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TRANSCENDENTAL REALISM AND THE CRISIS OF PHILOSOPHY
FOR HUMAN GEOGRAPHY : A CRITICAL REVIEW

SYUNG-DOO CHOI

School of Geography
University of Leeds
Leeds LS2 9JT

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ABSTRACT

My intention in this paper is a critical reading of Bhaskar's writings. I argue that Bhaskar's continuing commitment to naturalistic realism prevents him from understanding properly both the conception of social science and the constitution of society.

Gregory: But one of the reasons that the 'new realism' has emerged, I think, is because of an increasing concern with just those ontological issues. Bhaskar, Keat and Urry, Sayer, and others seem to be proposing that their engagement with realism is intended precisely to enable them to address ontological questions in a much more central way than the traditional formulations allowed.

Giddens: I don't think so - or what they mean by ontology isn't what I was just referring to. What I mean is a theory of social being, social existence; I don't mean by it a more generalised philosophical ontology of, as it were, what 'being' is in general (Giddens, 1984, p.124).

1. INTRODUCTION

Since the late 1970s there have been some important endeavours in human geography to explore the relation between the discipline and contemporary philosophy and social theory. Apart from Marxist (or radical) geography and so-called humanistic geography which have pursued the relation in a very broad way, perhaps the more distinctive feature in these endeavours may include the geographical examinations and applications of Habermas's critical social theory, Giddens' theory of structuration, and realists' (especially Bhaskar's) account of society among others. Of course, the studies of these theories or paradigms are not separated, but largely integrated in each of such endeavours (cf. Gregory, 1978; Sayer, 1984). But it seems just because of this integrative (or put in other words, eclectic or synthetic) character of these endeavours that one of their difficulties may be raised. That is to say, most geographers who have been engaged in such endeavours appear to ignore or underestimate the differences or strains between the works which they want to discuss in the context of their own discipline. I do not deny, however difficult it may be, the possibility of integrating such works.

But needless to say it is necessary to examine these works from a critical viewpoint, before doing so in genuine sense.

The above quotation is an example which represents well a difference or strain between Giddens's thought and the realist account of society. It is true that once Giddens himself spoke of 'realism' in a sense that its 'modified' version might offer an appropriate philosophical background on which social theory would be constructed (Giddens, 1977, 1979, 1982). And it has been generally seen by some geographers and others that there are some parallel points between Giddens' theory of structuration and Bhaskar's 'transformational model of social activity' (cf. Gregory, 1981, 1982a, 1982b; Thrift, 1983; Minicua, 1980). But there is now an important question: why does Giddens think of his own position as rather different from that of writers like Bhaskar among others? There may be several sorts of answer to this question, but I do not intend in this paper to prepare to such an answer by discussing the similarity and differences between them. Although I shall sometimes point out difficulties in his work in comparison with Giddens, I shall concentrate upon a critical reading of Bhaskar's writings (see the postscript in Bhaskar, 1978 for commentary reviews and his response to them; and see Halfpenny, 1980 and Benton, 1981 for reviews or comments on Bhaskar, 1979). But it is my standpoint throughout this paper, which might be implied in the above quotation, that the thesis that "the concept of existence is univocal: 'being' means the same in the human, as the natural world" (Bhaskar, 1979, p.60) can be no longer sustained in any way.

2. FIRST OBSERVATIONS

The question, 'what is (new) realism?' is difficult to answer. By 'new realism' (hereafter simply 'realism') I refer to the 'school' whose arguments have been expressed in a body of writings in recent philosophy and the social sciences for which Rom Harre's earlier development of a realist philosophy of science (for example, Harre, 1970, 1972) had proved to be seminal (Keat and Urry, 1981 2nd ed., p.229). The writings of this school included Harre and Madden (1975), Keat and Urry (1975), Bhaskar (1975) and Sayer (1984) which provided some form of realist accounts of scientific knowledge, and Harre and Secord (1977), Benton (1977), Bhaskar (1979), Harre (1979; 1983) among others which proposed the realist standpoint in the social sciences. Although there may be several different points in their

arguments, it can be said properly that the main theme for the realist is to present a theory of science and society in terms of causal laws by elucidating generative or causal mechanisms of which the patterns and regularities of phenomena are the effects. Harre's idea of realism is reflected directly in Bhaskar's studies, and he acknowledged his indebtedness to him.

The aim of Bhaskar's first study (1975; 2nd ed. 1978 - hereafter all quotations to the latter book) is "the development of a systematic realist account of science" (p.8, p. 13) in the hope that it will "provide a comprehensive alternative to the positivism" (p.8; p.12); the objective of this study is a 'philosophy for science' (p.10); and the main focus is natural science, though something is said about the social sciences. The primary theme is "to synthesise two critical strands" in recent philosophy of science which he thinks have attacked damagingly "the twin templates of the positivist view of science, viz. the ideas that science has a certain base and a deductive structure" (pp. 8-9); the first is represented by writers such as Kuhn, Popper, Lakatos, Feyerabend, Toulmin, etc. and the second strand by the work of Hanson, Heise and Harre among others. To establish these purposes, Bhaskar develops a number of arguments, which can be outlined as follows:

(1) There is a ontological distinction between scientific laws and patterns of events, or there is a real independence between structures or mechanisms and patterns of events which they generate.

