

CRITICAL REALISM AS A RIVAL METHODOLOGY FOR INSTITUTIONAL
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ABSTRACT

CRITICAL REALISM AS A RIVAL METHODOLOGY FOR INSTITUTIONAL ECONOMICS

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The aim of the thesis is to clarify the methodology of the original institutional economics and then to evaluate the current attempts to utilize critical realism as a superior methodology for it. After sketching the historical background of the discussions surrounding methodology of science and 19th century economic methodology, the thesis separately analyses the methodology of institutional economics and critical realist stance in the philosophy of science. A critical discussion of the subject matter reaches to the conclusion that critical realism does not offer a better methodology for institutional economics.

Keywords: Institutional Economics, Critical Realism, Methodology

ÖZ

KURUMSAL İKTİSAT İÇİN OLASI BİR YÖNTEM OLARAK ELEŞTİREL GERÇEKÇİLİK

GÜRPINAR, Erkan

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Bu çalışmanın amacı kurumsal iktisadın yöntemini ortaya çıkarıp, eleştirel gerçekçiliğin ona daha iyi bir yöntem sağlayıp sağlayamayacağını incelemektir. Bilim felsefesindeki temel eğilimlere ve 19. yy. iktisatta yöntem tartışmalarına değinildikten sonra, tez kurumsal iktisadın yöntemini belirlemeye çalışmış ve eleştirel gerçekçiliğin bilim felsefesindeki yerini incelemiştir. Yapılan analiz eleştirel gerçekçiliğin kurumsal iktisada daha iyi bir yöntem sağlayamadığı sonucuna varmıştır.

Anahtar Kelimeler: Kurumsal İktisat, Eleştirel Gerçekçilik, Yöntem

To My Parents and Brother

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CHAPTER I

INTRODUCTION

The aim of the thesis is to clarify the methodology of original institutional economics and then to evaluate the current attempts to utilize critical realism as a superior methodology for it.

The first part of the thesis summarizes the discussions surrounding 'methodology of science' since the Enlightenment, and then analyses the effect of these developments on the methodology of economics in the 19th century. The aim of this part is to clarify the historical background of the discussions surrounding the methodology of institutional economics.

The second part of the thesis dwells on the methodology of original institutional economics. As will be apparent in the following pages, the so called founders of the school do not offer a unifying methodology. The only original attempt to offer an alternative to the prevailing methodologies in economics was from Thorstein Veblen. His Darwinian mind was the most important factor in shaping his ideas when offering an alternative to the state of economic science. Of course, his contributions are not only in the area of methodology. He wrote in many other issues of social science, and particularly economics.¹ However, in the thesis the discussion on Veblen is restricted to the ideas directly related to his methodological approach.

¹For example see, *Imperial Germany* (1915), *Higher Learning in America* (1918).

The other two important figures of the school, John Commons and Wesley Mitchell, do not follow Veblen in terms of methodology. Their methodology is much more of a compromise with mainstream economics. In fact, the developments in the areas of psychology (the rise of behaviorist psychology) and philosophy (the rise of logical positivism) are important factors in shaping their methodological choices (Hodgson, 2004a). The third part of the thesis is devoted to the study of the decline of Veblen's approach and to the brief analysis of the differences held by Commons and Mitchell on the methodology of the school.

The fourth part of the thesis evaluates the current attempts trying to bridge institutional economics with critical realism. Realism in philosophy is as old as the origins of philosophy. It has a variety of interrelated and contested meanings (Maki, 2001). In the social sciences there have been several attempts to adopt the realist approach. As pointed out by Tony Lawson (1996), not all of them have accepted the perspective of critical realism.² The concern of the thesis is on the discussions originating from critical realism, which is mainly developed with the works of Roy Bhaskar (1978, 1979). The approach of critical realism to the basic problems of natural and social sciences is evaluated and then its basic premises related to the methodology of social sciences and economics is discussed by relying on the works of Bhaskar and Lawson.

After analyzing the methodologies of institutional economics and critical realism, the fifth part of the thesis makes a critical discussion of the attempts aiming at utilizing critical realism as a superior methodology for institutional economics. The last part concludes.

² "In recent years there have been a number of projects within the social sciences adopting an explicitly *realist* stance. Not all have accepted the perspective of critical realism, of course, including, in economics, the important contributions of Maki" Lawson (1996, 405n, emphasis original).

CHAPTER II

HISTORICAL BACKGROUND

The scientific revolution began in Europe with Nicolaus Copernicus (1473-1543), and reached to its mature form with Isaac Newton (1643-1727) in the 18th century. This period totally changed the perception of the world prevalent in the Scholastic Age. The rise of natural science and its success were the main reasons for this changing perception.

Galileo Galilei (1564-1642) is one of the first scientists of that period who perceived methodology as a problem for the rising phenomena of natural science. Tradition that is initiated with him culminated in the works of Newton, who developed the idea that the nature is in unity in terms of (mathematical) laws. This development represents a break from Aristotelian qualitative physics. It oriented itself to the search for the laws of nature in quantitative terms (Losee 1993).

Another important development that took place in this period was the rising importance of the idea of 'individual'. This emphasis on individual has had a great influence on the development of scientific methodology. The effect of individualism could easily be seen in the ideas put forward by the great figure of the 17th century; Rene Descartes (1596-1650). His strong commitment to individualism, that is truth could be acquired by the self, affected many generations of following scientists.

Besides his individualist methodology, Descartes' influence on the methodology of science debates is of great importance in other areas. His rationalism underpinned the belief to the laws of nature in explaining the physical world. Yet, with exceptions; he argued that all the laws of the nature are only applicable to matter, and not to the entities like mind, which is distinct from the body, hence matter. Mind is not identical to the brain. Mind is separate and cannot be studied with the laws of physical science. This distinction proposed by Descartes that there exists a division between physical matter and immaterial human soul, leads to the idea that causation prevails only in the physical world. The 19th century social science took his views for granted and tried to explain cause in social science with terms like human intention, purpose and belief without taking matter into consideration (Hodgson 2004a).

Against Descartes and his dualism, Thomas Hobbes (1588-1679) took a naturalist position. Hobbes argued that natural causes are enough in explaining every event in nature and that there is no distinct entity like mind which is not subject to the laws of nature. This materialistic alternative of Hobbes is one of the first systems of empiricist methodology (Gökberk 2005).

Empiricist line of thought can be found fully developed in the ideas of English empiricist David Hume (1711-1776). Hume argued that sense experiences are the only source of our knowledge of matters of fact. However, experience can only provide finite amount of evidence. Therefore, the empirical evidence for any law is always incomplete. This is Hume's 'problem of induction': We can never be certain about the truth of any scientific law. The only thing we can be certain of is that past will be in conformity with future.

Empiricism, and particularly Hume's problem of induction, since then dominated both natural and social sciences. Empiricism proposes that knowledge is justified by experience; therefore, the truths of science are not necessary but contingent truths and that knowledge could not extend beyond the realm of experience.

This view is challenged by Immanuel Kant (1724-1804), the great figure of German Idealism. He was influenced by Hume and tried to solve the problems originating from his philosophy. He made a distinction between analytic and synthetic truths.³ According to Kant, the laws of nature are *synthetic truths*. Then he set out to explain how it is possible for the fundamental laws of nature to be 'synthetic a priori truths' that is, how they can make explanatory claims about the actual world even though we can know them without relying on observation. However, the problem was left unsolved. Scientists believe that the laws of nature are not knowable *a priori*. Hence, they can only be known on the basis of experience, which takes us back to the problem of Hume again: Experience can only provide finite amount of evidence for a phenomena to become a law. Since neither Newton's laws nor their successors could be known a priori, a proposition with content, synthetic in Kantian terms, can only be justified by observation and experiment. Therefore, if Hume is right, the conclusions of scientific investigation can never acquire the sort of necessity required by Kant and others (Rosenberg 2005).

19th century, represents a break in many aspects from the philosophical discussions of the past. First of all, the vision of science that was dominant since Galileo started to be challenged. Secondly, there had been no

³ Kant's distinction between analytical and synthetic truths is as follows: Analytical truths are statements true by definition and they are without content. Synthetic truths, by contrast, have content. They make claims about distinct things on the world, such as the laws of nature.

separate methodological discussions for the social realm until then. This view started to be challenged and the problem of cultural knowledge and its methodology became important issues among the scientific community (Gökberk 2005). One of the most important changes in the realm of natural science was the rise of biology; hence biological thinking against the dominance of physics and mathematics. With the rise of biology, and subsequent idea of evolution, many ideas that had been prevalent in natural philosophy started to be criticized. In this respect, Charles Darwin (1809-1882) is one of the most important figures of the 19th century.⁴

Darwin's theory demarcates him from Newtonian mechanistic thinking in crucial aspects. First of all, it rests on the idea that biological elements have a history, they change over time.

The acceptance of evolution meant that the world could no longer be considered merely as the seat of activity of physical laws but had to incorporate history and, more importantly, the observed changes in the living world in the course of time (Mayr 2001, 7).

Secondly, his theory destroyed theologically inspired worldview. Darwin argued that there is no such thing as goal and purpose. They are all "adaptations we discern in nature, adaptations that are really just the result of the environments' persistent filtration of blind variations creating the appearance of design" (Rosenberg 2005, 3). It is obvious that this view represents an alternative to the Cartesian ontology where the connection between physical world and human soul is denied.

