

# Closing open systems: Two examples for the ‘double hermeneutic’ in economics

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## Abstract

The present paper, which takes as its starting point the criticisms by Roy Bhaskar directed to the Humean conception of causality as constant conjunctions of atomistic events, as the basic characteristic of “closed system” theorizing, emphasizes the importance of complexity, or the prevalence of “open systems,” emanating from the hermeneutic character of the social world. It is argued in the paper that because of the ubiquity of open systems in the social world, economics is not only concerned with explaining social reality, but also with changing this very reality by creating and/or transforming the institutional structure within which the theory is developed. In order to show that this ‘double hermeneutic’ is an integral part of economics, two cases from the history of economic thought are examined: creation of the market system as by a conscious attempt, and the creation of the ‘welfare state’, by considering the views of Polanyi, Keynes, and Schumpeter.

*...the ideas of economists and political philosophers, both when they are right and when they are wrong, are more powerful than is commonly understood. Indeed the world is ruled by little else. Practical men, who believe themselves to be quite exempt from any intellectual influences, are usually the slaves of some defunct economist. Madmen in authority, who hear voices in the air, are distilling their frenzy from some academic scribbler of a few years back. (Keynes, 1936: 383)*

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## 1. Introduction

Although the above quotation from Keynes's General Theory could seem odd at first glance, Karl Marx, another great thinker who also influenced the world in many ways, seems to hold a similar idea when he asserts that "the Philosophers have only interpreted the world, in various ways; the point is to change it" (Marx, 1975: 423), and that "theory also becomes a material force once it has gripped the masses" (Marx, 1975: 251). In other words, it seems that social philosophers, economists notwithstanding, are not only concerned with understanding or interpreting the world, but also with devising theories that attempt to influence, and even to change, the very reality they want to explain. That is to say, economic theories may, and in effect do, act as "self-fulfilling prophecies." If this is the case, however, the traditional opposition, maintained by the historians of economic thought, between the social scientific activity and its subject matter, and the resulting controversy between the 'absolutist' and the 'relativist' positions (e.g., Blaug, 1992: 1), should be revised in a radical way. If every one of us is a "slave of a defunct economist," this relationship between the subject and the object of social scientific inquiry should be considered as a dynamic one because of the hermeneutic element manifesting itself at two levels. First, the social (or, for that matter, economic) world itself is constituted by the category of 'meaning' which guides the actions of individuals. Second, at a deeper level, the social science itself is an active agent that participates in the constitution of this world. It is the starting point of the present paper that this 'double hermeneutic', which asserts itself in the development of economics, implies that economists are also concerned with changing the rules of the 'game' that they try to understand or explain. As different writers (e.g. Bhaskar, 1989, Giddens, 1984, Taylor 1985b) argue, the social science is internal to the world it tries to understand, and it always seeks to affect or even to transform its 'subject matter' by conscious attempts. The present paper suggests that this attempt to set and/or change the 'rules of the game' is a natural consequence of the ubiquity of 'open systems' prevailing in the social world. That is, 'closed-systems' in the sense of the existence of Humean 'constant conjunctions' among brute, atomistic events are never encountered in the human realm. Since the social reality is complex in the sense of the nonexistence of closed systems, a natural attempt, among others, on the part of economists could be to 'close' the reality, or different aspects of it, by trying to establish and/or to change the institutional structure within the boundaries of which the theory is supposed to work.

In order to show that this double hermeneutic is an integral part of economics, two cases from the history of economic thought are examined in the paper: first, Polanyi's understanding of the market system as created by conscious attempts on the part of the liberal thinkers and economists, and Keynes's views which can be asserted to led to the creation of the "welfare state" which is, incidentally, also akin to Schumpeter's insight for the institutionalization of the "creative destruction" by devising an appropriate corporate environment through research and development activities as a way to maintain the dynamism of capitalism. The choice of these two examples is by no means accidental; the basic assumption uniting them is the fact that the market system, since the very beginning, has always required active interventions of different agencies; even the system itself, following Polanyi, can be said to be a "project" which is designed by economists (and social philosophers) and implemented by continuous state interventions. Later, in another conjunction of history in which the very existence of the system is in danger, Keynes's solution, characterized by the "welfare state" which guarantees the accumulation process, and Schumpeter's insight that the "creative destruction" process can be controlled institutionally through research and developments implemented by big corporations appear as conscious attempts to close the system so as to guarantee its success. In order to show this, the paper first deals with the analytical framework, informed by the "critical realism" of Roy Bhaskar and, to a lesser extent, by Anthony Giddens, and then focuses on the issue of the "ontological closure" that economists attempt to achieve.

## 2. Critical Realism and Social Scientific Study

### *2.1 A Critique of Positivism and Closed Systems*

Roy Bhaskar's (1975, 1989, 1993, 1994) critical realism represents an important alternative to the positivist vision of science which maintains two principles: the principle of empirical invariances claiming that laws are or depend on empirical regularities; and, the principle of instance confirmation claiming that laws are confirmed or falsified by their instances (Bhaskar, 1989: 124). This view adopts the Humean theory of causal laws which presumes the existence of closed systems in the sense of constant conjunctions of atomistic events (Bhaskar, 1975: 12). In the Humean conception of closure, causal laws can be described with the formula "whenever event X, then event Y." In other words, "same cause, same effect" applies everywhere (Bhaskar 1975: 141). Since causal laws are considered as empirical regularities, they are reduced to sequence of events, and the events to experiences (Bhaskar, 1989: 15). Therefore, Humean view is based on an implicit ontology

which supposes the world itself to be constituted by constant conjunctions of discrete, atomistic events. Consequently, a particular conception of human beings is underpinning to this view: they are seen as passive sensors of given facts and recorders of their constant conjunctions, rather than as active agents in a complex world (Bhaskar, 1975: 198). This completes the “trinity” upon which the positivist approach is founded: Empirical realism, which is based on the Humean causality view, epistemic fallacy which assumes that statements about ontology (about being) can always be reduced into statements about epistemology (about our knowledge of being), and a particularist (or a corpuscularian) ontology<sup>2</sup> (Bhaskar, 1975: 16).