(2) There are two dimensions and two kinds of object of knowledge: a transitive dimension, in which the object is the material cause or antecedently established knowledge which is used to generate the new knowledge; and an intransitive dimension, in which the object is the real structure or mechanism that exists and acts quite independently of men.

(3) If experimental activity is to be rendered intelligible, it is necessary to differentiate open systems (i.e. systems where no constant conjunctions of events prevail) from closed systems (i.e. systems in which constant conjunctions occur).

(4) The domain of the world is stratified into the real, the actual and the empirical in virtue of the assumption of the real independence of mechanisms from the events, and that of the independence of events from experience.

(5) In science there is a kind of dialectic, which he suggests as the logic of scientific discovery; where a regularity is identified, a plausible explanation for it is invented, and the reality of the entities and processes postulated in the explanation is then checked.

(6) We can have only knowledge a posteriori; that is, if we can have empirical knowledge of generative mechanisms or structures then we can have knowledge of natural necessity a posteriori.

(7) If science is to be possible, the world must consist of enduring and transfactually active mechanisms; society must consist of an ensemble of powers irreducible to but present only in the intentional action of men; and man must be causal agents capable of acting self-consciously on the world.

In my first observation of this study, it is supposed that the process of ontological and epistemological construction of philosophy which Bhaskar undertakes might run certain risks: the danger of producing highly formalistic or dogmatic arguments, or on the other hand the possible conflation or suppression of differences between philosophical fields of study. The first appears in his argument that what he calls the 'transcendental realism' is the last instance of the development of philosophy 'of' science, and of an adequate account of philosophy 'for' science. The second possibility is actually avoided by elaborating the transcendental realism in the respective examinations of empirical realism and of transcendental idealism. But even in this case Bhaskar tends to develop his idea by bracketing away (classical) empiricism on the one hand, and (transcendental) idealism on the other. This tendency culminates in his presentation of a logic of scientific discovery which, starting from classical empiricism, through transcendental idealism, terminates in transcendental realism. In short, if empirical realism, as he argues, reduces ontology to epistemology, Bhaskar's transcendental realism appears to reduce epistemology to (transcendental or Kantian) pseudo-ontology.

We can outline Bhaskar's second book (1979) in the same way as the first one. The aim of this work is the development of "a new critical naturalism, entailing a transformational model of social activity and a causal theory of mind". The objective of his study is "to elucidate the possibilities of a philosophical critique of contemporary philosophy"; the focus is the social (or more generally the human) sciences and philosophy. The primary themes are to formulate "a transcendental deduction of the properties that

societies and people respectively must possess", and to develop "a critique of the leading traditions in the philosophy of social science, [that is] transcendental refutations of both the positivist and hermeneutical schools" (the above quotations are in the preface of Bhaskar, 1979). For these purposes Bhaskar suggests several ideas or arguments which can be summarised as follows:

- (1) Only a transcendental realist account of science and philosophy can sustain the intelligibility of experimental activity and scientific development and an adequate account of the philosophy/science relation.
- (2) Societies are real objects irreducible to people; social forms are a necessary condition for any intentional act, and their pre-existence or causal power establishes their autonomy as possible objects of scientific investigation, but the causal power of social forms is mediated through human agency.
- (3) What he calls the 'transformational model of social activity' entails both a relational conception of the subject matter of social science, and the notion of the activity-, concept-, and space-time-dependence of social structures.
- (4) The notion that social structures in the three-fold dependence only ever manifest themselves in open systems means that criteria for the rational assessment of theories must be explanatory and non-predictive; while the relational consideration lays the ground for a kind of critique, in which one can pass immediately from facts to values, from explanatory theories to practical imperatives.
- (5) People possess properties, certain fundamental features or powers, which establish their irreducibility to society; the powers involve consciousness or intentionality of persons and the intentional human behaviour is always caused by reasons.
- (6) Human activity which is regarded as a causal intervention into the natural (material) world subject to the possibility of a reflexive monitoring of that intervention has two aspects; that which human agents do, and that which happens to them.

(7) Reasons can and must be causes: the transcendental realist defence of the naturalist needs to show not only that reason explanations play a role in the discourse in a causal kind of way, but that reasons are analogous to the causal structures of nature and that empirical knowledge of them is possible.

(8) Both the positivist and hermeneutical traditions should be subjected to transcendental refutations, which is obtained if it can be shown to be inconsistent with the 'possibility of science'.