⁴ However, Darwinism was not the only alternative to Newtonian physics. Lamarck proposed an alternative conception of biological science which was taken for granted by many social scientists as well. Lamarck argued that variation was largely a result of multiple adaptations to the environment whereas for Darwin variation was present first and the ordering activity of the environment, namely natural selection, followed afterwards (Hodgson 2004, 90).

The alternative to Cartesian ontology came from several important figures. George Henry Lewes (1817-1878) is one of the first philosophers who analyzed the physical basis of mind. He accepted that mind has a physical basis; yet, it cannot be reduced to it. Conwy Lloyd Morgan (1852-1936) brought the ideas of George Henry Lewes to America. They both accepted the criticism of August Weismann that human biotic and mental capacities could not evolve so rapidly as to account for the evolution of human civilization (Hodgson 2004a).

Morgan developed a sophisticated ontology in which mind was not reduced to body and is seen as emerging from the interaction of neural phenomena. An *emergent* is a property of a system that could not be traced and explained in terms of its components or their interactions. Because of the propositions of Weismann, Darwinians of the time considered biological and social level as partially autonomous; yet, the absence of a fully developed idea of hierarchical ontology made the contributions of these scientists rudimentary and underdeveloped (Hodgson 2004a).

The developments in philosophy of science and natural sciences affected the newly emerging science of economics. Yet, social and economic developments were the basic determinants behind the rise of a certain type of economic theory. The gradual rise of the market ideology was one of the most important factors in this regard. The importance of market exchange grew slowly, and finally in the 19th century self-regulating market became a primary instrument directing the production and distribution of goods and services. It was in this context that economics, an independent field of enquiry based on the laws of market, was able to develop. "It was only the emancipation and unbundling of economic activities from social and political constraints that enabled economics emerge as a science" (Trigilia 2002, 18).

While economics broke free from social and political effects there was a concurrent event: Reliance on Newtonian mechanistic thinking. With the rise of physiocracy, the assumption that there were natural laws governing society similar to that in natural world became familiar in economics. Adam Smith (1723-1790) and his conception of *invisible hand*, in which the perception of a natural order in society without any need of intervention, became one of the most important and persistent ideas in the history of economic thought (Ekelund and Hebert 1975).

In addition to this mechanistic natural law conceptualization of science, David Ricardo (1772-1823) represents another important turn in economics. His analytical-deductive method which triumphed over his successors contributed greatly to the establishment of separate science of economics with a narrowed down subject-matter (Trigilia 2002).

The first school that represents a reaction against these developments in economics is the German Historical School. It represents a reaction to deductivist method of Classical Political Economy (CPE). The aim of the German Historical School was to make economics sensitive to different social cultures and historical periods (Hodgson 2001). They pointed out that the methods and procedures of social sciences should be different to follow the changing object of analysis, which is not the case in physical sciences. However, against the deductivist methodology of CPE, they proposed mere empiricism in which collection of facts is seen as enough to explain phenomena.

German Historical School represents a critique of individualistic conception of CPE as well. They took a holistic vision. In German Historical School this is in the form of organicism, in which the agency is explained by almost

totally giving a reference to structure. Therefore, what they offered was a kind of methodological holism against the methodological individualism of mainstream economic thought.

On the other hand, the methodological failures of this school were great as well. They relied on mere empiricism in their analyses. However, as pointed out by Hume well in advance, no stated sequence of facts could itself verify any causal relationship between the events. Deductivism is to be criticized; however, this is the case for empiricism as well: No fact is discernible without a pre-existing conceptual framework. Hence, neither empiricism nor deductivism is the solution of the problems of scientific methodology.

Austrian economist Carl Menger (1840-1921) attacked the Historical School. He successfully identified their inconsistencies. Besides, he constructed his own methodology. In fact, he is one of the architects of methodological individualism. His analysis starts with an institution-free environment and given individuals. Then, he proceeds to explain the emergence of institutions from that point onwards. His concern was to understand “how some institutions could emerge spontaneously from the interactions of individuals in an institution free environment” (Hodgson 2004a, 19). Menger, thus, represents the break of economics from the analysis of institutions. As he noted, with institutions in the analysis, it is impossible to maintain regularity and predictability in actors’ behavior, which is of great importance for neoclassical economics to formulate models describing the functioning of the market (Trigilia 2002, 32).

Besides, the critiques of Karl Marx (on the consequence of the analysis of CPE in terms of social effects of the conflict between capitalist and workers) and Historical School, the rising interest in labor problems, and Darwinian evolutionary ideas undermined further the importance of CPE, hence

opened way to the rise of utility theory and marginalism (Ekelund and Hebert 1975). The rise of marginalism represents the further marginalization of the concerns put forward by its critiques.

Overall, the discussions surrounding economic methodology in the 19th century were around four main themes. The first problem, the problem of historical specificity as Hodgson puts it, originated from the critique of CPE by the German Historical School. Theirs was as a reaction to the ahistorical and natural law conceptualization of economics.

However, when criticizing CPE, German Historical School came under attack from another angle: the choice of induction and deduction as a methodology, which constitutes the second problem surrounding 19th century economics. When criticizing deductivist approach of CPE, they relied on induction and collection of mere facts as a methodology. Their reliance on induction is then criticized by Menger. His attacks weakened German Historical School significantly.

Thirdly, the rise of marginalism and Austrian School with Carl Menger represents the gradual dominance of methodological individualism over methodological holism of the German Historical School and Marx. Especially with the ideological critique of Marxism, marginalists took a strict individualistic turn against their predecessors.

Fourthly, the gradual dominance of Newtonian analogy in the field of economics became apparent in the 19th century. Newtonian mechanistic analogies triumphed over historically sensitive approaches and biologically inspired analogies.

One of the most important critiques of this dominant line of development is the rise of Darwinism. The next section of the thesis analyzes Veblen, who represents the application of Darwinism not only to the realm of economics but also to the discussions surrounding scientific methodology. By this way, his analysis opened the way to overcome some of the dichotomies that were prevalent in economics in the 19th century. Overall, while accepting many of the concerns originating from the German Historical School and Karl Marx, Veblen transcended them and provided an alternative to the rising marginalist school of economics by relying on Darwinism.

CHAPTER III

VEBLEN AND THE METHODOLOGY OF INSTITUTIONAL ECONOMICS

Thorstein Veblen (1857-1929) is regarded as the co-founder of Institutional Economics, with John Commons (1862-1945) and Wesley Mitchell (1874-1948). What makes him important and distinctive is his thorough criticism of mainstream economic methodology of his time, and his reliance on Darwinism in analyzing social phenomena.

What Veblen had in mind was a distinction between two contrasted generations of science and scientists: pre-evolutionary (before Darwin) and evolutionary (after Darwin). In his seminal article "Why is economics not an evolutionary science?" (1898a), he critically discussed the situation of the science of economics by giving reference to these two contrasted generations of science. He argued that pre-Darwin science is taxonomic in nature, in which inquiry was focused on definition and classification. It was assumed that natural laws govern the phenomena under the rule of causation. This taxonomic nature of science belongs to the period of handicraft where change was treated as a disturbing factor (Veblen 1898a). This was the case for almost all of the schools of economic thought of his time; be they Classical, Neo-classical, German Historical or Austrian.

On the other hand;

An evolutionary economics must be the theory of a process of cultural growth as determined by the economic interest, a theory of a cumulative sequence of economic institutions stated in terms of the process itself (Veblen 1898a, 393).

With the advent of machine process that had a decisive effect on the habits of thought of society, man started to think in terms of process rather than in terms of statics. Darwinian scientific approach altered the focus of science from natural laws governing the phenomena view, to what has taken place and what is taking place with the theory of process of consecutive change, in which causal effect does not come to rest (Veblen 1908). Modern culture and industry was the chief factor in shaping men's habits of thought that led to the matter of fact explanation. Thus, this 'matter of fact' habit of thought was a necessary consequence of industrial life.

In general, higher the culture the greater the share of the mechanical conception in shaping human thought. This was the case for matter of fact type explanation. In a predatory life animistic explanation for inanimate world prevailed. There was a unanimistic matter of fact ingredient in every explanation; however, concentrated at the lower levels (Veblen 1899b). Evolutionary thought represents a move from an organization of knowledge on the basis of imputed personal or animistic propensity to the theory based on an imputation of matter of fact manner. The difference, according to Veblen, came from the ability of civilized people for impersonal insight into the material facts that mankind has to deal with, which refuses to go behind opaque tangible facts in scientific analysis (Veblen 1964 [1925]). As Veblen pointed out, it was true that savage culture has the theory making inclination, but it was romantic rather than realistic. The aim was a systematic correlation of data but with free play of imputed personal initiative (Veblen 1964 [1925]).

His analysis of the current situation of science then led him to criticize mainstream economics from several aspects. He argued that, in spite of the changes in the habits of thought of contemporary society, economics has still a strong natural rights conception habit of thought (Veblen 1908). Economics still employed the term 'statics' of the pre-evolutionary period which is borrowed from physics that is used to describe the laws of the normal and the natural (Veblen 1898a). Besides, the effect of animism in economics was still evident with the prevalent concepts of natural rights and natural law (Veblen 1899b).

One of the first schools of economics that employed this kind of analysis is French Physiocrats. They saw the laws of nature and conformity to these immutable laws as the best economic truth tending beneficently to the highest welfare of the human race (Veblen 1899b). British were less inclined to this habit of mind compared to their French counterparts. In this regard, Adam Smith represents a combination of animistic feature and matter of fact explanation. Yet, the animistic synthesis was the controlling element in both approaches. In fact, the gradual shift in habits of thought of Physiocrats and Adam Smith represents the time interval in which these schools prevailed: agricultural community and handicraft (Veblen 1899b).