Such a vision always assumes the existence of closed systems. If constant conjunctions of events prevail, or equivalently, events of type A are invariably followed by events of type B, one can say that a “closure” has been obtained (Bhaskar, 1975: 73). If there are no constant conjunctions among events, by contrast, the system is said to be open. In the empiricist tradition in general causal laws apply only to closed systems. Underlying this view is the “corpuscularian inheritance” (Harré 1984), which presupposes the “classical paradigm of action” (Bhaskar, 1975: 79). This paradigm adopts a corpuscularian or an atomistic view of matter and a mechanical view of causality in which all causes are regarded as efficient and external to the thing in which change occurs. These propositions together defines a “limit condition” of a closure (Bhaskar, 1975: 79). These features also imply a particular model of human beings; they are passive sensors of events. In addition to, or more accurately conditioned by, this world view, a reductionist approach in the sense that some higher order entities, properties or powers can be (a) based on, or (b) explained by, or (c) predicted by some lower order (microscopic or atomistic) ones is assumed (Bhaskar, 1975: 114-15). In sum, a natural closure, a mechanistic conception of action and the model of men as passive sensors, underlies the doctrine of actuality of causal laws: Laws are relations between events which are thought as the objects of actual or possible experiences (Bhaskar, 1975: 64).

The basis of critical realism, on the other hand, is an ontological claim: “the objects of scientific thought are real structures irreducible to the events they generate” (Bhaskar, 1991a: 458). In this view the “explanatory structures” or “generative mechanisms” are a) ontologically distinct from, b) generally “out of phase” with, and c) sometimes in opposition to the phenomena that they generate (Bhaskar, 1991a: 458).

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<sup>2</sup> An extension of this view with respect to social science, as we will see below, is sociological and/or methodological individualism.

On this conception, since the world is constituted by mechanisms rather than events, the task of science must be to attain to the knowledge of those enduring and continually active mechanisms of nature (Bhaskar, 1975: 47). It is essential here to emphasize that generative mechanisms and structures are ontologically distinct from the events that they generate; and further, the pattern of events are also ontologically distinct from experiences.

Critical realism asserts that closed systems are encountered only rarely, and open systems are the rule rather than exception in the world. In open systems, laws can only be universal if they are interpreted in a non-empirical (transfactual) way, as demonstrating the operation of generative mechanisms and structures independently of any pattern of events they generate (Bhaskar, 1975: 14). It is a general characteristic of open systems that two or more, maybe radically different kinds of, mechanisms are at work at the same time to produce some particular effects (Bhaskar, 1975: 119). In other words, the laws of nature are subject to the possibility of “dual” or “multiple” control including control by human agents (Bhaskar, 1975: 113). Therefore, we cannot rely on empirical generalizations as lawlike statements, for nature is not uniform in the sense that generalizations which hold at one time will hold at all times<sup>3</sup>.

Accepting the complexity of the world and the dominance of open systems requires acknowledgement of the fact that primary aim of scientific activity is to explain phenomena at hand, because these phenomena are produced by generative mechanisms and structures. Since the world is differentiated or stratified in a way that it is constituted by distinct kind of mechanisms, scientific knowledge must move from one stratum to another. Since in open systems more than one generative mechanism may be at work simultaneously, explanation of these mechanisms must also be stratified. In other words, stratification of explanation reflects a real stratification in the world which is unbounded in the sense that scientist can never know whether a level of stratification is the ultimate stratum (Bhaskar, 1975: 170-171). Given this complexity and thus prevalence of open systems in nature, experimental activity becomes necessary (Bhaskar, 1975: 91). An experiment is an attempt to “close” the system, or to isolate a particular mechanism by keeping off all

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<sup>3</sup> Such a conception of “openness” is similar to one that Prigogine and Stenger (1984) adopt. Likewise, Paul Davidson’s (e.g., 1996) notion of “non-ergodicity” which supposes that economic reality is not “immutable” captures a similar idea. However, for Davidson, “non-ergodic” or “transmutable” reality conception is necessitated by the introduction of time and hence of uncertainty. Yet, the notion of “openness” of reality need not be attributed to the time element only; it is a more general notion. That is to say, “openness” exists in both “synchronic” and “diachronic” levels. Still, below, when Keynes’s notion of uncertainty is examined, the point of emphasis will be the time element existing in reality.

other potentially effective mechanisms. In an experiment, two essential actions are made. First, experimenter triggers the mechanism under study to ensure that it is active (experimental production), and second, she must prevent any interference with the operation of the mechanism (experimental control) (Bhaskar, 1975: 53). To the extent that the sequence of events emerging under experimental conditions would not be emerging without it, experiment is necessary. In this sense, experimenter is a “causal agent”<sup>4</sup> of the sequence of events, not of the causal laws. These sequences enables to the experimenter to identify that law. Consequently, there is an ontological distinction between laws and sequences of events (Bhaskar, 1975: 33). In other words, experimental activity can only be given a rationale if the causal law that experiment enables us to identify prevails outside the context in which the sequence of events is generated. This view implies that causal laws operate in open systems, and closed systems must be established experimentally (Bhaskar, 1975: 33). Therefore experiment is a significant feature of science. Once laws are identified or theories are tested in closed experimental conditions, they can be applied outside these conditions. Therefore, it can be seen that experiments are essential in the natural sciences both for the theorizing process, through the isolation of specific relations by closing the system, so that we can identify the generative mechanisms, and for the testing process, through the specification of the appropriate domain within which the theory is supposed to be valid.<sup>5</sup> Then, it is natural to ask that whether the same situation applies in the social sciences, or whether we can find some analogue for experiment, given the essential difference of the realm of society from the realm of nature.

## 2.2 Open Systems: Hermeneutical Character of Social Science

With respect to the social science, the primary issue seems whether *naturalism* in the sense that there is an “essential unity of method” between the natural and the social sciences is possible or not. Naturalism can be said to have two different variants. First, *reductionism* which asserts that the subject matter of both kinds of sciences are actually identical; and second, *scientism* which denies the existence of any significant difference between their methods, irrespective of the issue that whether or not their subject matters are identical (Bhaskar, 1989: 2). In this regard, one can distinguish between two traditions: the positivist tradition, which argues for an

<sup>4</sup> Anything that is capable of bringing about a change in something (including itself) is an agent (Bhaskar, 1975: 109). In this sense, an agent is endowed with transformative or “causal power” (Haré and Madden, 1975).

<sup>5</sup> This should not, however, be taken to imply that without experiment, there is no science. Some natural sciences, such as astronomy, are characterized by the difficulty of controlled experiments as in the social sciences.

unqualified naturalism claiming that there is a unity of method for the two sciences, even if society may be much more complex than the natural world; and the *hermeneuticist* tradition which denies the possibility of social science in the same sense with natural sciences.