The shift of Bhaskar's interest is remarkable: the focus has been changed from mainly natural science to the social (and human) sciences; his primary theme from a synthesis of two strands of so-called post-positivism to a formulation of the properties of societies and people. But despite this shift, his fundamental standpoint has not been changed at all: he still explores a possibility of naturalism, and his philosophical opponent is empirical realism, which he argues is common both in the positivist and the hermeneutic traditions. Bhaskar therefore argues for "a qualified anti-positivist naturalism, based on an essentially realist view of science" (p.3). But it seems to me a highly problematic thesis that, in spite of (or 'in virtue of' in Bhaskar's expressions) ontological, epistemological and relational differences between the social and the natural sciences, one can still defend naturalism, viz. the idea that there is (or can be) an essential unity of method between them. Once again in Bhaskar's study (1979) there seems at least two kinds of risks: a reduction of social theory to objective materialism, and that of philosophy of social science to merely naturalist methodology. If one wants to analyse the properties of societies and people in an analogy with the structure of a natural object, one may easily identify their formulation with an objective materialism, in which the non-materialistic dimensions of society (such as semantic, moral and cultural ones) is to be wholly discarded, or reduced to the objective dimension of materials. On the other hand, if one wants to sustain a naturalistic unity of 'method' between the natural and the social sciences in spite of ontological, epistemological and relational difference between them, the result may be to overemphasize the 'possibility of naturalism', and to reduce philosophy of social science, ontological, epistemological and relational, to merely methodological level. I do not think that Bhaskar's study has avoided falling into either of these risks.

In a recent article (Bhaskar, 1983), Bhaskar announces his intention to prepare two new books on ideology and emancipation (Bhaskar, forthcoming a; forthcoming b). Although these books have not yet been published, they are supposed to extend some part of his work (1979) and his recent articles (especially 1980; 1982). In the latter articles, he argues that "emancipation depends upon explanation, which depends upon emergence. Given the phenomenon of emergence, an emancipatory politics (or therapy) depends upon a realist science" (1980, p.28; 1982, p.276). My first observation on Bhaskar's arguments in this respect are as follows. While he seems to establish a connection between realism and a critical theory, his continuous commitment to a rigorous realism will result in the science/ideology opposition which is hardly to be sustained, and a conception of emancipation, suffering from a lack of hermeneutical dimension of social science or of subjectivity of the social world.

3. BHASKAR'S TRANSCENDENTAL REALISM

3.1 The transcendental ontological distinction between structures and events

We start from Bhaskar's 'transcendental' (Kantian style) definition of 'ontology'. According to him, the question 'what must science be like to give us knowledge of intransitive objects, (such as 'structures' in his terms)?' is not a properly ontological question. Rather "the answer to the transcendental question 'what must the world be like to science to be possible?' deserves the name of ontology" (1975, p.21). Hence he describes his philosophical position not as depending upon 'an arbitrary definition of science', but rather upon the 'intelligibility'. Along this line, Bhaskar develops most of his arguments concerning what science must be like in order to make sense of the properties of the world, society, people etc., and the characters of explanation, causal laws etc. But it seems to me that his defence of 'transcendental' ontology is not so unambiguous or successful that the rest of his work can be developed without any difficulty on the basis of this definition. A simple, but not trivial, ambiguity is found in his argument which reverses this position. For example, we compare two statements in his work: that "as science occurs the world must be open. This is not the reason why the world is open (though it is the reason for my justified belief that it is). Rather it is because the world is open that science ... is possible" (p.116); and that "if science

is to be possible the world must be open" (p.126). If one follows the 'transcendental' definition of ontology, the latter statement should be admitted. But even in this case there is a question raised: Is there no part of science which deals with a closed world? The answer may be 'yes' either in his definition of closed systems or in a more general sense. Moreover as the first statement is implied, the notion, say, that social science must investigate open systems is certainly not the reason why the social world is open. It should be argued that it is because the social world is open that social science must cope with the open world.

There is a more fundamental shortcoming in his 'transcendental' approach. Let me consider that "... science can come to have knowledge of natural necessity a posteriori. The differentiation of the world implies its stratification, if it is to be a possible object of knowledge for us" (p.19). The second part of this phrase might be developed on the basis of his 'transcendental' approach, and hence it involves a transcendental (or pre-interpreted) view, i.e. the stratification, of the world. In other words, the implication of this is that we can know prior that the world is differentiated or stratified. But this is hardly integrated into the view in the first part of the quotation, namely that science can have only the a posteriori knowledge of natural necessity. In short, Bhaskar's 'transcendental' approach fails to make a connection between the a priori and a posteriori knowledge, by defining too rigorously science in terms of the latter. His approach to science excludes logically the significance of a priori knowledge, which may be obtained not simply in virtue of antecedent knowledge but in virtue of human agents' competence or knowledgeability in their everyday life. This failure makes it impossible for him to comprehend the hermeneutical dimension of social science and the subjectivity of social life. In so far as this kind of issue is concerned, Habermas's concept of 'knowledge-constitutive interest' in a 'quasi-transcendental status' is valuable, even though some difficulties of it have been confessed (Habermas, 1978); or his distinction between 'critical self-reflection' and 'rational reconstruction' seems to be much more plausible than Bhaskar's transcendental realist approach (Habermas, the postscript in 1978; and 1979). What is more Bhaskar's ontology itself in which the social 'existence' or 'being' is regarded as equivalent in an exactly same sense to the natural one is highly problematic. I shall discuss this later in detail.