In addition to the animism inherited from CPE, the taxonomic nature of economics was still prevalent in Alfred Marshall. His emphasis was still on the equilibrium of activities, and there was no explanation for institutions and change that result from the exigencies of life. Therefore, even during the time of Marshall, economists had not accepted the premises of evolutionary science (Veblen 1899b).

Veblen's criticism was not only to CPE and newly rising school of Marginalism. He also criticized German Historical School and Marxism, the two opposing schools to mainstream thinking. His criticism of German Historical School relied on the fact that they lack any body of theory to explain social phenomena (Veblen 1899b). Historical School's orientation was on the process of development, but with tools belonging to pre-Darwinian science. In spite of acknowledging the points they emphasized, Veblen was clearly aware of the fact that they have only narrative survey of phenomena; hence their contribution cannot be classified as an economic theory (Hodgson 2004a, 388-389).

His criticism of Marx relied on his lack of adequate developed theory of agency. In Marxian approach, individual was entirely explained in terms of structures and institutions. Therefore, Marxism lacked an explanation of how structures or institutions affected individual purposes and inclinations (Veblen 1899b). This was also the case for Historical School. Veblen was against the idea that individual's actions are entirely formed by his socio-economic conditions.

Although he rejected systemic wholes as an explanation, he did not embrace methodological individualism as well. This is one of the reasons why he criticized the Austrian School and Marginalism. Their conception of human nature was faulty. Veblen argued for an evolutionary and cumulative explanation of individual; hence broke from the idea of a given individual. According to Veblen, individual is socially and institutionally formed (Veblen, 1899a). His criticism of Marginalism was continued by emphasizing the faulty conception of given individual as hedonistic. Veblen pointed out that human seeks realization; he is not only an agent that responds to stimuli from outside (Veblen 1909).

Overall, Veblen represents choosing between the alternatives dichotomies of the 19th century economic methodology and occasionally to transcending them. Firstly, his reliance on Darwinian evolutionary thought, hence biological metaphor over natural law conceptualization of the science of economics, is his choice of biological metaphor over the Newtonian mechanistic metaphor. Secondly, this also signifies his implicit acceptance of the historical specificity problem that is voiced by the German Historical School, since biology itself signifies the incorporation of history into the analysis (Mayr 2001). Thirdly, accepting the German Historical School in that regard, he nevertheless criticized them for their reliance on induction as a methodology. Fourthly, by relying on Darwinism and instinct-habit psychology, he transcended the methodological individualism vs methodological holism dichotomization of the 19th century social sciences: According to Veblen, individual and social structure was in a process of co-evolution rather than one being determined by the other. Therefore, he escaped from the reductionism of both individualism and collectivism (Hodgson 2001, 140). Below is the analysis of his approach.

The roots of his approach came from three main sources: Darwinism, instinct-habit psychology and pragmatism. The first one, Darwinism, clearly led him to dismiss Newtonian analogy and implicitly gave emphasis to historical specificities in the study of social phenomena and to reject animism in the social realm. Foremost, Darwinism means adherence to causal explanation for Veblen (Hodgson 2004a). This commitment involves human intentionality as well. However, commitment to causal explanation should not be confused with the belief that science could be built on searching for mere causal sequences. Veblen acknowledged that the ultimate ground of knowledge is always of a metaphysical character: Some metaphysical presuppositions are necessary and unavoidable for science (Veblen 1900).

Veblen followed Kant in solving the problems originating from Hume almost hundred years ago. As analyzed in the previous section, Hume argued that no causal relation can be observed. Veblen was aware of the fact that preconceptions that are not derivable from experience alone are necessary. He followed Kant who had argued that causal connections are mental constructions. Even if causality cannot be discerned by experience we should not stop searching for causes. Hence, Veblen clearly distanced himself from positivism and empiricism. He pointed out that simple experience is not enough for knowledge. Free person must be able to insert causality upon things. Hence, according to Veblen, causation is a fact of imputation not of observation; therefore, it cannot be included in the data. Causal sequence is imputed by the scientist as a matter of logical necessity of a systematic knowledge of the facts of observation (Veblen, 1964 [1884]).⁵

What Darwinism aims is to explain the evolution of organisms as well as other complex systems, with the mechanism of variation, inheritance and selection. Darwinian evolution occurs when there is some replicating entity that makes imperfect copies of itself, where these copies do not have an equal chance to survive. It has three aspects. First of all, before the selection process, there must be a sustained variation among the members of species. Secondly, there must be heredity or continuity in which offsprings resemble their parents. Finally, there should be a process of natural selection of the advantaged ones.

Veblen saw instinctive propensity of 'idle curiosity' as the main source of variation in society. It has a disturbing affect on the habitual body of

⁵ The approach of Kant challenges the real status of cause. Therefore, Veblen's philosophy retained a Kantian bias regarding the realist approach to science (Hodgson 2004, 148).

knowledge. Institutions are seen as the unit of stability and continuity; hence the main actors of inheritance of habits of thought. This makes them key objects of evolutionary selection. In the end, natural selection of these enduring habits of thought (institutions) is the mechanism through which evolution occurs.

Overall, Veblen's methodology is the application of Darwinian principles to the subject matter of economics. As argued by Hodgson (2003), his use of Darwinism was much more than just a metaphor. Veblen thinks that socio-economic systems actually evolve in a manner consistent with Darwinian principles. In Veblen's scheme, social environment consists of elements that were themselves subject to an evolutionary process of selection.

The life of man in society, just like of other species, is a struggle for existence, and therefore it is a process of selective adaptation. The evolution of social structure has been a process of natural selection of institutions...Institutions are not only themselves the result of a selective and adaptive process which shapes the prevailing or dominant type of spiritual attitude and aptitudes; they are at the same time special methods of life and of human relations, and are therefore in their turn efficient factors of selection (Veblen 1899a, 131).

Secondly, Veblen inherited the conception of knowledge from pragmatist philosophy (Hodgson 2004). The rejection of Cartesian ontology was one of the basic premises of pragmatism. Charles Sanders Peirce (1839-1914) and his criticism of Cartesian rationalism is important in this regard.⁶ He

⁶ The first step of Descartes in his methodology is to permit skepticism and to discard authority as the ultimate source of truth. Then, he finds the universal truth in individual consciousness. For Descartes, what initiates inquiry is universal doubt, and then intuition and deduction constitute the method of knowing. In the end, this method led to absolutely certain claims. Peirce agreed with Descartes in the sense that doubt constitutes the first step of inquiry. Yet, we cannot start with universal doubt. We must begin with where we are (Scheffler 1974). Thus, doubt is not arbitrarily chosen but always occurs against a background of habitual beliefs compared to the universal doubt of Cartesian ontology. Peirce emphasized the communal character of science. He argued that there is no capacity in a human being to reach to infallible intuitive knowing; there is no such evidence. In fact, history of science reveals not universal agreement but the social impulse of disagreement. Hence, science, as well as inquiry, is communal and historical rather than individual (Anderson 2006). This means certainty is removed from the individual's

pointed out that doubt is chosen against a background of habitual beliefs compared to the universal doubt of Cartesian ontology. In pragmatic philosophy, “intentionality is not denied but placed in the context of habits of thought and behavior” (Hodgson 2004, 156). The rejection of dualism of Cartesian philosophy is evident in Veblen:

The two methods of inference – from sufficient reason and from efficient cause - are out of touch with one another and there is no transition from one to the other: no method of converting the procedure or the results of the one into those of the other. The immediate consequence is that the resulting economic theory is of a teleological character – “deductive” or “a priori” as it is often called – instead of being drawn in terms of cause and effect (Veblen 1909, 624-625).

Moreover, in this schematization the movement from one doubt to the other is continuous and comes to no rest. Hence, instead of the dichotomy of deduction and induction, Peirce relied on a three step methodology; adding *abduction* (hypothesis development) to deduction (prediction of consequences) and induction (experimental testing of the hypothesis), in which they are in a continuous process. As Peirce put it, abduction is an act of insight. The ideas that arise in abduction must pass from deduction and induction; and this is a continuous process that never ends with the discovery of the absolute truth (Anderson 2006). Therefore, Peirce emphasized the communal, provisional and short term characterization of scientific theories (Scheffler 1974).

The third important source that has significant influence on Veblen is instinct-habit psychology of William James (1842-1910). Veblen followed James and saw habit and native propensity as the activating sources of human agent; instead of rational calculation of material interest. “Like other species, he [man] is a creature of habit and propensity” (Veblen 1898b, 188). His criticism of marginalism is informative in that sense. He accepted

experience. Thus, provisional and short term characterization of scientific theories is accepted in pragmatism.

that, human intentionality is prevalent in human behavior but it should be explained as well:

It is, of course, true that human conduct is distinguished from other natural phenomena by the human faculty for taking thought, and any science that has to do with human conduct must face the patent fact that the details of such conduct consequently fall into the teleological form; but it is the peculiarity of the hedonistic economics that by force of its postulates its attention is confined to this teleological bearing of conduct alone...But it is at the same time no less true that human conduct, economic or otherwise is subject to the sequence of cause and effect, by force of such elements as habituation and conventional requirements (Veblen 1909, 626).