As to the positivist tradition, whose main tenets are explained above, one can see that it also maintains reductionism, especially in its adoption of a corpuscularian ontology. This reductionism asserts that 1) it is possible to provide a rigorous specification of a hierarchy of entities, from higher to lower ones, and hence rank any pair of domains, and 2) the entities and laws of higher levels can be reduced to facts about entities and laws at lower levels (Little, 1991: 191). In this framework, then, some higher order entities, properties or powers can be based on or explained by some lower order (atomistic) ones. That is to say, reductionism denies the stratified nature of the world; in other words, this perspective rests on the “closed system” thinking and thus cannot explain human behavior in its full dimensions. An implication of positivism seeking empirical invariances between discrete, atomistic events also in the social realm is therefore methodological individualism, which is a special case of reductionism in the sense that facts about society and social phenomena can be explained in terms of facts (decisions, actions etc.) about individuals (Bhaskar, 1989: 27; 1978: 5)<sup>6</sup>.

On the other hand, the other alternative, *hermeneutic* social theory which is based on the notion of “interpretative understanding” (*Verstehen*) asserts that social world must be understood from within, rather than

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<sup>6</sup> Of course, the term “individualism” is a highly loaded one, used in different senses by different writers. For example, Harrod (1946), in his criticism of Hayek’s individualism, distinguishes among six senses of the term, whereas Giddens (1984: 214) distinguishes among four variants, and Little (1991: 183-188) distinguishes among three theses of individualism. Without going into further detail in this matter, it would suffice for our purposes to mention Schumpeter’s (1954: 888-89) distinction between “sociological” (or ontological) individualism and “methodological” individualism. Whereas the former claims that society is composed only of individuals, and that society or collectives/aggregates do not have any ontological status, the latter position does not reject the fact that individuals are also social beings, but it argues that “there is no other way toward an understanding of social phenomena but through our understanding of individual actions directed toward other people and guided by their expected behavior” (Hayek 1946:6). The former, as can be seen, does not entail the latter, or vice versa. Nevertheless, these two levels, ontological and methodological levels, are usually confused with each other in the discussions of social sciences, which constitutes a good example to the “epistemic fallacy” in Bhaskar’s sense. For example, in the Austrian conception, exemplified by Menger, Mises, Lachman, and most notably, Hayek, the defense of methodological individualism are related to an ontological thesis. In this conception, individualism is assumed to mean to study the unintended (and unseen or unexpected) consequences of intentional individual action. However, the idea of unintended consequences and individualism should be understood as two distinct and different hypotheses because unintended consequences hypothesis which is a specific instance of the notion of “emergence” does not necessarily imply methodological individualism. Emergence, that is to say, is an ontological thesis (Özel 1998: 58-65; 2000: 271-72). For this reason, it is not necessary for our purposes to distinguish between the sociological and “epistemological” forms of individualism because both of them in one way or another implies reductionism.

explained from without; that is, social science should be concerned with the clarification of meaning and conceptual connections (Bhaskar, 1989: 134-35; Winch, 1958: 95; Little, 1991: 68-69; Taylor 1985a, 1985b). Because of this difference in the social sphere, hermeneuticists, following Max Weber, make a sharp distinction between causal explanation (*erklären*) and “interpretative understanding” (*verstehen*) and thus between science of physical non-human world of nature and the science of the mind, culture, and the history (Winch 1958: 95, 111). Social phenomena can only be rendered intelligible, they cannot be explained in a causal framework. The principle of *verstehen* is both necessary and sufficient method for the social study (Bhaskar 1989: 135).

Although the term “meaning” of the actions is an ambiguous term ranging from what is consciously and individually intended to what is communally and often unintendedly significant (Hollis, 1994:17)<sup>7</sup>, the method of social sciences in this approach is taken as *conceptual* and their central category as *meaning* whereas the method of natural sciences is *empirical* and their central category is *causality*. The aim in social science is therefore not to include human action under a causal law, but to discover the *rules* (or goals or meaning) which guide the action and render it meaningful; and the effort for understanding these rules requires *interpretation*. In other words, hermeneutic approach treats social phenomena as a text to be decoded through imaginative reconstruction of the significance of the various elements of the social action (Little, 1991: 68). Therefore, in the hermeneuticist tradition, society is entirely conceptual in character and social life does not exist independently of the concepts about how individuals perceive it (Bhaskar, 1989: 134). For example, according to Peter Winch, a leading Hermeneuticist, social sciences are concerned with meaningful, or “rule following” behavior and they must be based on the understanding of the rules which constitute the forms under study (Winch 1958: 51-52). Likewise, Wilhelm Dilthey, who is regarded as the originator of the hermeneutic social theory, and who

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<sup>7</sup> Within the hermeneuticist tradition, two broad strands can be distinguished. Firstly, in the Weberian strand, which also includes the Austrian Hermeneutics we mentioned in the previous footnote, the category of meaning is understood in terms of the different definitions of rationality, coupled with methodological individualism. In this strand the aim is to show that how subjective meanings attached by individual actors to their actions create social phenomena through the intersubjective meanings of individual actions. The second strand is inspired by Wittengsein’s notion of “language games” and championed by Peter Winch (1958), and argues that particular practices of individuals are embedded within the wider practices that constitutes human culture and that the category of meaning (which is given by wider social practices) should be sought in the rule-following behavior of individuals. Yet, in both cases, the category of meaning is of utmost importance. As Hollis (1994: 18-19) observes, social study may proceed either in a holistic or a “top down” way in the sense that the “games” individuals play absorb them, or in an individualist or “bottom up” way in the sense that it is the players who construct the “games” of social life. In this respect, hermeneuticism by itself cannot prevent us from lapsing into closed-system theorizing.

adopts a “holistic” view, argued, following Hegel, that the category of “meaning” must be considered as “the category which is peculiar to life and to the historical world.” For him, human life can be understood only by means of categories, not applicable to the physical world, like “purpose,” “value,” and “ideal” as different aspects of “meaning.” Dilthey believed that the connectedness of life can be understood only through the meaning that individual parts have for understanding the whole. But what we call “the whole” is in fact internal to the whole of humanity. “Life does not mean anything other than itself. There is nothing in which points to a meaning beyond it” (quoted in Hollis 1994: 17). In economics too, especially within the Austrian economics, the importance of the hermeneutic elements has been widely recognized (e.g., Hayek, 1942, 1943; Lachmann, 1950, 1969; Lavoie, 1990). According to Hayek (1942, 1943) for example, one of the most important differences between the natural sciences and the social sciences is that there are no objective facts in the social (or moral, praxeological) sciences; they are about individuals’ beliefs, expectations etc. (Hayek, 1942: 277-80). The immediate corollary of this thesis is the constituted character of the social “facts”, and hence the hermeneutic character of social sciences. For this reason, the “social laws” are different from the natural ones: “what is relevant in the study of society is not whether these laws of nature are true in any objective sense, but solely whether they are believed and acted upon by the people” (Hayek, 1942: 281). This hermeneutic character is a distinguishing feature of the social science:

The special difficulty of the social sciences is a result not merely of the fact that we have to distinguish between the views held by the people which are the object of our study and our views about them, but also from the fact that the people who are our object themselves not only are motivated by ideas but also form ideas about the undesigned results of their actions -- popular theories about the various social structures or formations which we share with them and which our study has to revise and improve. ... The real contrast is between ideas which by being held by the people become the causes of a social phenomenon and the ideas which people form about that phenomenon (Hayek, 1942: 285).