The first thesis in Bhaskar's transcendental approach is that there is two dimensions of objects of science (or knowledge): transitive and intransitive. "Any adequate philosophy of science must be capable of sustaining and reconciling both aspects of science; that is, of showing how science which is a transitive process, dependent upon antecedent knowledge and the efficient activity of men, has intransitive objects which depend upon neither" (p.24). With this argument he wants to grasp "both (1) the social character of science and (2) the independence from science of the objects of scientific thought" (*ibid.*). What he thinks of by referring to the 'social character' here is that which has been emphasised by Kuhn, Popper, Lakatos and others (cf. p.9). But Bhaskar does not seem to deal with, or criticise effectively their works. Although he clarifies some limitations in these works (especially criticising Popper's work), he does not examine an omission which is found in these works: that is, the hermeneutical dimension of science (cf. Bernstein, 1976; 1983). This seems to me because his main concern is not the transitive process of science, but the intransitive aspect of knowledge or science in terms of explanation, causal laws, structures, etc., and hence he could not realise such a difficulty; or because he does not want to stress this issue which might be regarded as incompatible with his own ideas.

Apart from this kind of difficulty, even if we stand on his own ground, the argument for the relation between two dimensions of knowledge seems to be curiously twisted. To explain the relation between them, he appeals to a logical procedure of 'if'/'then' relation, which he also uses frequently in other contexts to justify his arguments. That is, (1) if we can imagine a world of intransitive objects without science, then we cannot imagine a science without transitive objects; (2) if we cannot imagine a science without transitive objects, can we imagine a science without intransitive ones? (the answer is 'no'); and (3) if the answer is 'no', that is, if we cannot imagine a science without intransitive ones, then a philosophical study of the intransitive objects of science becomes possible (pp. 22-23). The statement (1), I think, has not a logical connection, because even if we 'cannot' imagine a world of intransitive objects without science - certainly we can imagine a world of science - (or concept) dependent objects, as Bhaskar might understand in his next work (1979) - we still cannot imagine a science without transitive objects. In other words, the fact implied in the latter part of this statement is not affected by the former. Further it seems to me logically ambiguous that the if-statement in (1) leads to two opposite results; that 'we cannot imagine a science

without transitive objects'; and that 'we cannot imagine a science without intransitive objects: that is to say, he does not provide properly the reason why the answer is 'no' in the statement(2). The logical connection in (3) appears also insufficient, because this excludes the fact derived from (1), namely that 'we cannot imagine a science without transitive objects'. In short, Bhaskar does not appear to connect plausibly between transitive/intransitive dimension of science.

Moreover it is my argument that the distinction between transitive/intransitive dimensions of knowledge can no longer be sustained in the social sciences. I shall discuss later why this distinction is impossible in the social sciences. But it is important, for the point of view applied throughout this paper, to state here that the problematic thesis that "'being' means the same in the human, as the natural world" (1979, p.60), which he advocates for 'intransitivity of the objects of social scientific investigation must be rejected, and that the transitive/intransitive dichotomy should be overcome.

Bhaskar's idea of the transitive/intransitive dimensions of knowledge underlies immediately his argument that 'there is an 'ontological' distinction between scientific laws and patterns of events'. This argument is developed on the basis of the fact that "it is a condition of the intelligibility of experimental activity that in an experiment the experimenter is a causal agent of a sequence of events but not of the causal law which the sequence of events enables him to identify" (p.12). As admitted by himself, Bhaskar uses the term 'law' in an ambiguous way throughout the work: "the term 'law' is customarily used to refer both to statements of law and to what such statements designate". He wants to "restrict his use of the term 'law' to the concept in the intransitive dimension" (1978, pp. 251-52). He also admits that he uses "the term 'cause' to refer both to the antecedent event, condition or agent which triggers a mechanism and to the mechanism ... itself" (*ibid*). I do not intend here to pursue further his use of the terms 'laws' and 'cause' in a systematically ambiguous way. But it is important to stress that 'causality' in a real world should be distinguished from 'causal laws' which state it, because the latter can be possible only in an interpretation of the former.