Therefore, he rejected the idea of continuously calculating and marginally adjusting individual and instead emphasized the prevalence of habits in human agent (Veblen 1909). Thus, the importance of acquired habits and socialization in activating human behavior is accepted, yet with taking instincts into account. He distinguished between instinct and habit. Following James, Veblen knew that instincts could be biologically inherited but habits could not, as pointed out by Weismann (Hodgson 2004a). Instincts are too vague as instruments to deal with the rapidly evolving exigencies of the human condition. On the other hand, habits are more adaptable than instincts, hence necessary to deal with the larger body of knowledge in a community. Habits are the guiding principle against the changing circumstances of social life. They allow the transfer of conventions to the individual:

The ends of life, then, the purpose to be achieved, are assigned by man's instinctive proclivities; but the ways and means of accomplishing those things which the instinctive proclivities so make worth while are a matter of intelligence...the instinctive ends of life are worked out under any given cultural situation is somewhat closely conditioned by these elements of habit. The instinctive proclivities are essentially simple and look directly to the attainment of some concrete objective end; but in detail the ends so sought are many and diverse, and the ways and means by which they may be sought are similarly diverse and various...under the discipline of habituation this logic and apparatus of ways and means falls into conventional lines, acquires the consistency of custom and prescription, and so takes on an institutional character and force. The accustomed ways of doing and thinking not only become an habitual matter of course, easy and obvious, but they come

likewise to be sanctioned by social convention, and so become right and proper and give rise to principles of conduct (Veblen 1914, 5-7).

His application of these ideas is prevalent in two main themes that he persistently discussed: Instinct of workmanship and pecuniary emulation (Hodgson 2004a). His emphasis on evolutionary explanation, the importance of instincts and habits in directing human activity, and the choice of institutions as the unit of analysis is apparent in the discussion of these two themes. In his article on the evolution of instinct of workmanship (Veblen, 1898b), he analyzed the mainstream argument on the irksomeness of labor. Against the views of mainstream approach, he argued that, it is nonsense to suggest that aversion of labor is normal in the history of mankind. What is necessary from an evolutionary biology perspective is to explain how economic man achieved emancipation from the laws of natural selection in the course of time.

To this effect, mankind was in a peaceable disposition by force of circumstances. The adaptation of the environment which the situation enforced was of an industrial kind. Therefore, regarding his relation to material means of life, the habits of thought that was enforced on early man was 'instinct of workmanship' (Veblen 1898b, 195). However, with the increasing density of population that follows from increasing industrial efficiency, society passed by force of circumstances from the condition of poverty stricken peace, to a stage of predatory life. This is the beginning of barbarism, in which most employments occupying attention were employments involving exploit. Exploit became the conventional ground of individual comparison between people, where industrial employments became of secondary importance (Veblen 1898b, 199).

His book, *The theory of the leisure class: an economic study in the evolution of institutions (1899)*, analyzes the evolution of habits of thought

of contemporary society by applying the above stated Darwinian schema. He studied the emergence of leisure class, and pointed out that the development of this class coincides with the emergence of ownership (Veblen, 1899a).

According to Veblen, the motive that lies at the root of ownership is the instinct of emulation. He saw the propensity for emulation as one of the most important instincts together with the instinct of self preservation. Ownership grew into a human institution with the incentive of distinction attached to wealth, which came at the beginning of barbarism. This old propensity for emulation is still the most important of economic motives in industrial society, and expresses itself with pecuniary emulation, in some form of conspicuous waste. However, this development was a gradual process. It took place during the transition from savagery to barbarism. The condition that is needed in this development was obtaining subsistence with relatively low labor cost. Hence, the institution of leisure class was found in its best form at the higher stages of this barbarian culture. The division of labor was a distinction between the working and the leisure classes. The most important honorable work was warfare and priestly services; and upper classes were exempt from industrial work, as an economic expression of their superior rank. Today, as industrial activity displaced predatory activity in everyday life, accumulated property replaced predatory exploit as a conventional demonstration of success.

CHAPTER IV

AFTER VEBLEN: THE ABANDONMENT OF HIS METHODOLOGICAL PILLARS IN INSTITUTIONAL ECONOMICS

Institutional Economics was the dominant theory in the US in the interwar period. The demise of the school in academia comes much later (after the Second World War). However; the abandonment of Veblen's methodology was an earlier event (Hodgson 2004a).

As discussed in the previous section, what constitutes Veblenian methodology is his adherence to Darwinism, pragmatism and instinct-habit psychology. His aim was to make economics a post-Darwinian science. What Veblen lacked was multiple level selection theory with an explicit concept of emergent properties and multiple ontological levels (Hodgson 2004a). Veblen acknowledged that institutions are the objects of selection in socio-economic evolution. However, his theory was not very well developed. There was no explicit emphasis on the newly rising concept of 'emergence', which was aiming to develop a multi-layered ontology.

In addition to Veblen's drawbacks, as argued by Hodgson (2001, 2004a), developments in the other disciplines of the social sciences also affected the fate of Veblenian methodology in economics. Pragmatism and instinct habit psychology lost their primacy in the first half of the 20th century and gave rise to positivism in philosophy and behaviorism in psychology. Besides, Darwinism started to be discredited in the academic environment. The rise of positivism led to the criticism of a type of analysis lacking

empirical evidence and experimental verification. The prevalence of logical positivism displaced pragmatism among academia. This was the case for the abandonment of Darwinism as well. The fate of instinct-habit psychology, which relies on concepts that are not directly observable, was the same. In contrast, in John Watson's behaviorist psychology,⁷ the ideas that are not grounded on experiment were discredited as not scientific.

These developments affected the other two founders of institutional economics. The most important parts of Veblen's analysis, Darwinism and instinct-habit psychology are lacking in their analyses. In his early writings Wesley Mitchell was sympathetic to instinct-habit psychology. He pointed out that, there should be an explanation for the rational economic man by giving reference to institutional context in which human beliefs are formed:

Even if economists are justified in starting with this assumption [economic rationality], they are not justified in stopping before they have made it a problem. And when they treat it as a problem they will find themselves working back to habits, and from habits back to instincts (Mitchell 1910, 201).

He further argued that money economy itself is an important factor in the development of rational economic man (Mitchell 1910). In spite of his earlier commitment to instinct-habit psychology in explaining human behavior, he abandoned it and took behaviorist psychology in his later writings (Mitchell 1964). Besides, he discredited Darwinism's explanatory power in social sciences (Hodgson 2004a). Finally, as Hodgson (2004a) argued, Mitchell's stress on the primacy of statistical analysis (1925), and his ignorance of metaphysical presupposition further discouraged the development of a theoretical basis for the school.

⁷ Founder of the behaviorist psychology, in which positivist vision of science is accepted. Psychological study is confined to the study of empirical phenomena without taking into account any unobservable entity such as instincts.

John Commons took a different position in his analysis of social evolution. First of all, like Mitchell he employed the behaviorist psychology in his analyses and rejected instinct-habit psychology (Commons 1931, 654). Secondly, he saw Darwinism inappropriate in studying economic evolution. He argued that economic evolution involves artificial selection rather than natural selection. This difference is based on the fact that humans could manipulate the selection process as compared to blind natural selection:

There is a continual selection of customs fitted to the changing economic conditions and the changing political and economic dominance. Since this occurs by operation of the human will, it is much like the artificial selection of Darwin's evolution, applicable, however, to practices and transactions suited to changing social conditions, instead of to Darwin's structures and functions of living organisms suited to changing geological conditions (Commons 1934, 45).

Commons criticized the approach of neoclassical economics. However, his distinction of the two schools was based on different concerns than Veblen. In his demarcation of the two schools, he pointed that, whereas neoclassical economics focuses on commodities and individuals, institutional economics focuses on transactions and working rules of collective action (Commons 1931, 652). As argued by Hodgson (2003), Commons' emphasis on the legal dimension of economics was prevalent in almost all of his studies, thus his studies lacked the treatment of extra legal institutions. Overall, he did not share the concerns raised by Veblen against the mainstream methodology and he took a different, but unfulfilled road, in his methodological studies. Therefore, he was not in a position to develop further the original methodology proposed by Veblen.

In fact, both Mitchell and Commons emphasized the study of evolution of institutions and the explanation of individual by giving a reference to institutional context (Mitchell 1910; Commons 1934). In this regard, they were distinct from neoclassical economics. However, both of them were in

a tacit compromise with neoclassical economics. Both Mitchell and Commons agreed that neoclassical theory could be a subset of broader economic theory. Therefore, compared to Veblen, their approach represents an eclectic combination with orthodoxy (Özveren 1998). This was in sharp contrast with Veblen who proposed an alternative methodology for economics that is structured along Darwinian principles.

In the end, institutional economics lost its originality and criticism that was developed by Veblen. By 1945, American institutionalism lacked a consensus on its own methodological and theoretical foundations (Hodgson, 2004a). Without a common methodology, it was bound to disintegrate and fall prey to dominant economic theory. The search for this common methodological denominator continues to this day. One recent candidate for this task has been critical realism, which is the subject of next chapter.

CHAPTER V

CRITICAL REALISM

Scientific realism claims for the existence of an objective reality. It considers truth as the objective of any scientific inquiry. The central task of science is to understand how the real world actually works. Scientific realism offers an alternative ontology rather than proposing mere epistemological analysis against relativist and positivist conceptions of the world. It is more about what exists, not only about what could be known.

