialism because they are closely related to human activity in the market economy and to the movement for "scientific" socialism. Even the Life-World theory of Berger, Luckmann, and Schütz, which seemed to be ideologically neutral, had to make a meaning-world and contrast this world with the world of physical cause and effect, which adherents to scientific ideology purported to investigate. In fact, Alfred Schütz specifically intended the construction of his phenomenological sociology to provide theoretical and ideological support to the methodology of the Austrian School, especially as developed by Mises (Hashimoto 1995).

From these considerations we can understand that "science" matters in our age because we must solve scientifically the fundamental problem of choice between capitalism and socialism. Our problem-consciousness, in engagement with the social sciences, derives from this issue. Popper, Mises and Hayek have examined the problem which Engels originally set forth, and they have contested his scientific socialism in the context of the philosophy of the social sciences. We can use the term "scientific" liberalism to refer to the theory of these three thinkers, in contrast to the theory of "scientific" socialism. These thinkers are "scientific" because they have criticized socialism and defended capitalism from a scientific point of view. As with Marxian theorists after Engels, these three liberal thinkers made the idea of "science" central in their discussion. To pursue the argument to its logical conclusion, scientific liberalism dared to meet the "scientific" socialists on their own ground. It took
"science" as the criterion for making the fundamental choice between capitalist and socialist institutions. The combative ring with which these three thinkers discussed this issue came from their recognition that they were tackling this issue according to the rules of "science," a criterion originally set by their opponents. They recognized that the more scientific their arguments were, the more valid these arguments would be in persuading others.

2. The Development of Scientific Liberalism

The development of scientific liberalism must be described in the context of the history of Vienna, especially in the period of the Habsburg Empire. Karl Popper (1902-1994), Ludwig von Mises (1881-1973), and Friedrich von Hayek (1899-1992) were all born and grew up in Vienna at the end of the nineteenth century to the beginning of the twentieth century. In Vienna during this period there was an atmosphere of anti-Prussianism and anti-Protestantism because of opposition to the school of German idealism from Kant to Hegel. The reform of the gymnasium by the Herbart School led to an educational program in Vienna that succeeded in creating an original intellectual culture. At the time people from many different nationalities lived together in Vienna, and its cosmopolitan citizens looked on the outside world in terms of universal, progressive ideals.

On the other hand, Vienna was also a conservative city, and its people, faced with the decline of the Habsburg Empire, were nostalgic for the culture of the days of city's former greatness. These circumstances have kept Viennese intellectuals away from the dynamism of Hegelian and Marxist dialectics and also from any association with Nietzsche's philosophy. In contrast to German intellectuals, they wanted classical Greek thought to keep its traditional predominance in learning, and at the same time they were attracted to recent English philosophy. So we should understand the development of scientific liberalism in Vienna in the light of this historical background, in which the intelligentsia opposed the German idealism that offered intellectual support to Marxism.

In fin de siècle Vienna, there were many fascinating intellectuals who were critical successors to the systematic philosophy of Herbart. In economics there were the members of the Austrian School of Economics, which originated with Carl Menger. The line of thinkers in this school ran from Menger to Böhm-Bawerk, Friedrich Wieser, Ludwig von Mises, and Friedrich Hayek. Another prominent school was that of Austro-Marxism, which originated with Alfred Adler, who was followed by Otto Bauer and Abba Lenner and others such as Joseph Schumpeter, Rudolf Hilferding, and Karl Polanyi. In philosophy important thinkers were Lujo Brentano, Ernst Mach, Karl Popper, Ludwig
Wittgenstein, and several logical positivists. Other important intellectual schools were those of Hans Kelsen's legal positivism, Eugen Ehrlich's sociology of law, Sigmund Freud's psychoanalysis, and Alfred Schütz's phenomenological sociology. All of these schools originated in Vienna at the turn of the century and have formed the basic foundations of the contemporary social sciences.

Because these thinkers lived in the same city, there must have been private and close relationships among them. We can see examples of such relationships among the thinkers who developed scientific liberalism. For example, Karl Popper had close relationships with Karl Menger, a son of Carl Menger, and Richard von Mises, a brother of Ludwig von Mises. F. A. Hayek and Alfred Schütz were close friends, and they conducted a private seminar named "Geisteskreis" together. They also participated in Ludwig von Mises' seminar, which was held at the Vienna Chamber of Commerce and Industry from 1922 to 1934. Ludwig von Mises was born in the same year as Hans Kelsen, and they went to elementary school together. Hayek and Wittgenstein were related as second cousins. When Hayek was a professor at the London School of Economics (LSE), he invited Popper, who had gone to teach in New Zealand, to come to LSE as a professor. After that relations between Popper and Hayek became closer; however, the relationship between Popper and Wittgenstein deteriorated after they quarreled during a discussion they had.