Besides this kind of difficulty, Bhaskar's philosophical rationale for experimental episodes itself does not seem to give an adequate philosophical

foundation for the ontological distinction between 'causal law' and events. According to him, "in an experiment we are a causal agent of the sequence of events, but not of the causal law which the sequence of events, because it has been produced under experimental conditions, enables us to identify". (p.33). This idea may be represented in Figure 1(a). In the figure, if there is not the experimental condition which prevents the other mechanisms from generating their events, the mechanisms M1 and M2, with M3, would generate the event E2 in Figure 1(b), not the particular event E0. Therefore it can be said correctly that the real basis of causal laws is not sequences of events which are produced in an experimental activity. But this fact cannot be regarded as implying that there is an ontological distinction between causal mechanisms (or causal laws) and patterns of events. For

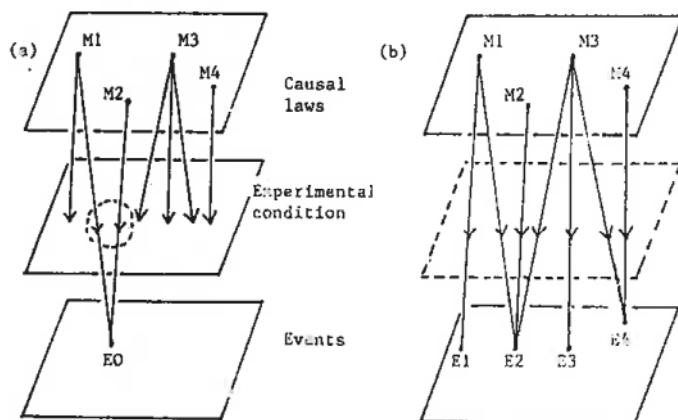


Figure 1. Causal laws, experimental conditions and events

experimental conditions are not an ontological, but an epistemic category. In other words, that we in an experiment are a causal agent of the sequence of events does not mean that we generate the events; but we make only a condition under which the particular events are generated by causal mechanisms. For example, if we can remove the experimental conditions, and hence we can make an 'absolute' condition in which events are generated without any prevention (see Figure 1(b)), then all of causal mechanisms may be manifested in patterns of events. Hence Bhaskar argues in another context that "the operation of the generative mechanism ... would, if undisturbed, result in the tendency's manifestation" (p.98). Although we can think that causal

mechanisms should be distinguished from regularities or patterns of events, and that the former cannot be exhausted by analysis of the latter, it is an error to see an ontological distinction between them only by means of an examination of experimental activities. In short, Bhaskar appears to conflate the epistemic level of things or events upon the ontological one. What he says in the end is that "although it has yet to be given an adequate philosophical rationale, the distinction between causal laws and patterns of events is consistent with our intuitions" (p.33).

3.2 The distinction between open and closed systems

Bhaskar's analysis of experimental activity entails not just the distinction between causal laws and patterns of events, but also that between open and closed systems. In his view, the intelligibility of experimental activity provides a rationale for an 'ontological' distinction between structures and patterns of events. Since the realist causal laws designate or describe only the activity of generative mechanisms and structures independently of any particular sequence or pattern of events, to establish a causal law, not only is a constant conjunction of events not a sufficient condition, it is not even a necessary condition for such a law. Furthermore, according to him, once a causal law is identified, it continues to operate even in open systems, where no constant conjunction of events prevail, because the structures which realist laws are ascribed go on acting in their normal way independently of whether or not a closure of systems, where constant conjunctions occur, obtains; while in experiments such closed systems should be established. It is Bhaskar's contention that

the intelligibility of experimental activity presupposes that a constant conjunction is no more a necessary than a sufficient condition for a causal law. And it implies that causal laws endure and continue to operate in their normal way under conditions, which may be characterized as 'open', where no constant conjunction or regular sequence of events is forthcoming. It is worth noting that in general, outside astronomy, closed systems, viz systems in which constant conjunctions occur, must be experimentally established (p.33).

We first concentrate upon his use of the term 'system'. In using this term, Bhaskar might have no intention of introducing or supporting a 'systems analysis'. But it seems to me that his analysis of system involve apparently some contexts parallel to the latter, thought I do not want to discuss here this aspect in detail (cf. Carchedi, 1983). Further he uses this term in several different contexts which make a number of difficulties: (1) to designate the world in a very general sense - for example, "for all action depends upon our capacity to bring about changes in our physical environment.