Critical realism is a term that combines two phrases 'transcendental realism' and 'critical naturalism'. It is a variant of realism⁸ that is developed by Roy Bhaskar in the second half of the 20th century. The first term offers a new perspective in the philosophy of science, whereas the second term refers to the possibility of naturalism in the social sciences. The term

⁸ As pointed out by Maki (1990, 2001, 2008) realism and scientific realism connote many doctrines. In general, realism claims for the existence of something, but depending on the thing that is believed to exist, realisms also differ. Scientific realism claims that unobservable things that science deals with do exist, against the *nominalist* conceptualization that the world is socially constructed by scientific theorizing. However, Maki points out that, in the social sciences, in contrast to mind independence quality of natural science, what is needed is a form of science independence for a plausible realism. By this he means that, theory construction does not account for world construction (Maki 2008). Thus, ontological realism about society requires the idea of science independence: Society exists independently of scientific theories about it (2001, 12818; 2008, 5). In economics, then, minimal realism corresponds to the view that "economic reality is unconstituted by his or her [scientist] representations of it and that whatever truth value those representations have is independent of his or her or anybody else's opinions of it" (Maki 1994, 248). Albeit implicit, this point could be found in Bhaskar's discussion of the social systems as intransitive objects of science. Also, Bhaskar points out that social structures are only relatively enduring and open to change by intentional human activity. Hence, there is no causation from theories to the world. As Maki argues, "economic theories do not shape the economy, people do" (Maki 2008, 6). It is beyond the scope of the current work to fully compare Bhaskar's and Maki's positions. However, this tentative analysis reveals that their basic ontological commitments are in accordance.

transcendental marks its affinity with Kant's philosophy, whereas the term realism marks its difference (Bhaskar 1978).⁹

Foremost, critical realism is against a positivist vision of science.¹⁰ In positivism, and the Humean theory of causal laws there is no distinction between patterns of events and scientific laws.¹¹ In contradistinction, the basic ontological claim of Bhaskar is that real structures exist independently of actual patterns of events. He argues that, the fact that we cannot know the world directly is not a reason to refute the existence of real world beyond our perception (Bhaskar 1978).

Empiricism and a variant of it, positivism, claim that real world exists and it is directly knowable. Positivist tendency is to reduce explanation to mere constant event conjunctions. However, Bhaskar points out that this is plausible only in closed systems in which observation of constant conjunction of events is possible. Realists argue that science allows us to uncover real structures; hence, the aim should be to give a reference to underlying structures and powers which govern directly experienced

⁹ The focus on critical realism is restricted to its main premises related to natural and social realm. They are mainly found in Bhaskar (1978, 1979). He and other critical realists also have ideas related to practical implications and possible policy conclusions of their philosophy. These arguments (emancipator nature of critical realism, the possibility of socialism and the flawed nature of social democracy) could be found in the works of Bhaskar (1986, 1991, 1993) and other critical realists. However, as Hodgson (1999, 8; 2004b) argued critical realism itself does not offer criteria to choose between alternative theories and ideologies: "Critical realism has not yet developed adequate criteria to distinguish between rival or alternative explanations" (Hodgson 2004b, 68). This point is also emphasized by D. Wade Hands (1999). Therefore, Hodgson stresses that critical realism has become not only a philosophical discourse but also a sociological and political phenomena. For example, see Hodgson-Collier (1999) debate and his analysis of Lawson and Collier (2004b).

¹⁰ Besides, critical realism is against a relativist conception of science, which has taken a great attention since the achievements of Thomas Kuhn and Paul A. Feyerabend. Relativists argue that theories share nothing in common; they are just different views of the world.

¹¹ Sheila Dow (2002) challenges this view. She argues that Hume could be read as a realist, and logical positivism stems from a particular interpretation of him (686-687).

phenomena in explaining events. In open systems, generative mechanisms and structures act independently of patterns of events. This is transcendental realism (Bhaskar 1978).

In this schematization, knowledge has two dimensions: transitive and intransitive. Transitive dimension of knowledge refers to the theories and paradigms that are developed by scientists. The intransitive dimension refers to the real things and structures that are invariant to our knowledge of them. The objects of scientific knowledge are situated in this intransitive dimension (Bhaskar 1978).

Bhaskar (1978) argues that, in the history of science there have been two broad approaches to the identification of objects of scientific knowledge. The first one is Hume's classical empiricism in which atomistic events are treated as the objects of scientific knowledge. On the other hand, Kant's transcendental idealism stresses ideas and models as objects. What is lacking in Kantian idealism is that these objects are seen as artificial constructions of our mind rather than real objects independent of any human activity. Bhaskar's philosophy sees these models as real and treats them as the objects of scientific knowledge.

Bhaskar identifies three domains of reality: real, actual, and empirical. This is a stratified ontology which is characterized by the prevalence of structures as well as events, and open systems as well as closed systems (Bhaskar 1978). Then the aim of science is to illuminate the structures and mechanisms that govern the events of experience. Three kinds of depth in critical realism explain this stratified and differentiated ontology: *intransitivity*, *transfactuality*, and *stratification* (Bhaskar 1998b).

The term *intransitivity* refers to *epistemic fallacy* of positivist conception of science: the reduction of ontological inquiry to epistemological one. It is true that science is a product of social outcome; but the mechanisms it identifies exist independently of their discovery. Therefore, there are two sides of knowledge: one (pertains to us) that consists of our knowledge of the world, and the second (pertains to things) that is not the product of human beings. Intransitive objects of knowledge exist independently of our knowledge of them. They are *real*, as opposed to our conception of world that is the domain of *empirical* (Bhaskar 1998b).

Transfactuality captures the fact that the laws of nature operate independently of the closure assumption. Therefore, the domain of *actual* is different than the domain of *real*. Laws must be analyzed as transfactual, not as actual or empirical: Constant conjunctions are produced and not found in science (Bhaskar 1998b). Things have dispositions to act in a certain way by virtue of their intrinsic structures, and powers that may or may not be actualized. Even if they are exercised, their effect may not be actualized because of the effects of counter-mechanisms. Therefore, laws in this schema are seen as only tendencies (Bhaskar and Lawson 1998). Hence, the domain of *real* is also greater than the domain of *actual*.

Finally, there is *stratification* in nature. Multiplicity of natural mechanism allows for the real plurality of sciences that study them. As pointed out by Bhaskar, even though one kind of mechanism may be explained in terms of another, it cannot necessarily be reduced to it (1998b). Therefore, every structure is real and worthy of scientific investigation. This is the case for social domain as well.

In concerning the possibility of naturalism, the question of Bhaskar is simple: "To what extent can society be studied in the same way as nature?"

(Bhaskar 1998a). Naturalism asserts that there is a unity of method in studying the natural and social sciences. In the study of social reality, Bhaskar identifies two broad philosophies: Positivist and hermeneutics. It is the aim of naturalism to transcend them and their dichotomies. Therefore, the divide between positivism of Emile Durkheim and hermeneutics of Max Weber is to be transcended (Bhaskar 1998a). Critical realists argue for a third way: a qualified critical and non-reductionist naturalism based on transcendental realism, which respects the emergent properties of social realm (Bhaskar 1998b).

Bhaskar (1998b) points out that society is irreducible to people. Social forms are necessary for any act, and it is their pre-existence that establishes their autonomy from people. Furthermore, as will be analyzed below, the pre-existence of social forms entails a transformational model of social activity.

Against the dualism of individualism and collectivism, which has been prevalent in the discussions of social sciences at least since the 19th century, critical naturalism offers a relational conception of society, in which society is seen as an *emergent* property of human conduct. Therefore, the debate on agency vs structure is transcended by the *transformational model of social activity*.

As it is discussed in the first part of the thesis, there are two main views on the conception of the relation between agency and structure: they are coined the terms individualism and collectivism. In both of the approaches the causality runs from one to the other: either from society to individual or from individual to society. As it is pointed out by Bhaskar; there could be a third way in which society and individual are conceptualized in a dialectical way. However, this conceptualization is also flawed. This is because,

according to Bhaskar, “they [society and individual] do not constitute two moments of the same process, rather they refer to different kinds of thing.” (1998c, 214).

Critical realist conception stresses that society is both a pre-existing and a necessary condition for social activity. However, society exists only by virtue of it. In this formulation, people do not create society (as in the case of dialectical conceptualization), they reproduce and transform it. Thus, social world is always pre-structured: Human is born into social context of language and beliefs, which are not his creation. Society does not exist independently of human activity, yet it is not the product of it (1998c). This formulation is known as the *transformation model of social activity*. Society is both a condition and a reproduced outcome of human agency. Change, in the social realm is now clear. According to Bhaskar, people in their conscious activity, unconsciously reproduce and sometimes transform the structures governing their activities (1998c, 215). In this conception, it is worth emphasizing that transformation of the conditions of the social structure is achieved by self-conscious people. Therefore people are not only reproducing society but also transforming it by their conscious activities.

In addition to offering an alternative to the approaches of methodological individualism and holism, Bhaskar’s stratified ontology offers a solution to the problem that is inherited from Descartes. Mind-body dualism is overcome by the utilization of the concept of emergence, in which mind is seen as an emergent power of matter (Bhaskar 1998b). Therefore, Bhaskar’s philosophy offers a non-anthropomorphic conception of the place of human beings in nature. They are placed in a stratified ontology that treats nature as a whole (Bhaskar and Lawson 1998). Nature is a whole; however, the emergent properties of social realm, at the same time,

differentiate social systems from natural ones. Hence, there should be some differences in the conceptualization of naturalism in the social realm. This is what constitutes 'qualified naturalism' in Bhaskar's work. Still, in spite of these limits, critical realist conceptions with some qualifications could apply to social domain. Thus, social sciences could be science in the same way as natural sciences (Bhaskar 1998b).