The rich and varied intellectual development of Vienna at the turn of the century was made possible by the close and sometimes conflicting relationships between members of the intellectual community, as described above. This intellectual community, however, collapsed after World War I, because of anti-Semitism, hyperinflation that bankrupted the economy, and finally the Nazi invasion of Vienna in 1938. Popper went to New Zealand in 1937, Hayek went to London in 1938, and Mises, who was on the blacklist of the Nazis and the Soviets, went to Geneva in 1934 and to New York in 1940. When the Nazis invaded Vienna, they confiscated all of Mises' books and documents.

However, these three thinkers, Popper, Mises, and Hayek, were used to be socialists when they were young. So they have become extremely conscious of and sensitive to the persuasive power of socialist ideology. Mises was pro-socialist when he was an undergraduate and studied history, such as the German historical school, under Karl Grünberg. However, he became a liberal after reading Carl Menger's Grundsätze in 1903. As an undergraduate Hayek participated in Fabian association activities. At that time he studied under Wieser and avoided Mises. However, he became a liberal after reading Mises' Socialism, which was published in 1922. Popper has been a socialist when he was in junior high school, and in 1919 he was a communist for a few months. But when he was seventeen, he turned against Marxism.
These personal experiences of socialism determined Mises', Hayek's and Popper's later thinking and speculation. They must have asked questions such as: why does a fascinating idea such as socialism lead to the collapse of society as an unintended consequence? For Mises and Hayek the important problem was that any socialist ideal would never succeed as an actual economic policy for improving the situation in Vienna at that time. For Popper the key problem was that the class struggles called for by socialist thought would not bring peace. He actually witnessed the political accident of the social democrats' threatening to use force on people.

In addition, these thinkers also asked why the idea of scientific socialism and economic collectivism fascinated many intellectuals. They focused on the problem that the statement “Marxism is a science” means that only the socialist ideal is true beyond any criticism. Because the Nazi invasion forced them to get away from their own country, I think that they came to hope earnestly that a liberal society would be realized. These three thinkers started the radical criticism of all forms of socialism, including Marxism, as “enemies of an open society”. This background thus forms the historical context for the debate between scientific socialism and scientific liberalism.

3. How We Should Conceive the Intellectual History of the Capitalism/Socialism Debate

The main issue in the debate over the institutional choice problem between capitalism and socialism was not formed easily. Although those who engaged in this debate thought that they had to answer this problem scientifically, there was no clear definition of the concept of “science.” So at the beginning of the debate they had to answer the question about how to define science or a scientific statement. With this definition one could ascertain whether any proposed statement was scientific or not.

Socialist thinkers have claimed: “socialism is science.” Liberal thinkers, however, criticized this statement by saying “Your conception of science is false.” Socialist thinkers made the same claim and criticism of liberal thinkers. Thus the main issue of the debate over the choice between capitalism and socialism moved to a higher level. The main issue became that of the methodology of the social sciences. In regard to this issue, the definition of science became a matter of philosophical importance.

We should note that in this methodological debate participants were not purely investigating academic truth. Rather, they were fighting on an ideological issue in which each side sought to use its reason and intellectual powers as much as possible. Moreover, they were not looking for methodological devices that would make it possible to examine contested points objectively.
The issue of methodology became the final stage for the ideological battle over the institutional choice problem.

As a result of this development, liberal thinkers such as Popper, Mises and Hayek had to take the methodology of the social sciences seriously when they struggled over ideological matters. We can understand this situation from the fact that they did not deduce or develop their social theory directly from their methodological tenets. In the methodology of the social sciences, the main problem was to decide the institutional choice problem between capitalism and socialism correctly. In this decision the claim that one's statements were scientific had great value. So we can say that the debate over methodology was not a general, disinterested discussion of the foundations of social theory. Rather, it was a continuation on a higher level of the ideological debate over capitalism and socialism.

In this situation, then, what course did the debate follow? We can suppose two possibilities.

One supposition would be the triumph of scientific liberalism. In this case, liberalism presented the most persuasive conception of science and provided the best solution to the institutional choice problem between socialism and capitalism. This interpretation of the history of the debate, however, is something we deny. As we examined critically in another paper (Hashimoto 1994), the “scientific” way which scientific liberalism has taken can no longer withstand criticism.

Another supposition would be that the debate on the definition of science has moved to another stage because discussion of this problem was fruitful and those engaged in the debate were on different wavelengths. But this interpretation is also false because the debate was not fruitful and on many points the participants were on the same wavelength. Here we can find a major theme in our reconstructing the intellectual history of the socialism/capitalism debate. The debate did not end because either side triumphed or because both sides saw the debate as unfertile. If so, then how did the debate come to an end?

If we look at the debate from the outside, we can see that the methodological debate came to an end because the political confrontation between socialism and capitalism no longer exists in our time. This view is partly correct in so far as it points out the external causes of intellectual history. However, if take all causes of intellectual history as external, then we would be obliged to take a relativist position. This position would be that “external causes determine the horizon of argumentation of intellectual history.” This position would be one in which knowledge changes due to irrational and non-intellectual reasons. It is true that a relativist position is correct in so far as
one argues that the themes of intellectual inquiry will change according to the political and economic demands of the time. But we are mistaken if we argue that there is thus no reason for changing and developing the themes of intellectual inquiry on the basis of internally rational causes. We must look at the logical adequacy of arguments that arise in intellectual history. We must also criticize these arguments from the standpoint of moral reasoning. To maintain our ability to reason rationally is one of the most important conditions for mankind to live together peacefully. Even Thomas Kuhn, as we find in his later works, did not take an extremely relativist stance.