We must belong to the "same system of objects (nature) on which we act" (p.172); (2) to refer to the connection between events or individuals for example, "the individuals/or events/compose ... the system" (p.69); (3) to refer to the relation between structures or mechanisms and events for example, he speaks of both "the system in which the events occur" (p.35) and "the system in which the mechanism operates" (p.98); and finally (4) to refer to the combination of structures, which is his explicit definition of system, though provided in another writing (1982), - that is, Bhaskar writes, "I shall call a combination of structures a system and a combination of features or aspects (eg. of an event) a nexus" (1982, p.279). The meaning (1) is excluded from our discussion of Bhaskar's use of the term 'system', though it should be further clarified. The meaning (2) might be denied by Bhaskar because his main concern is the relation between cause and its effect, and an event in his definition cannot be a cause of other events. But if this meaning is denied, we can hardly understand in what sense he thinks of a (closed) system in which there is an absence of internal structures (cf. p.75). The meaning (3) seems to me to be regarded as the most plausible definition, despite his definition of system in (4). This kind of notion of system is well represented in his diagram which illustrates the closed and open systems, thought, he says, a system needs not "to be 'closed' in any more picturesque sense of the word" (p.70).

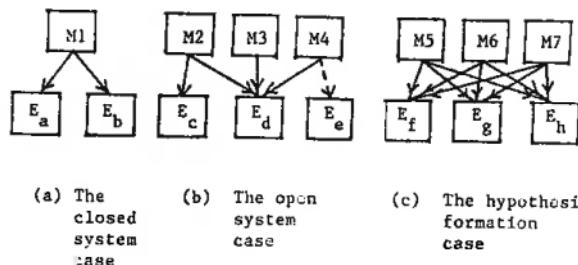


Figure 2. Bhaskar's illustration of the open/closed systems
(M : Mechanism; E : event) (from Bhaskar, 1978,
p.165 and 167)

In his account, Figure 2(a) is the closed system because a single M₁ is at work, while Figure 2(b) is the open system because E_d occurs in virtue of M₂, M₃ and M₄ (p.165) and Figure 2(c) represents various plausible hypothetical mechanisms. In this diagrammatic representation of open/closed systems, there is no doubt that what characterises the open/closed systems is not merely the combination of mechanisms, but also the relation between mechanisms and events. In other words, we cannot classify the systems as open or closed without considering the events. However Bhaskar might not adopt explicitly this kind of notion of system, because he uses the terms 'structure' on the one hand, and 'event' on the other, as ontologically independent with each other. Hence he seems to confine his use of the term 'system' into the stratum of structures or mechanisms, as mentioned in (4), while using the term 'nexus' to refer to a combination of events. But a number of difficulties seem to result from the concept of system confined to the stratum of structures. According to this view, it cannot be said that 'events occur in systems'; but rather they are generated by a system viz. a combination of structures. Also it is incorrect to say that "a closure is ... always relative to a particular set of events..." (p.73); rather it would be relative to that of structures or mechanisms of things. What is more, it is implausible to suppose that "the operation of the generative mechanism does not depend upon the closure or otherwise of the system in which the mechanism does not depend upon the closure or otherwise of the system in which the mechanism operates" (p.98). For if a system of structures (a combination of structures) is open, the operation of a structure constituting the system must be affected by that of other structures which in his definition of an openness are non-constant. Hence finally it is wrong to suppose that causal laws can be applied in open and closed systems alike. This sort of difficulty can be reconsidered in his suggestion of the critical or limited conditions for a closure.

According to Bhaskar, "a closure ... depends upon either the actual isolation of system from external influences or the constancy of those influences" (p.74). And "either the absence or the constancy of internal structures must also be a condition for a closure" (p.75). Finally "an additive function of the state of the individual components of the system ... represents a third kind of requirement for a closure. Here again a closure is possible if the principle or organization is non-additive, provided it remains constant" (pp. 75-76). "The satisfaction of one each of the system,

individual and organizational conditions is sufficient ... for a closure; but not necessary for it" (p.76) (see Table 1).

| Conditions for a closure | (1) Epistemically dominant case | (2) Epistemically recessive case |
|----------------------------------|------------------------------------|--|
| (A) System | Isolation | Constancy of extrinsic conditions |
| (B) Individuals | Atomicity | Constancy of intrinsic conditions |
| (C) Principle of organization | Additive | Constancy of non-additive principle |

TABLE 1. Bhaskar's suggestion of limit conditions for a closure (from Bhaskar, 1978, p.76)

But in his suggestion of critical conditions for a closure, Bhaskar does not clarify what he means by the term 'individual' as well as his use of that of 'system'. He uses this term at least in three different ways: (1) individuals as component events of systems (p.72); (2) an individual such as an elephant which can be characterized by its 'internal' structure (p.75); and (3) individuals which function in the principle of organization or system. Although these notions of 'individual' have been used on the supposition that 'regularity determinism' is true, Bhaskar must specify his use of this term. The notion of individuals as component events in (1) seems hardly consistent with the others in (2) and (3). For if individuals are regarded as events in his sense, the individuals cannot have their 'internal' structure, nor any functions in the principle of organization of system. If the individual does not refer to an event, but a thing or its structure, then the other kind of difficulty may be raised. For instance, even in the case that the extrinsic condition (condition A) is satisfied, if individuals as structures composing a system (condition B) are not atomic, or if the individuals' function in the principle of organization (condition C) is not additive, the system can hardly be conceived of a closure, because of the non-constant operation of individual structures of the non-additive function of the structures. On the other hand, even if both the condition of atomicity of individuals and that of additive principle of organization are met, if the extrinsic condition is not satisfied, it is difficult to say that a closure is to be established. Hence it can be

said against Bhaskar that the satisfaction of each of these conditions is not sufficient for a closure.