As opposed to natural sciences, there are no intransitive objects of the social realm. Social mechanisms cannot exist independently of human agent; hence, they are not intransitive objects of scientific inquiry as in the case of mechanisms existing in natural sciences. Besides, social systems are open. Therefore, distinct from the natural sciences, it is impossible to conduct experimental practice in social sciences. Finally, social structures are only relatively enduring and open to change by intentional human activity. In spite of these differences, the transcendently real character of society still makes it the object of scientific knowledge. Importantly, transformational model implies historical nature of social activities. Therefore, the laws of social domain are seen as tendencies as will be discussed below (Bhaskar 1998c).

The application of Bhaskar's philosophy to economics is largely achieved by Tony Lawson. His critique of neoclassical economic methodology and proposition for a new one in economics constitute the approach of critical realism to economic methodology.

Lawson argues that deductivism is the basic approach that mainstream economics utilizes to explain social phenomena. He points out that deductivist explanation means to deduce something from initial and boundary conditions with universal laws which takes the form 'whenever event x then event y' (Lawson 1999). What is required in this formulation is

some form of constant conjunction of events. And, the task of science is to seek out event regularities. Scientific laws, in this formulation, always depend on these event regularities, which in turn require closed systems (Lawson 1995). Yet, these kinds of regularities are rarely the case outside astronomy (Lawson 1994).

What is the conception of reality that is proposed by this deductivist type of explanation? The root of the answer to this question can be found back in Hume. According to him, human knowledge takes only the form of sense experiences or impressions. Therefore, there is the ontology of atomistic events. Then, reality is defined by giving reference to experience with describing the realm of experience as empirical. As Lawson (1994) argued, this position is already refereed as empirical realism by Kant, Bhaskar and others.¹²

After clarifying the orthodox methodology in economics, Lawson argues that heterodox project in economics is a rejection of modern mainstream mathematical-deductivist method. Hence, “the essence of the heterodox opposition is ontological in nature” (Lawson 2005a, 11). Even if it is not always explicit in heterodox writings, alternative ontology of structured and open world characterizes the various schools of heterodox economics.¹³ Then, the distinction among heterodox schools is based on their different orientations and emphases of social reality:

Heterodox traditions *can* be coherently identified and distinguished from each other, but *not* according to any specific theories or policy proposals favoured and defended, nor in terms of any features of the economy held to constitute

¹² Hands (1999) challenges empirical realist description of neoclassical economics by Lawson, and argues that empiricism has not played an important role in the evolution of economic theory.

¹³ This point is also emphasized by Steve Fleetwood (1999) by relying on the works of Keynes, Hayek, and Veblen.

the most basic units of analysis, nor according to any other specific substantive or methodological claim.

Rather, I suggest that the most, and perhaps only, tenable basis for drawing distinctions between the various heterodox projects is *according to substantive questions raised or problems or aspects of the socio-economic world thought sufficiently important or interesting or of concern as to warrant sustained and systematic examination* (Lawson 2005a, 17, italics original).

Therefore, what exists between various schools of heterodoxy (post-Keynesians, Institutionalist, Feminists, and Austrians) is a division of labor. In this formalization, the emphasis of post-Keynesians is on the uncertainties stemming from openness of social reality, institutionalists on examining how social items change over time,¹⁴ Austrians on market process and entrepreneurship, and feminists on the study of care, hence social relations (Lawson 2005a, 18-19).

Lawson argues that if he is to propose an alternative to deductivist methodology, what he would do is to refer to an alternative ontology to empirical realism (Lawson, 1994). An alternative perspective, according to Lawson, is transcendental realism. Realist approach does not conceive the world as only consisting of events but also structures, mechanisms, powers and tendencies that are not directly observable but are responsible for the actual course of events.

Lawson noticed that in the social realm two important qualifications of transcendental realism are of immediate attention. First, event regularities are difficult to find in the social realm. The world is open; there are only partial regularities, as opposed to astronomy and other domains of natural sciences (Lawson, 1996). Secondly, human agents possess the capacity of real choice. If choice is real, this means agents could always act differently. Therefore, the most important thing that creates the openness of the social

¹⁴ Therefore, Lawson is against the conceptualization of institutional economics in terms of its unit of analysis as institutions or evolutionary processes (Lawson 2005, 18). For the discussion of the issue see the next section.

realm is human agent. Human agent has the capacity to real choice, and if choice is real, any agent could behave differently. Then, the question arises: If event regularities do not occur widely in the social realm what are the objects of knowledge? It is clear that as in the case of natural domain it is social structures, which are irreducible to events including human activities (Lawson, 1994).

Therefore, social realm is identical to natural in the sense that structures are the ones that underline the events of experience. Still, though, with some qualifications. Unlike their natural counterparts, social structures are dependent on human agents for their existence. Besides, given the open nature of human action it is clear that social structures are only possible in open systems (Lawson, 1994). Therefore, causal powers in the social realm do not determine the actual trip taken: They are only tendencies (Lawson, 1989). This means any economic law could only be interpreted as a tendency, which is manifest only in partial fashion in an open system (Lawson, 1999).

Overall, critical realism in economics offers a movement away from finding constant conjunction of events to identifying mechanisms and structures which determine the phenomena in question (Lawson 1994). Hence, the aim is to move from surface phenomena to some deeper causal mechanism to formulate laws (Lawson 1995). And, the method is *retroduction*,¹⁵ in contrast to both induction and deduction. It is a move from the phenomena identified to a deeper level to explain the responsible causal mechanisms (Lawson 1996).

¹⁵ Thomas A. Boylan and Paschal F. O’Gorman (1999) argue that *retroduction* could be analyzed as a part of induction.

CHAPTER VI

CRITICAL REALISM: A SUPERIOR METHODOLOGY FOR INSTITUTIONAL ECONOMICS?

Critical realism is foremost a movement against the positivist conception of science. According to critical realists, the positivist agenda in economics reveals itself in closed system modeling and atomistic thinking. This research agenda restricts economics to the finding of event regularities and to the analysis of surface phenomena. Critical realism claims to transcend this approach by relying on a different ontology, in which not only events but also their underlying mechanisms are seen as the object of inquiry. In so doing, critical realism accepts the fact that there are important differences between natural and social sciences. Yet, critical realists argue that qualified naturalism is possible.

First of all, as emphasized by Lawson (2003), it is true that there is an ontological neglect in Veblen's works and that there is no mentioning of ontologically irreducible social structures which is an important development in the philosophy of science. It helps to transcend the debate between methodological individualism and collectivism. This point is also emphasized by Hodgson (2004), that due to lack of apparent use of the concept of 'emergence' in Veblen, layered ontology is not very well developed in his writings.

Secondly, it is also true that in order to be qualified as a realist, the Kantian bias should be removed from Veblen (Hodgson 2004). This is what critical realism clearly aims to transcend. In other words, this is what realism is for

in transcendental realism. It is obvious that these two modifications could easily bring Veblen's work closer to realist stance.

As we have seen, Lawson argues that heterodoxy is differentiated in ontological terms from the mainstream project. In this regard, Veblenian institutionalism could be placed in a realist position with some qualifications as stated above. However, as emphasized by Maki, "the impact of ontology is a matter of constraint, ontology does not determine methodology," meaning methodology is under-determined by ontology (Maki 2008, 12). It should be clear that the minimum criteria needed to be a realist could be in accordance with institutionalism. However, this is not enough for institutional economics.

It should be pointed out that there is a huge diversity among heterodox schools as well. Even some of them; namely Marxian, Sraffian and post-Keynesian schools, employ mathematical methods and econometric analysis that are discarded by Lawson (Hodgson 2006, 4). So, it is not sufficient to distinguish among heterodox schools according to their focus on different research topics and their rejection of mathematical-deductive method. Darwinism and instinct-habit psychology of Veblen is not prevalent in other heterodox schools (Hodgson 2006, 7). Lawson points out that old institutionalism is concerned with how to deal with change and continuity (Lawson 2005b, 14). He conceives this merely as a matter of focusing on research topics. However, as will be apparent below, rather than the end, this is the beginning of the story: Focusing on continuity and change is not only a matter of focusing on different research topic. Hence, what distinguishes institutionalism is beyond its realist conceptualization and mere division of labor in heterodoxy as argued by Lawson.¹⁶

¹⁶ This line of thought is apparent in the work of Lenger (2007). He rightly argues that the realist stance in Veblen and other institutionalist Gunnar Myrdal is apparent (341, 362). However, to accept that institutionalism is in accordance with critical realism, one should

As argued above, change is prevalent in Lawson's works (1994, 2003). In fact, transformational model of social activity has its own views on change (Bhaskar 1998 [1979]). Critical realists rightly emphasize that structure and individual are different entities. There is non-conflation in their theory, yet there are inadequacies. As Hodgson argues, the account of agency in critical realism is incomplete; there is no explanation for the evolution of beliefs and reason (2004a, 37), which occupies an important part in Veblen's methodology. The derivations of transformational model of social activity are based on the premise of existence of intentional human activity. The mechanism behind the evolution of habits of thought, and the co-evolution of institutions and human agent, is almost missing in critical realism. Hence, transformational model is not enough in explaining the evolution of beliefs and reason. This takes us to the heart of the problem.