In other words, the relation between human sciences and their subject matter is in the form of a “subject-subject” (or concept-concept) relationship rather than simply a “subject-object” (or concept-thing) one (Bhaskar, 1989: 21). The immediate corollary of this position is that social phenomena, as the result of the unintended consequences of intentional individual action, are too complex to make predictions (Hayek, 1942: 290), which implies that within the human realm, constant conjunctions, distinguishing characteristic of the notion of closure, cannot hold. The hermeneutical character of the social realm (or the human realm in general), forces the scientist to work

within open systems. Yet, even if this seems to be a real limit for a qualified naturalism, it can also be argued that it is the existence of such limits themselves which make social scientific study possible. For the beliefs and theories held by the individuals constitute the “raw materials” of social science from which the scientist starts her inquiry of the society, as Hayek emphasized in the above quotation. This quotation also shows the “double hermeneutic” that is prevalent in the social realm: not only that theories start from individual beliefs, notions, etc., but also that they influence these beliefs, notions, etc. Through their influence on the cognitive processes of social agents, they really become “material forces” as well. Therefore, it is necessary to explore the importance of this double hermeneutic.

### *2.3 Open Systems: Double Hermeneutic*

The hermeneutic character of the social science is also emphasized within the critical realist position, which claims that the hermeneuticist tradition is correct to stress that social reality is pre-interpreted, and thus cannot be independent of agents’ interpretations, so that *verstehen* is a condition for social science (Bhaskar, 1989: 159). However, what this tradition overlooks is the fact there are real social structures or, social relations which are of relative independence of individuals. That is to say, contrary to the hermeneuticist tradition, critical realism also argues that there are causal laws at work in the social life, and these laws may be opaque to agents’ perceptions, but it is in mistake in seeing laws as empirical regularities in closed systems, for the social sphere is always constituted by open systems. However, the issue here is not simply the tensions between the individual action (the “Weberian stereotype”) and the collective phenomena (“Durkheimian stereotype,”) <sup>8</sup>; critical realism argues that individuals and society refer to radically different kinds of things: although society cannot exist without human activity, and such activity cannot occur unless the agents engaging in it has a conception of what they are doing (an hermeneutical insight), it is not true to assert that man creates it. Rather, people reproduce or transform it. Since society is already made, any concrete human activity or praxis can only modify it. In other words, society is not the product of their activity but it is an entity that exists only in their activity (Bhaskar, 1989: 31-37).

Conscious human activity can be made only in given objects, that is, it always expresses and utilizes some previously existing social forms. Besides the fact that society is irreducible to the individual, it is a

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<sup>8</sup> In other words, Hayek’s (1943) criticisms of objectivism (as opposed to subjectivism), collectivism (as opposed to individualism); and “historism” (as opposed to the conceptual or hermeneutical character of social science) as the basic “sins” of scientism committed in the study of society are not relevant here.

necessary condition for any intentional human activity. In other words, society and human praxis both have a dual character. Society is both the material cause and the continually reproduced outcome of human agency (duality of structure); and praxis is both conscious production, and normally unconscious reproduction of the conditions of production (duality of praxis) (Bhaskar, 1989: 34-35; Giddens, 1984: 25). In sum, this “transformational model” asserts that people do not create society for it already exists and is a necessary condition for human activity. Society must be regarded as an ensemble of structures, practices, and positions which individuals reproduce and transform. But these structures cannot exist independently of people’s actions. Still, even though society is only present in human action, human action is always made in the context of social forms. However, neither can be reduced to or explained in terms of the other (Bhaskar, 1989: 37).

Therefore, there are very important ontological, epistemological, and relational limits to naturalism arising from the differences between natural and social structures. First of all, social structures, unlike natural ones, can only exist in the activities they govern and they cannot be empirically identified independently of these activities. In the social activity people both make the social products and reproduce/transform the structures. In other words, social structures are themselves social products, and are subject to transformation and therefore they are only relatively autonomous. The property of society as an ensemble of relatively independent and enduring generative structures which are subject to change means that society “is an articulated ensemble of tendencies and powers which, unlike natural ones, exist only as long as they (or at least some of them) are being exercised; are exercised in the last instance via the intentional activity of men; and are not necessarily space-time invariant” (Bhaskar, 1989: 39). And these ontological limits imply that social scientific explanation is necessarily incomplete for there is always possibility that better explanations are replaced with the previous ones, depending on the development of the social structures that take place (Bhaskar, 1989: 48). Therefore, the ontological limits on a possible naturalism are (Bhaskar, 1989: 38);

- 1) Social structures do not exist independently of the activities that they govern whereas natural ones do (activity-dependence).
- 2) Social structures do not exist independently of the agents’ conceptions about what they are doing in their activity, whereas natural ones do (concept-dependence).

- 3) Social structures may be only relatively enduring; they are not, unlike natural structures, space-time invariant (space-time dependence)<sup>9</sup>.

However, the dependence of social structures upon their effect, or the unperceivable character of society (concept-dependence) poses no epistemological difficulty for naturalism. Rather, the epistemological limits for naturalism are posed by the fact that social objects only manifest themselves in open systems in which empirical invariances cannot be obtained (Bhaskar, 1989: 45). However, since closed systems cannot be obtained generally in natural sciences also, this fact does not lead to difficulties specific to social sciences.

Turning to the relational limits of naturalism, a primary difference of social sciences from the natural ones is that social science is internal to its subject matter whereas natural science is not. That is, given the internal complexity and interdependence of social activities, the objects of scientific inquiry do not exist independently of, or even may be affected by, the social science itself. In other words social (and in general human) sciences are themselves aspects and even causal agents of what they are trying to explain (Bhaskar, 1989: 47). Social science is also affected by the developments in society and with this regard a new development in society can be conceptualized only long after the development itself. Therefore, this dynamic interaction between the development of the object and the development of knowledge also requires a sociology of knowledge approach. Just as the impossibility of social science without society, society cannot exist without some kind of scientific, proto-scientific and ideological set of ideas (Bhaskar, 1989: 48), or, to use Schumpeter's (1954: 41-42) famous notion, without the "prescientific vision" that constitutes the "raw material" for scientific activity, for these constitute the self-understandings of individuals about what is going on in society. Taking into account this dynamic interaction between the social science and its "object", it should be clear that social science is an effective agent in shaping and/or transforming the very reality it aims to explain. Theories in social sciences are theories about practices, which are partly constituted by certain self-understandings of human beings. Therefore, to the extent that theories transform this self-understanding, they sometimes undercut, bolster or transform the constitutive features of these very practices (Taylor 1985b: 101). That is to say, social theory itself becomes a form of "practice" (Taylor 1985b).