The basic weakness in Bhaskar's terminology links to his concepts of tendency and causal laws associated with the notion of open/closed systems. For Bhaskar,

Tendencies are roughly powers which may be exercised unfulfilled. They are thus well adjusted to cope with open systems. If a system is closed then a tendency once set in motion must be fulfilled. If the system is open this may not happen due to the presence of 'offsetting factors' or 'countervailing causes'. But there must be a reason why, once a tendency is set in motion, it is not fulfilled ... Once a tendency is set in motion it is fulfilled unless it is prevented (p.98).

The notion of closed/open systems related to the concept of tendency appears quite different from that which he suggests for the critical conditions of closure (and openness) of systems. In this notion, whether a system is closed or open depends upon the fulfilment of tendencies on the system. But, in his view, even in open systems, a tendency should be fulfilled if there are no 'offsetting factors' which prevents its operation. Therefore he argues as if a causal law valid under closed systems must continue to be valid under open systems if there is no radical disturbance of the system when the closure is opened. However, according to his suggestion of critical conditions for a closure, what he regards as 'open' systems here in 'closed' systems in which the condition (A) is satisfied. Lawlike statements "about the operation of the generative mechanism that would, if undisturbed, result in the tendency's manifestation" (p.98) must be the statements only about closed systems, not about open ones. In open systems, the operation of tendencies should be always disturbed and prevented by non-constant extrinsic and intrinsic conditions. If a system is a combination of structures or mechanisms, and if his suggestion of the conditions for a closure is admitted, it is an error to suppose that "the operation of the generative mechanism does not depend upon the closure or otherwise of the system" (*ibid*), because it is evident that the operation of mechanisms in open systems is always influenced and disturbed by other structures or systems as their combinations.

In Bhaskar's view, while the mode of application of lawlike statement is the same in open and closed systems, the inference that can be drawn from our knowledge of the applicability of the statements differ in the

two cases. "Once we allow for open systems, then laws can be universal if they are interpreted in a non-empirical (trans-factual/or normic/way" (p.14). Rejecting the positivistically postulated symmetry between explanation and prediction in open systems, Bhaskar argues that "explanation in open systems ... normally requires retrodiction; that is, the inference from present effects to prior (perhaps hidden, perhaps just unrecorded) causes, via the application of normic statements" (p.135). And Bhaskar distinguishes two kinds of prediction: (1) practical predictions of ontological or categorical form "which are rarely made in science but which are important in some of its practical applications in open systems"; (2) "test predictions of hypothetical form made under effectively closed conditions in order to test a theoretical hypothesis or putative law" (*ibid*). There may be several kinds of significance in Bhaskar's analysis of causal laws in open systems. I agree entirely with the ideas that causal laws should be interpreted, or retrodiction by the inference from present effects to prior causes, and that explanation and prediction must be distinguished with each other and practical predictions are important in practice.

But when we take a close look at his defence of the inference (from present effects to prior causes), we can find that a version of a Humean concept of causality, which he wants to reject in any way, involved in this notion. That is, if one infers a causality from an effect to its prior cause, the effect is what causes the cause to become a cause, hence the effect, not the cause, should be treated as the origin. In this version of causality, we cannot wholly reject the Humean notion of causality, which expects the effect after its cause on the basis of psychological phenomena or 'inner experience'.¹ In other words, if one, like Bhaskar, regards 'hypothetical formation' (or 'model-building') as necessary for analysing the relation between cause and effect, it is important for him to stress that such a hypothetical formation or model-building presupposes inevitably the Humean relation between them, even if in the end they cannot be sustained. Bhaskar's model of scientific discovery which we shall see below, includes implicitly but apparently this kind of version.

On the other hand, if only practical predictions of ontological or categorical form in its practical applications are possible in open systems, while only test predictions of hypothetical form in the test of its theoretical hypothesis are possible in closed systems, a question is raised: can one still argue that the mode of lawlike statements is the same in open and closed systems? The answer may be 'no'. What is more, Bhaskar's main

concern throughout his work is not hypothetical form, but the ontological or categorical one. Seen in this light, what should be emphasised may be the 'practical predictability', not 'test predictability'. If we call the 'practical predictability' a priori knowledge in a sense that such a predictability can be obtained in large part in virtue of the competence or knowledgeability of human agents without directly referring to the empirical phenomena, such category of knowledge should be developed and applied symmetrically with a posteriori knowledge both in science and practices.