Naturalism, which is proposed by Bhaskar, is problematic. His distinction between natural and social realms, hence sciences, ignores the historicity in natural sciences. In order to accept the qualified naturalistic position of Bhaskar, we have to accept that natural mechanisms are not historical (Benton 1998, 306). The distinction he makes between natural and social systems is based on the premise that social systems are open and not suitable for controlled experimentation and prediction. However, for many of the branches of natural sciences these concerns are relevant as well. His distinction of natural and social realms totally ignores the fact that historicity and development are the characteristics of several natural sciences: evolutionary biology, cosmology, geology etc. (Benton 1998, 310). Therefore, the distinction he made between natural and social sciences, and the premises of qualified naturalism represent the reliance of Bhaskar

go beyond the basic premises of realism and should analyze in detail the critical realist stance. See below.

on physics and astronomy as representatives of natural science; hence his ignorance of natural sciences like evolutionary biology.

In fact, not only the above stated science (on which Darwinism has strong impact), but also the changes in physics itself alleviated the conception of the natural realm as static, and now, it is accepted that natural sciences resemble social sciences in several aspects: complexity, evolutionary processes etc. (Tezel 2007, 366). And, what exactly institutional economics opposes is exactly the precision that was inherited via physics into economics since the Enlightenment (Tezel 2007, 395).

Therefore, although Bhaskar wants to take a naturalistic view on the social sciences, many of the exceptions voiced by him put his analysis in a position to support distinction between the social and natural realms that is outmoded. The faulty distinction between natural and social realms leads to the ignorance of one of the basic concerns of Veblen by critical realists: to find an explanation for change is almost totally missing in critical realism. Critical realism repeatedly emphasizes that there are three domains of reality which are irreducible (empirical, actual, and deep). Then, in this schematization, the task of science is determined as the illumination and elaboration of the structures and mechanisms that govern the events of experience. This is the case for social sciences too. Yet, there is no concern for or any theory of the explanation of change of these very structures. As pointed out by Baert, critical realism examines the reproduction of structures not their transformation (1996, 520-521). Therefore, where critical realism stops, Veblen's analysis re-starts.

If one wants to summarize Veblen's methodology with one word, it is 'Darwinism'. Any methodology without Darwinian inclination cannot offer a better methodology to institutional economics. As discussed above, without

Veblen even the approaches of Commons and Mitchell were under the threat of conflation with mainstream economics. Thus, the originality of institutional economics comes from the Darwinian ingredient in it.

Veblen had a research agenda to make economics an evolutionary science. In this regard, critical realism offers no better solution. It has no adherence to Darwinism, and even to historical natural sciences, and it has no theory of change of its own. Critical realism does not capture the revolution in natural science; historical, developmental and non-experimental natural science (Benton, 1998, 311); whereas Veblen, anticipating by a century the 'new science'¹⁷ yet to come, put it into the centre of his analysis.

¹⁷ 'New Science' describes the developments in the fields of thermodynamics, molecular biology, quantum physics, and chemistry which reveal the fact that complexity, heterogeneity and evolution are the main characteristics of the nature as opposed to Newtonian science. This line of thought could be found in Prigogine and Stengers (1984).

CHAPTER VII

CONCLUSION

The discussions surrounding economic methodology in the 19th century were around four main themes. The first problem, the problem of historical specificity was due to the reaction of German Historical School against deductivist and ahistorical conceptualization of the science of economics by Classical Political Economy. Historicists pointed out that economics should be sensitive to different cultures and historical periods. When criticizing CPE, German Historical School relied on induction and mere empiricism as a methodology. The drawback of this choice was clearly demonstrated by Carl Menger and led to their thorough criticism by him. Therefore, the second methodological problem, the dichotomy between induction and deduction was set on the agenda.

The triumph of Austrian School with Menger in particular, and marginalism in general, not only led to the choice of deductivism in mainstream economic methodology, but also to the determination of unit of analysis in explaining economic phenomena; the third theme of the methodology discussions of the 19th century. Austrians and marginalists took a methodological individualist position against the holistic approaches of Historicists and Karl Marx. Finally, the rise of marginalism strengthened the mechanistic approach to the study of economic phenomena and marginalized organicist and biology inspired analogies. This symbolizes the acceptance of Newtonian mechanistic analogies in economics.

Veblen's methodology could be analyzed by giving reference to the above stated four themes. Firstly, Veblen represents the application of Darwinism, hence the biological metaphor to the realm of economics. By this way, he transcended the dichotomies of the 19th century economic methodology. Veblen criticized the natural law conceptualization of science, and in turn mechanistic analogies of Newtonian physics in the study of economics. Secondly, and in relation to the first issue, his acceptance of biological metaphor led him implicitly transcend the historical specificity problem. Thirdly, he distanced himself from deductivist modes of explanation. However, his rejection of deductivism did not lead him to embrace induction as a way of explanation. He accepted the unavoidability of metaphysical presuppositions in theory development and pointed out that simple experience is not enough. As studied, the pragmatist approach to the issue led him to transcend this dichotomy. Finally, Veblen's Darwinian mind led him to transcend organicist approaches of Historicists and to accept the co-evolution of individual and social structure, rather than one being determined by the other. By so doing, in addition to rejection of methodological holism, he refuted the methodological individualistic position of the Austrians and Marginalists.

The internal problems of institutional economics, and the rise of positivism in the first half of the 20th century, gradually eliminated the methodological pillars of Veblen's methodology in academia. Since then orthodox economics has mainly employed the positivist vision of science. Critical realism of Roy Bhaskar represents a critique of this positivist ontology which has dominated heterodox-minded academia since then.

Positivists reduce explanation to constant conjunction of events. In contrast, realists argue that reality goes beyond what we perceive. And the true aim of science should be to uncover underlying structures and powers which

govern directly experienced phenomena. In contrast to induction and deduction, retroduction (the move from the phenomena identified to a deeper level to identify causal mechanisms) is the method proposed.

In the social realm, critical realism offers a qualified naturalism. In spite of its differences from the natural realm, transcendentally real character of society makes it the object of scientific knowledge. Society is always pre-structured: Human beings are born into social context of language and beliefs. Then, the criticism of mainstream economic methodology is based on the above schematization: Empirical realist ontology and deductivist mode of explanation are to be criticized in economics.

As we have seen, the ontological neglect in Veblen's works and the lack of explicit mentioning of ontologically irreducible social structures restrain his approach regarding the realist stance. It is also true that, the Kantian bias in Veblen restricts his reading as a realist. However, it is also true that with modifications in these regards, Veblen could be put into realist camp (Hodgson 2004).

Yet, as Maki (2008) points out, mere ontological considerations do not determine the fate of the methodologies taken by different schools of thought. Therefore, Lawson's position that heterodoxy is differentiated in ontological terms from mainstream project is untenable. It should be clear that the minimum criteria needed to be a realist could be in accordance with institutionalism. However, this is not enough for institutional economics. It is true that one of the basic concerns of old institutionalism is its concern with change and continuity. However, this focus is not only a matter of choosing between different research topics as argued by Lawson (2005b).

Naturalism is problematic in critical realism. The distinction that critical realism maintains between natural and social sciences, and the premises of qualified naturalism represent the reliance on physics and astronomy as representatives of natural science; hence the ignorance of natural sciences like evolutionary biology. In fact, developments in physics itself have changed the conception of the natural realm; today, it is accepted that natural sciences resemble social sciences in several aspects: complexity, evolutionary processes etc. (Tezel 2007).

Critical realism does not capture this revolution in the natural sciences; whereas Veblen put it into the centre of his analysis. Therefore, although the realist stance of Bhaskar and Lawson clearly supports the position of institutional economics in removing Kant from his analytical pretext and adding a layered ontology, their flawed conceptualization of natural science makes the application of critical realism to institutional economics as a superior methodology untenable. To repeat, Veblen's unfulfilled aim in the area of economic methodology was to make economics an evolutionary science. In this regard, critical realism fails to offer a solution to institutional economics. Critical realism does not capture the revolution in the areas of both physics and biology.

REFERENCES

Anderson, Douglas R. (2006) "Peirce and Cartesian Rationalism", In *A Companion to Pragmatism*, eds. John R. Shook and Joseph Margolis, (Oxford: Blackwell Publishing), 154-165.

Baert, Patrick (1996) "Realist Philosophy of the Social Sciences and Economics: A Critique" *Cambridge Journal of Economics*, XX, 513-522.

Backhouse, Roger (1994) *New Directions in Economic Methodology*, (London: Routledge).

Benton (1998) "Realism and Social Science: Some Comments on Roy Bhaskar's 'The Possibility of Naturalism'", In *Critical Realism: Essential Readings*, eds. Margaret Archer, Roy Bhaskar, Andrew Collier, Tony Lawson and Alan Norrie (London; New York: Routledge), 297-312.

Bhaskar, Roy (1978) *A Realist Theory of Science* (Brighton: Harvester).

Bhaskar, Roy (1986) *Scientific Realism and Human Emancipation* (London: Verso).

Bhaskar, Roy (1991) *Philosophy and the Idea of Freedom* (Oxford: Blackwell).

Bhaskar, Roy (1993) *Dialectic: The Pulse of Freedom* (London; New York: Verso).

Bhaskar, Roy (1998a [1979]) *The Possibility of Naturalism: A Philosophical Critique of the Contemporary Human Sciences*, 3rd ed. (New York: Routledge).