This transformative power of the social theory is clearly emphasized by Giddens's notion of the "double hermeneutic." In this conception, the

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<sup>9</sup> Actually, they are more space-time specific than some kinds of natural, such as biological, structures (Bhaskar, 1989: 176).

social world is constituted by both the actions of the actors and the “metalanguages” invented by the social sciences (Giddens, 1984: 284). In other words, social science is not only affected by society, but at the same time is an effective agent in shaping it; that is, social science is internal to its “subject matter” in a way natural science is not. The findings of the social science has the property of “self-fulfilling prophecies,” in the sense that they “cannot be kept wholly separate from the universe of meaning and action which they are about” (Giddens, 1984: xxxii-xxxiii). This also explains the fact that in the social sciences the “founding fathers” cannot usually be forgotten because their insights, hypotheses, theories etc. become the constitutive parts of contemporary reality. That is to say, their theories could also have the effect of creating institutional structures in which they could be “true.”

These remarks suggests that institutional transformations may provide analogues to the experimental activity in the natural sciences. With respect to “social experiments,” it could be helpful to consider the fact that in periods of social transition or crisis, emergence of new theories and/or new developments in existing theories are not rare occurrences because some “deeper” realities or generative mechanisms that are formerly opaque may become more visible to the agents in society (Bhaskar, 1989: 48). However, the principle of double hermeneutic suggests that such institutional transformations cannot occur independently of the views of agents in society about what is going on. Agents in society may become more willing to undertake some “experiments” based on new developments in the discursive realm, or to accept them under such circumstances. Here the dynamic character of the relationship between the social science and its object, social relations and/or institutions, becomes more visible. The “social experiments” designed by the scientist helps her not only to identify some real structures that did not manifest themselves previously, but also to affect and/or change these structures through “persuading” the agents in the society to behave as the theory suggests. Of course, in this interaction between the “subject” and the “object,” the question about the direction of causation is a chicken-egg question; the subject both influences the object, and, since the social science is also a part this very object, it is also influenced by the object. The point here is that such experiments also act as “self-fulfilling prophecies.” Then, especially in the case of economics, a natural question is whether such ontological closures are possible or not. It is the contention of this paper that such attempts to “close” the reality itself by devising institutional transformations within the society are also part and parcel of economic theory taken as a form of practice. Two most prominent examples in this regard seem the creation of the very market system (Polanyi, 1944), and the creation of the

institutional structure of the “Welfare State” based on the theory provided by Keynes (1936), which also conforms to Schumpeterian understanding of the capitalist system. Both of these developments can be conceived as conscious attempts, or social “experiments,” to change the institutional structure of capitalism, even to design new institutions in some periods of transition or unrest that capitalism had undergone in specific conjunctions of history. These examples, it is argued, clearly show the transformative power of economics.

### 3. “Ontological Closure” and Economic Theory: Design of Social Institutions

#### 3.1 *Karl Polanyi and the Market “Utopia”*

Economists, at least since Adam Smith, have been concerned with the emergence of the idea of a social “order.” Although in economic discourse this order appears as a “spontaneous” one, as Hayek called it, that emerges as a result of an “invisible hand,” to use this time Adam Smith’s term, it is also possible to argue, as Karl Polanyi (1944) did, that the things may work in the other way round as well: that is, the “self-regulating” market system, or capitalism, was actually the result of deliberate attempts, as designed by the political economists, and implemented by the power of the state.

The market system, this “stark utopia” according to Polanyi (1944: 3), is characterized by two related features: the creation of the “commodity fictions,” that is, labor, land and money become “commodities,” which gives rise to a separate “economic” sphere for the first time in human history, and the reflection of this institutional separation in people’s minds, “the market mentality,” or more accurately, economic determinism. The market economy is a unique and peculiar economic system in human history; never before capitalism has the economic sphere been institutionally separated from the rest of society, in the specific sense that the economic system is *disembedded*, i.e, it stands apart from society, more particularly from the political and governmental system. In such an economic system, based on “the” market referring to a self-regulating market system in which each individual market is connected to the other and sets its own price without any outside intervention, the whole of economic life is to be governed by the market prices on the basis of the “motive of gain and the fear of hunger” (Polanyi, 1944: 43). Thus, the institutional separation of the economic and political spheres is a key to understanding this society, for a “self-regulating market demands nothing less than the institutional separation of society into an economic and political sphere. Such a dichotomy is, in

effect, merely the restatement, from the point of view of society as a whole, of the existence of a self-regulating market” (Polanyi, 1944: 71).

This institutional separation of the economic sphere from the political is a result of the creation of the “*fictitious commodities*,” that is, labor, land and money, all of which must be subjected to sale in the market in order for the market economy to function, even though they are not produced in the same sense as the production of other, genuine commodities. For what we call “labor” is nothing but the whole of human life activity, whereas what land as a “factor of production” indicates is nothing but nature itself (Polanyi, 1944: 72-75). In other words, their treatment as commodities means that the entire society must become subordinate to the market. Under such a system human beings for their own survival need to buy commodities on the market with the incomes they earn by selling other commodities they could offer for sale, including their own labor and natural environment, land.

According to Polanyi, the institutional separation between the economic and political spheres is “merely the restatement, from the point of view of society as a whole, of the existence of a self-regulating market” (Polanyi, 1944: 71). Historically, this dichotomy presupposed four institutions, two of which were economic in character and the remaining two were political: while the self-regulating market and the Gold Standard formed the economic sphere, the “liberal” state and the balance of power system formed the political. However, since the self-regulating market is the dominant institution within this setting, all other institutions, namely the Gold Standard and the balance of power system within the international sphere, and the state within the domestic, to use another taxonomy, must be at the service of the market institution (Polanyi, 1944: 3). That is to say, these three institutions are to be characterized by their functionality: They exist by virtue of their roles in facilitating the smooth working of the market.