If we define the idea of "rationality" adequately, we can describe intellectual history as the rationally progressive growth of knowledge. Admittedly, it is an open question whether knowledge has progressed rationally or not. However, history is always constructed ex post facto, and it is actually possible for the historian to generate a "past" at the time he is writing. Let us suppose a person who is reconstructing the past sees some lack of rationality in the intellectual history he is interested in. In such a case, I think he should add a rational reconstruction of this history from his perspective.

My ideal historian is one who serves also recent thought (ideology) by constructing history from his value-laden perspective. Anyone who writes history needs to be aware that he is already engaged in a political conflict for historical legitimization in a broad sense. Thus we should deal with this kind of conflict in as rational manner as possible. We should hope to strengthen the pressure for rationally selecting knowledge in the light of the growth of knowledge.

That is, knowledge must be selected through rational criticism and must be preserved by rational reason. To present a rational criticism must be established as one of good manners in intellectual discourse; an attitude of choosing knowledge rationally based on adequate criticism.

With these thoughts in mind, I would like to make a radical reconstruction of our intellectual history, in which knowledge is received and rejected through rational reasoning, i.e., through internal causes, based on intellectual consistency. The concept of science transformed the institutional choice problem between capitalism and socialism from a realm in which this problem was a persuasion game centering on the concept "science" to a realm in which the concept itself was most important. But after a while this realm of discussion has almost disappeared. External causes, such as the emergence of welfare states and the fall of socialist states, are one reason for the disappearance of this realm of discussion. But internal causes, which will be given through constructing a critically rational process of intellectual history, also explain this disappearance. My hypothesis, which I develop in my Logic of Liberty: Popper, Mises, and Hayek (Hashimoto 1994), is that we can no longer argue on political
thinking within the realm of a methodology of the social sciences. Internal criticism shows that methodological statements in social sciences can no longer lade any ideological elements.

4. The Turning Point of the Social Sciences

Here we would like to draw attention to the recent academic situation that has emerged after the process described above, of extracting the value-laden elements out of methodological statements.

Scientific liberalism has already become a relic of the past. As I examined in another paper, scientific liberalism has not only lost its opponent with the decline of socialism. It has also been broken down through immanent criticism. It is true that the Japanese Communist Party, for example, still upholds the ideal of scientific socialism. However, most modern philosophers, who support liberalism, do not share its problem-consciousness, which concerns the concept of "science." They seem to think that their opponent, scientific socialism, has already declined.

If the debate that sought to shed light on the concept of "science" is no longer fruitful, then the methodology of the social sciences needs to change its direction. For this methodology has been argued over in terms of the concept of "science." When we cease to argue matters in terms of ideological interests in the search for scientific truth, the most important part of methodological inquiry, as it concerns the social sciences, will lose its significance. In retrospect, the conditions for paying serious attention to the methodology of the social sciences were ones that came about under pressure of settling an ideological struggle by means of rational procedures.

Today this ideological pressure has weakened. So it is necessary to change the tasks of methodology and social philosophy to other directions. On the other hand, however, I think that methodological investigations that are unconcerned with thought or ideology are often sterile. Recent methodological research has been liable to a pedantic intellectualism. The more exact methodological refinement becomes, the less is its significance for the growth of scientific knowledge. The methodological investigation of the social sciences is now at a turning point.

Over the past hundred years the methodology of the social sciences has been the final resort in the ideological controversy between capitalism and socialism. In fact, social science methodology, which examines scientific truth for ideology, has played an important role in the problem of the final choice between these two institutions.

Our problem, however, is not this kind of radical choice. As we have decoupled the value-laden elements from it's methodological thought, the former
significance of methodology has been lost. On the other hand, we can now discuss ideology separate from methodology. Therefore, it is possible for us to turn back to the legacy of the “moral sciences” before Engels, and reconstruct our research program for science and thought. We would have to start from both of our legacies, from before and after Engels. We need to see clearly the gap between the two lines of intellectual development. Through these investigations, we will learn about the various ways of legitimizing the idea of liberty, and we will be able to elaborate our ideas on liberalism and an open society. Since our final concern is with ideological discourse on the ideal of a future society, we do not want to finish our investigation at the point of the “end of history” after Engels.

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Selected Bibliography

2. Engels, Friedrich (1877-78), *Anti-Dühring* (Herr Eugen Umwälzung der Wissenschaft).
12. Marx, Karl (1873), *Das Kapital*.
13. ——— (1934), *Zur Kritik der politischen Oekonomie*.
15. More, Thomas (1516), *Utopia*.
17. Neuerath, Otto hrg. (1933-34), *Einheitswissenschaft* in Verbindung mit Rudolf Carnap, Philipp Frank,
Hans Hahn, Wien, Gerold.