Bhaskar, Roy (1998b) "Philosophy and Scientific Realism" In *Critical Realism: Essential Readings*, eds. Margaret Archer, Roy Bhaskar, Andrew Collier, Tony Lawson and Alan Norrie (London; New York: Routledge), 16-47.

Bhaskar, Roy (1998c) "Societies" In *Critical Realism: Essential Readings*, eds. Margaret Archer, Roy Bhaskar, Andrew Collier, Tony Lawson and Alan Norrie (London; New York: Routledge), 206-257.

Bhaskar, Roy and Lawson, Tony (1998) "Introduction: Basic Texts and Development" In *Critical Realism: Essential Readings*, eds. Margaret Archer, Roy Bhaskar, Andrew Collier, Tony Lawson and Alan Norrie (London; New York: Routledge), 3-15.

Boylan, Thomas A. and Paschal F. O’Gorman (1999) "Critical Realism and Economics: A Causal Holist Critique", in ed. Fleetwood, Steve (1999) *Critical Realism in Economics: Development and Debate* (New York: Routledge).

Commons, John R. (1931) "Institutional Economics", *American Economic Review*, 21(4), December, 648-657.

Commons, John R. (1934 [1959]) *Institutional Economics: Its Place in Political Economy* (Madison: University of Wisconsin Press).

Ekelund, Robert B. and Robert Hebert (1975) *A History of Economic Theory and Method* (New York: McGraw-Hill).

Dow, Sheila (2002) "Historical Reference: Hume and Critical Realism," *Cambridge Journal of Economics*, 26: 683-695.

Fleetwood, Steve (1999) "Situating Critical Realism in Economics", in ed. Fleetwood, Steve (1999) *Critical Realism in Economics: Development and Debate* (New York: Routledge).

Gökber, Macit (2005) *Felsefe Tarihi* (Remzi Kitabevi: İstanbul).

Hands, Wade D. (1999) "Empirical Realism as Metha-Method: Tony Lawson on Neoclassical Economics", in ed. Fleetwood, Steve (1999) *Critical Realism in Economics: Development and Debate* (New York: Routledge).

Hodgson, Geoffrey M. (1999) "Marching to the promised land? Some doubts on the theoretical and policy affinities of critical realism" with a response by Andrew Collier and rejoinder, *Alethia*, 2(2): 2-13.

Hodgson, Geoffrey M. (2001) *How Economics Forgot History: The Problem of Historical Specify in Social Science* (London and New York: Routledge).

Hodgson, Geoffrey M. (2003) "John R. Commons and the Foundations of Institutional Economics," *Journal of Economic Issues*, Vol. XXXVII: 3.

Hodgson, Geoffrey M. (2004a) *The Evolution of Institutional Economics: Agency, Structure and Darwinism in American Institutionalism* (London and New York: Routledge).

Hodgson, Geoffrey M. (2004b) "Some Claims Made for Critical Realism in Economics: Two Case Studies," *Journal of Economic Methodology*, 11-1: 53-73.

Hodgson, Geoffrey M. (2006) "Characterizing Institutional and Heterodox Economics – A Reply to Tony Lawson," *Evolutionary and Institutional Economics Review*, 2(2).

Lawson, Tony (1989) "Abstraction, Tendencies and Stylized Facts: A Realist Approach to Economic Analysis," *Cambridge Journal of Economics*, 13: 59-78.

Lawson (1994) "A Realist Theory for Economics", In Roger Backhouse (1994) *New Directions in Economic Methodology*, (London: Routledge), 257-285.

Lawson, Tony (1995) "A Realist Perspective on Contemporary Economic Theory," *Journal of Economic Issues*, Vol. XXIX: 1.

Lawson, Tony (1996) "Developments in Economics as Realist Social Theory," *Review of Social Economy*, Vol. LIV: 4.

Lawson, Tony (1999) "Developments in Economics as Realist Social Theory," in Steve Fleetwood (1999) *Critical Realism in Economics: Development and Debate* (London; New York: Routledge), 3-20.

Lawson, Tony (2003) "Institutionalism: On the need to Firm up Notions of Social Structure and the Human Subject," *Journal of Economic Issues*, Vol. XXXVII: 1.

Lawson, Tony (2005a) "The Nature of Heterodox Economics," *Cambridge Journal of Economics*, (forthcoming), 1-23, retrieved from <http://cje.oxfordjournals.org/cgi/reprint/bei093v1?ijkey=K8S2IrlyzHltXNr&keytype=ref> .

Lawson, Tony (2005b) "The Nature of Institutional Economics," *Evolutionary and Institutional Economics Review*, 2(1): 7-20

Lenger, Aykut (2007) "Kurumsal İktisat ve Eleştirel Gerçekçilik", in ed. Eyüp Özveren (2007) *Kurumsal İktisat* (Ankara and İstanbul: İmge Kitabevi Yayınları), 339-364.

Losee, John (1993) *A Historical Introduction to Philosophy of Science* (New York: Oxford Univ. Press).

Maki, Uskali, Gustaffson, B. and Knodsen, C. (eds.) (1993) *Rationality, Institutions and Economic Methodology* (London and New York: Routledge).

Maki, Uskali (1988) "How to Combine Rhetoric and Realism in the Methodology of Economics," *Economics and Philosophy*, 4(1): 89-109.

Maki, Uskali (1990) "Scientific Realism and Austrian Explanation," *Review of Political Economy*, 2: 310-344.

Maki, Uskali (1993) "Economics with Institutions: Agenda for Methodological Enquiry", in eds. Uskali Maki, B. Gustaffson, and C. Knudsen, (1993) *Rationality, Institutions and Economic Methodology* (London and New York: Routledge).

Maki, Uskali (2001) "Realism and Their Opponents: Philosophical Aspects", *International Encyclopedia of the Social and Behavioral Sciences* (Elsevier), Vol 19: 12815-12821.

Maki, Uskali (2004) "Realism and the Nature of Theory: A Lesson from J H von Thünen for Economist and Geographers," *Environment and Planning*, Vol. 36: 1719-1736.

Maki, Uskali (2008) "Scientific Realism and Ontology", for *The New Palgrave Dictionary of Economics*, 2nd Ed. (Macmillan).

Mayr, Ernst (2001) *What Evolution Is?* (New York: Basic Books).

Mitchell, Wesley (1910) "The Rationality of Economic Activity," *Journal of Political Economy*, 18(2-3), parts I and II, 97-113, 197-216.

Mitchell, Wesley (1925) "Quantitative Analysis in Economic Theory," *American Economic Review*, 15(1),1-12.

Mitchell, Wesley (1964) "Introduction", In ed. Wesley Mitchell (1964) *What Veblen Thought: Selected Writings of Thorstein Veblen*, (New York: A. M. Kelly Bookseller).

Özveren, Eyüp (1998) "An Institutional Alternative to Neoclassical Economics," *Review*, Fernand Braudel Center, XXI: 469-530.

Prigogine, Ilya and Stengers, Isabelle (1984) *Order Out of Chaos: Man's New Dialogue with Nature* (New York: Bentham Books).

Rosenberg, Alexander (2005) *Philosophy of Science: A Contemporary Introduction* (New York; London: Routledge).

Scheffler, Israel (1974) *Four Pragmatists: A Critical Introduction to Peirce, James, Mead and Dewey* (London: Routledge).

Tezel, Gülbahar (2007) Kurumsal İktisat ve 'Yeni Bilim' Tartışmaları", in ed. Eyüp Özveren (2007) *Kurumsal İktisat* (Ankara and İstanbul: İmge Kitabevi Yayınları), 365-399.

Trigilia, Carlo (2002) *Economic Sociology: State, Market and Society in Modern Capitalism*. Translated by Nicola Owtram (Oxford: Blackwell).

Veblen, Thorstein (1898a) "Why Is Economics Not an Evolutionary Science?" *Quarterly Journal of Economics*, 12(3), 373-397.

Veblen, Thorstein (1898b) "The Instinct of Workmanship and the Icksomeness of Labor" *American Journal of Sociology*, 4(2): 187-210

Veblen, Thorstein (1899a) *The Theory of the Leisure Class: An Economic Study in the Evolution of Institutions* (New York: Macmillan).

Veblen, Thorstein (1899b) "The Preconceptions of Economic Science: I and II", *Quarterly Journal of Economics*, 13(2): 121-150 and 13(4): 396-426.

Veblen, Thorstein (1900) "The Preconceptions of Economic Science III", *Quarterly Journal of Economics*, 14(2): 240-269.

Veblen, Thorstein (1908) "The Evolution of Scientific Point of View", *University of California Chronicle*, 10(4): 396-416.

Veblen, Thorstein (1909) "The Limitations of Marginal Utility", *Journal of Political Economy*, 17(9): 620-636.

Veblen, Thorstein (1914) *The Instinct of Workmanship, and the State of Industrial Arts* (New York: Macmillan).

Veblen, Thorstein (1919) *The Place of Science in Modern Civilization and Other Essays* (New York: Huebsch).

Veblen, Thorstein (1964 [1884]) "Kant's Critique of Judgement", in ed. Leon Ardzrooni (1964) *Essays in Our Changing Order* (New York: A. M. Kelly).

Veblen, Thorstein (1964 [1925]) "Economic Theory in the Calculable Future", in ed. Leon Ardzrooni (1964) *Essays in Our Changing Order* (New York: A. M. Kelly).

Veblen, Thorstein (1964 [1934]) *Essays on Our Changing Order*, ed. Leon Ardzrooni (New York: A. M. Kelly).