Polanyi continuously emphasizes the fact that in the emergence of such an institutional structure, the role of conscious design was crucial. The market economy as a “project,” designed by the liberal thinkers and implemented by the state interventions, is a prevalent theme throughout *The Great Transformation*. According to him, “there was nothing natural about *laissez-faire*; free markets could never have come into being merely by allowing things to take their course” (Polanyi, 1944: 139). An “enormous increase in continuous, centrally organized and controlled interventionism” was necessary, in order to “make Adam Smith’s ‘simple and natural liberty’ compatible with the needs of a human society,” (Polanyi, 1944: 140). To this end, the most suitable means was the state. In fact, the significance of the state in the establishment of the market

system with continuous and conscious interventions was actually one of the cornerstones of the liberal doctrine itself:

Of the three things needed for economic success –inclination, knowledge, and power– the private person possessed only inclination. Knowledge and power, Bentham taught, can be administered much cheaper by government than by private persons. It was the task of the executive to collect statistics and information, to foster science and experiment, as well as to supply the innumerable instruments of final realization in the field of government. Benthamite liberalism meant the replacing of Parliamentary action by action through administrative organs (Polanyi, 1944: 139).

The state has always been important for the market from the very beginning. In fact, its significance in the establishment of the market system with continuous and conscious interventions was so prominent that the assertion that “the liberal economic order was designed by the early English political economists and was instituted by the power of state” (Polanyi-Lewitt, 1995: 10-11) is not an excessive one. With respect to the “institutionalization” of the market economy, three acts were of utmost importance: the Poor Law Reform Act of, 1834, in establishing the labor market for the first time; the Bank Act of, 1844, in establishing the principle of Gold Standard; and the repeal of the Corn Laws in, 1846, in establishing the principle of “free trade.” These acts corresponded to the three tenets of economic liberalism upon which the market economy was established. In other words, the institutionalization of capitalism was completed with these three acts, the most important of which is, of course, the establishment of the labor market. Such a proposition suggests that capitalism arrived too suddenly; in fact, Polanyi emphasizes the abruptness of the change. According to him, liberalism created a novel system by integrating more or less developed markets:

Besides continuous growth from small beginnings, there is also a very different pattern, that of discontinuous development from previously unconnected elements. The “field,” in which such sudden change as the emergence of a new, complex whole occurs, is the social group under definite conditions. These discontinuities broadly determine both what ideas and concepts gain currency with the members of a group and at what rate. But once disseminated, these ideas and concepts permit change at an enormously accelerated rate, since the patterns of individual behavior can now simply fall into line with the new general pattern preformed by those ideas and concepts. Formerly unconnected elements of behavior thus link directly up in a new, complex whole, without any transition (Polanyi 1977: liii-liv).

Therefore, if Polanyi's thesis is accepted, economic theory (including its neoclassical variant), seems to explain the working of a mechanism which actually contributed to emerge. In this sense, *homo oeconomicus*, the agent of the neoclassical story, is actually a "constituted" entity that emerged as a result of the market system. The abstraction of the "rational economic man," *Homo oeconomicus*, becomes a reality within the market system; individual is transformed into a functioning component of a system, and therefore as such must be equipped with essential features indispensable for running the system. Here, it is essential to understand that it is the very reality of the market system that reduces man into an abstraction, for when individuals enter into the market sphere, they become transformed so as to behave under the guidance of the optimization principle (Kosík 1976: 52). The immediate corollary is, of course, the "market mentality" with its postulate, the notion of economic "rationality": Once a human being is reduced to an "individual in the market" (Polanyi 1977: 29), i.e., to *Homo Oeconomicus*, it was now easy to argue that "economic" action "was 'natural' to man and was, therefore, self-explanatory" (Polanyi 1977: 14). That is to say, from now on, the term "economic" could safely be identified with the market activity. This could only be achieved through the institutional separation between the economic sphere within which individuals are forced to behave under the guidance of self-interest ("the hope of gain and the fear of hunger"), and the political sphere, within which individuals are treated as abstract citizens. For this society is only an "economic society," which "had emerged as distinct from the political state" (Polanyi 1944: 115-16). This distinction between the "civil society" and the "political state" is indeed the manifestation of the fact that the spheres of the economic and the politic have been separated and the individual has been reduced to an "isolated monad who is withdrawn into himself" (Marx 1975: 229): the individual is only acknowledged in the form of the "egoistic" individual, whereas in the political sphere he is just treated as an abstract "citizen" (Marx 1975: 220). Under such an institutional setting, the *homo oeconomicus* becomes real, and it would become natural to treat not only preferences of the individual, but also the social and institutional structure within which the market function as given. Hence a closure that is achieved through institutional transformation. Yet, such a designing role played by economics is by no means limited to the emergence of the market system. It has been effective for its later, "welfare" phase as well.

### 3.2 Keynes and Schumpeter in the Creation of the Welfare State

Keynes, in an article he wrote on the *General Theory* in 1937, argues that he had two main grounds for his departure from the orthodox "Classical" theory, namely the principle of effective demand, and the

principle of uncertainty (Keynes, 1973: 122-23). As is well known, the first, revolutionary aspect of his work depends on this principle, which is considered as a sum of two components, propensity to consume and investment (Keynes, 1936: 25-36). If  $Z$  is the aggregate supply price of the output from employing  $N$  workers, then the Aggregate Supply function will be  $Z = \Phi(N)$ ; and  $D$  is the proceeds which entrepreneurs expect to receive from the employment of  $N$  workers, then the Aggregate Demand function will be  $D = f(N)$ . The value of the aggregate demand function at the intersection of aggregate demand and supply schedules, the effective demand, is the sum of propensity to consume and investment:  $D = D_1 + D_2 = \Phi(N)$ . Here, whereas  $D_1 = \chi(N)$  denotes for consumption, investment is expressed as a "residual":  $D_2 = \Phi(N) - \chi(N)$ . The equilibrium level of employment will depend on the aggregate supply function  $\Phi$ , propensity to consume  $\chi$ , and the volume of investment  $D_2$ . Since investment is expressed as a residual, the volume of employment and therefore production are to be determined primarily by the propensity to consume, which is a "psychological law" beyond the control of any agency. On the other hand, the volume of investment depends upon the future prospects of the profitability of investment (the marginal efficiency of capital), which in turn depends on the expectations of investors, determined primarily in capital markets, depending on the "state of confidence," i.e., the psychology of the actors within these markets (Keynes, 1936: 148). This confidence in turn is determined by a convention prevailing in the market, whose essence lies in the assumption that "the existing state of affairs will continue indefinitely, except in so far as we have specific reasons to expect a change." (Keynes, 1936: 152). Nevertheless, because of uncertainty, this confidence may and will undergo drastic changes. Uncertainty in Keynes refers to a state in which there is no way to calculate mathematical probabilities or expectations (Keynes, 1936: 152; Lawson, 1985: 915; Hamouda and Smithin, 1988: 160-61), which is different from the notion of "risk" in which probability distributions are possible to assign (Hamouda and Smithin, 1988: 162). Whereas "the game of roulette is not subject, in this sense, to uncertainty," says Keynes, about matters such as prices twenty years hence or the position of private wealth owners in a distant future, "there is no scientific basis on which to form any calculable probability whatever. We simply do not know" (Keynes, 1973: 113-14).

Yet because of practical necessity, we need to act on the basis of the assumption that the present is a good guide for the future, in order to form our expectations regarding future. And, not only marginal efficiency of investment, but also the liquidity demand function will depend on such a "flimsy foundation," for "our desire to hold money as a store of wealth

is a barometer of the degree of our distrust of our own calculations and conventions concerning the future” (Keynes, 1973: 116). This convention is subject to drastic changes because of a “sudden fluctuation of opinion due to factors which do not really make much difference to the prospective yield” (Keynes, 1936: 154). Then, both the interest rate and the volume of investment fluctuate, and it is quite natural for the volume of investment, and therefore employment to fluctuate as well (Keynes, 1973: 118). That is to say, for each expectation level, there corresponds a different Marginal Efficiency of Investment (and different interest rate) schedule. However, as Kalecki emphasizes in his review of the *General Theory* (Targetti and Kinda-Hass, 1982: 251-53), when the expectations fluctuate in a drastic way because of market psychology, the volume of investment, and thus the employment and income levels will become indeterminate.

Of course, such a picture of the capitalist accumulation process is quite disturbing, because “when the capital development of a country becomes a by-product of the activities of a casino, the job is likely to be ill done” (Keynes, 1936: 159). Under these circumstances, capital accumulation will come to depend on the “animal spirits –of a spontaneous urge to action rather than inaction” (Keynes, 1936: 161) of capitalists. “This disturbing conclusion” according to Keynes, “depends, of course, on the assumption that the propensity to consume and the rate of investment are not deliberately controlled in the social interest but are mainly left to the influences of *laissez-faire*” (Keynes, 1936: 219). Then, since capital accumulation is “determined by psychological and institutional conditions” (Keynes, 1936: 217), the solution is obvious. What is needed is “a somewhat comprehensive socialization of investment” (Keynes, 1936: 378), that could guarantee full employment and the continuity of capital accumulation, which is inherently dynamic and vulnerable to the changes in the business psychology. The problem for Keynes was therefore to free accumulation process from the caprices of the “animal spirits” which is by definition external to the system by internalizing it to the system in the form of the “welfare state” setting.

Keynes’s situation in this respect seems similar to that of Schumpeter, who always emphasizes the dynamic, and inherently instable, aspect of the capitalist accumulation process. For Schumpeter too, just like Keynes and Marx, capitalism is an inherently a dynamic system displaying structural instability (Vercelli 1985), in which the accumulation of capital always requires to find new methods of production, new forms of industrial organization, new methods of transportation, and new markets (Schumpeter, 1942: 83). That is, the accumulation process is characterized as a creative destruction process in which economic structure is revolutionized from within, in the form of

the destruction the old one so as to give rise to a new one (Schumpeter, 1942: 83). As is well known, the key for this creative destruction is the notion of innovation. However, with respect to innovation process, Schumpeter seems to have undergone a fundamental change of opinion. Whereas in his earlier work *The Theory of Economic Development* (Schumpeter, 1911), he argued that innovative activity comes from small firms operating in highly competitive industries, in his later work, *Capitalism, Socialism and Democracy* (1942), primary source of this activity comes from large firms operating in highly oligopolistic industries.<sup>10</sup> In the former book, the principal driving force behind innovations is the entrepreneur, who constantly introduces new inventions in the production process in order to increase his or her profits. In the latter, it is the institutionalization of modern Research and Development (R&D) laboratories which guarantees accumulation. That is to say, there are two different “closures” that Schumpeter adopts in these two books. In the first case, the entrepreneur appears as a *deus ex machina*, that is to say, it is external to the system: once again, the accumulation process depends on the caprices or, the “animal spirits,” if it is permitted to use Keynes’s expression, of the entrepreneur. Yet, just like Keynes’s case, it is very disturbing to leave the survival of the system into the hands of the entrepreneur. In the second book, the entrepreneur, as it were, is internalized into the system in the form of the R&D activities, for such activities will ensure the continuity of innovations in a setting in which the creation of innovations and investment becomes a routine carried out by specialists. In this regard, the oligopolistic, big corporation, which is capable of undertaking R&D activities, is useful to utilize the potentialities of mass production, which cannot be realized within a perfectly competitive environment (Schumpeter 1946: 200). Such a corporation is able to undertake “creative responses”, which involves the creation of new products, new production and marketing methods (as opposed to the “adaptive response”, which involves no change in the organizational and institutional structure), to changes in the economic and social conditions, which itself also becomes a driving force for the changes in social and economic environment; that is to say, creative responses can also change the rule of the “game” (Schumpeter 1947: 222). When these responses are institutionalized through the R&D activities of the big corporation, “the element of personal intuition and force would be less essential than it

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<sup>10</sup> According to Paul Sweezy, this change of opinion actually dates to 1928, in Schumpeter’s article “The Instability of Capitalism” that appeared in the *Economic Journal* (Schumpeter 1928). From this article on, the exclusion of the entrepreneur from the process of innovation through routinized practices of specialists, appears as a basic change in capitalism’s *modus operandi* (quoted in Bottomore, 1985: 36-37).

was: it could be expected to yield its place to the teamwork of specialists; in other words, improvement could be expected to become more and more automatic" (Schumpeter 1947: 229). In short, the entrepreneur gives way to an institutionalized "creative destruction". In a sense, the big, oligopolistic corporation can be seen as an efficient way to institutionalize Schumpeter's famous "creative destruction" process, and hence to guarantee capital accumulation. However, in order for the big corporation to fulfill this function, it should work in an appropriate setting whose overall structure will secure stability. This new institutional setting would be the "welfare state," whose essential institutional agents were the state, the big corporation, and trade unions that act cooperatively in order for the capital accumulation to be stabilized.<sup>11</sup>

As the above discussion regarding the institutionalization of the market system reveals, the state has always been an important pillar for the market system; it is not only necessary in order to establish the system, but also essential for reproduction of the system as a whole. In a capitalist society, the state plays a dual role: while it is the governing organ of the "ruling classes," it also claims to represent the whole society. Then, on the one hand, since the state, or the bureaucracy, represents the whole society, it functions to protect the "interest" of the society as a whole, that is, it takes measures to protect society from the destructive effects of the market mainly through its redistributive role. However, since even the very existence of the state depends upon capital accumulation in a capitalist society, it is no mystery that it would promote capitalist relations by all means. In this regard, it should be noted that the state's centralized power, which actually is a result of the fact that the state has the monopoly over the means of violence in capitalist societies, gives it a unique position in both enforcing and protecting property rights and the formation of money and the credit system (Giddens, 1986: 152-54). It can be asserted that the modern "welfare state" is a more "peaceful" way to maintain the separation between the economic and the political spheres. That is to say, this postwar institution, the "social contract" with the workers in the form of full employment and comprehensive welfare (Kapstein, 1996: 16-17), has been devised as an "economic" solution in order for the social tensions between classes not to develop and take the form of opposition to the market system itself. In other words, welfare state, whose essence "consisted of matching mass production and mass consumption" (Lipietz, 1997: 117), represents a "great compromise" between the needs of capitalist production and of society (Lipietz, 1997: 118).

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<sup>11</sup> Brouwer and Kleinknecht (1999) suggest one possible link between Keynes and Schumpeter, i.e., between effective demand and firm-level R&D efforts: High levels of effective demand may play a role to increase firm's R&D intensities.

Giddens (1994: 136-37), on the other hand, identifies three structural sources of the welfare state: 1) enforcing labor contracts; 2) creation of national solidarity in the nation-state building process; 3) management of uncertainty, especially in the form of Keynesian policies. These three aspects seem to function to protect capitalist production process, once again displaying the “economic” character of the capitalist society. On the other hand, with respect to the uncertainty management function, it is possible to assert that the modern corporation too can be seen as an institution fulfilling the needs of the accumulation process in a stable environment, for the “principal animus behind the corporate revolution is to urge stabilize and control the exigencies of the corporate environment, and these exigencies are largely the uncertainties concomitant to the operation of the market mechanism” (Stanfield, 1986: 119). That is to say, the basic function of the so called “monopoly capitalism” (Baran and Sweezy, 1966) is actually to stabilize the market system by creating such a corporate environment in which there are far fewer agents to negotiate with the other two most important actors, i.e., the state and trade unions, so as to achieve a suitable environment for accumulation.<sup>12</sup> Such a setting will alleviate the tensions among the social classes without endangering the accumulation process.

Therefore, it seems that the basic function of this new order in which welfare state, trade unions and big corporations play the crucial role was to stabilize the accumulation process. Following Keynes, if the accumulation of capital is under the threat of instability emanating from uncertainty, then the best way to create the preconditions of accumulation process is to devise an institutional structure in which there are three basic parties; workers, organized around big trade unions who need concessions in the form of full employment and comprehensive welfare spending, the state that monitors the “social contract” among these two parties and supporting business through government contracts, and the big corporation. In this “tripod” model, uncertainty could be reduced, and the accumulation process could be “institutionalized.” Such an institutional design has proved successful for a long time in establishing a continuous accumulation process<sup>13</sup>.

<sup>12</sup> To this function, one can also add Schumpeter’s view that under conditions of depression, monopolistic elements may result in both steadier and greater expansion of the total output than otherwise (1942: 91).

<sup>13</sup> Of course, such attempts at forming closure in society both presupposes, and overlook human agency, the transformative power of human beings. With respect to the relation between social structures and individual human action, it is always the case that reproduction of social institutions, relations and structures, even those created by deliberate design such as the market system, is always a contradictory process. As Polanyi warned, the nineteenth century civilization was disintegrated, not because of invasion or a revolution, but because of “the measures which society adopted in order not to be, in its turn, annihilated by the action of the self-regulating market” (Polanyi, 1944: 249), as was conceptualized by Polanyi with the notion of the “double movement” (Özel, 1997). For the

### 3. Conclusion

On the basis of these two examples of the double hermeneutic, that is, the creation of the market system, and the development of the welfare state, it can be argued that economic theories too act as “self-fulfilling prophecies.” If we are all slaves of some “defunct economist,” the relationship between the subject and the object of social scientific inquiry should be considered as a dynamic one because of the hermeneutic element which is always at work in the societal realm. Since the social science itself is an active agent that participates in the constitution of the very world it tries to understand or explain, the process of reproduction and/or transformation of the society, or of different structures and institutions in it becomes the basic issue for the social science. Yet, the existence of open systems in the human realm makes this task a very difficult one. Then, the most promising way to handle this double hermeneutic seems to adopt an interdisciplinary attitude towards the subject matter of economics, the market system, for its working depends on many contradictory elements emanating from the human transformative power. That is to say, even if it could be seen as a form of “scientism” by some (e.g., Hayek, 1942, 1943), it seems necessary to recognize, and even actively use (when possible), this transformative power of the social science, without forgetting, of course, that it is “an illusion to assume a society shaped by man's will and wish alone” (Polanyi, 1944: 257)

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contradictions of the welfare state, on the other hand, see Habermas (1973), O'Connor (1973), Wolfe (1977), Offe (1984). For the political, class struggle aspects of full employment policy, see Kalecki (1944). And, after all, it is one of Schumpeter's (1942) basic theses that capitalism is doomed to collapse, not because of its failure, but because of its very success in rationalizing the society in its all aspects causes it to be trapped in, to use Max Weber's famous term, an “iron cage” (Bottomore, 1985). These contradictions reveal the fact that in the human realm, we only have “open systems” no matter how hard we try to “close” them. After all, “the road to hell is paved with good intentions.”

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## Özet

### Açık Sistemlerin Kapatılması: İktisatta 'Çifte Yorumlama'ya İki Örnek

Bu yazının çıkış noktası, Roy Bhaskar'ın, atomistik olaylar arasındaki sabit bağlantıları dikkate alan ve esas olarak kapalı sistem düşüncesine dayanan Hume'cu nedensellik anlayışına yönelttiği eleştirilerdir. Yazının temel savı, çoğunlukla kapalı sistem kuramlarıyla düşünme alışkanlığında olan iktisatçıların, toplumsal dünyanın açık sistemlerle niteleniyor olması yüzünden çabalarını, uygun kurumsal yapıları geliştirme ya da dönüştürme yoluyla gerçek dünyayı 'kapatma' üzerinde yoğunlaştırdıkları, başka bir deyişle kuramların genellikle kendi betimledikleri bir dünya için geçerli olmaları yüzünden dünyayı kendi öngördükleri biçimde dönüştürmeye yönelmeleridir. Bu 'çifte yorumlama'nın' iktisadın ayrılmaz bir parçası olduğunu göstermek için, kapitalizmin tarihinden alınan iki durum incelenmektedir. Bunlar, ilkin Polanyi'nin piyasa sisteminin klasik iktisatçıların bilinçli çabalarıyla yaratıldığı tezi ve ikincileyin "refah devletinin" yaratılmasında Keynes'in ve Schumpeter'in görüşlerinin önemidir.