3.3 The logic of scientific discovery

In Bhaskar's view, "structures and mechanisms ... are real and distinct from the patterns of events that they generate; just as events are real and distinct from the experiences in which they are apprehended. Mechanisms, events and experiences thus constitute three overlapping domains of reality, viz. the domains of the real, the actual and the empirical" (p.56). Bhaskar represents this view in Table 2.

| | Domain of real (Dr) | Domain of actual (Da) | Domain of empirical (De) |
|-------------|------------------------|--------------------------|-----------------------------|
| Mechanisms | / | | |
| Events | / | / | |
| Experiences | / | / | / |

TABLE 2. Bhaskar's view of the domains of real, actual and empirical.
(from Bhaskar, 1978, p.13 and p.56)

According to Bhaskar, for transcendent realism $Dr \neq Da \neq De$ (i), while empirical realism $Dr = Da = De$ (ii). Bhaskar argues that (ii) is a special case of (i) (p.56): hence he seems to "situate the conditions such as a naturally occurring closure, a mechanistic conception of action and the model of man as a passive recipient of given facts of the plausibility of empirical realism as depending upon what is in effect a special case" (p.17). But it is surprising to see that empirical realism, which he argues is a 'special case', is the starting point for a logic of scientific discovery suggested by Bhaskar himself. Figure 3 represents his idea of "a characteristic kind of dialectic in which a regularity is identified, a

plausible explanation for it is invented and the reality of the entities and processes postulated in the explanation is then checked" (p.145).

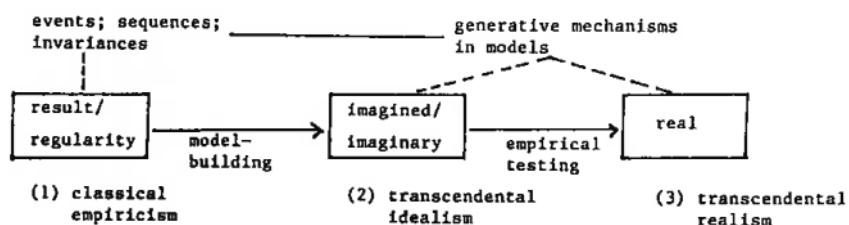


Figure 3. Bhaskar's model of logic of scientific discovery (modified from Bhaskar, 1978, p.15 and p.145)

In the logic of scientific discovery suggested by Bhaskar, of course, to start from empirical realism which is "common to the other two traditions" (p.15) is not to say that his transcendental realism has exactly the same interpretation of each stage. He argues that "transcendental realism differentiates itself from/classical/empiricism by interpreting the first stage of the dialectic as the invariance of a result rather than that of a regularity" (p.145). Perhaps to avoid the Humean concept of regularity, Bhaskar prefers the term 'result' to that of 'regularity'. But there is an ambiguity in the sense in which he uses the term 'result' and the extent that this can be distinguished from that of the latter. If it is reasonable to say that "for science to be possible the world must be open" (p.144) and "explanation in open systems ... requires retrodiction; that is the inference from present effects to prior ... causes" (p.135), what can be identified in the 'connection between events' may be not the invariance of a 'result', but rather that of 'regularity' in a version of Humean sense, as I mentioned before. The implication of the invariance of a 'result' seems to me to be easily connected to something given as sequences of events.

Bhaskar continues to argue that "it/transcendental realism/differentiates itself from transcendental idealism in its interpretation of the second stage ... whereas for transcendental idealism the imagined mechanism is imaginary, for/ transcendental/realism it may be real, and come to be established as such" (pp.145-46). Once again his distinction of the 'imagined/imaginary' seems very unclear or unsuccessful. It is difficult to see in what sense he argues that "'imaginary/real' marks an ontological watershed; 'imagined/known to be real' an epistemic one" (p.146). If one wants to argue for

'practical predictions of ontological form in its practical applications in open systems', it may be important to recognize the significance of 'what is imaginary', which may be called 'practical imagination' (or 'practical consciousness' in Giddens's terms). Not merely the epistemic conjunction of the 'imagined/known to be real' but also the ontological one of the 'imaginary/real' must be stressed for such a practical imagination of ontological forms of things. In short, at least insofar as steps (1) and (2) in the above figure are concerned, the transcendental realist logic of scientific discovery has no significant difference from, or no elaborated reconstruction of, empirical realism.

Bhaskar adds to these two steps the third, final one, in which the reality of the entities and procedures postulated in the explanation for a regularity is checked by 'empirical-testing': that is, "the move from (2) to (3) involves experimental production and control, in which the reality of the mechanisms postulated in the model are subjected to empirical scrutiny" (p.146). But in his own view, what can be produced and controlled experimentally should be that in a close system, not in an open one; whereas "most events in open systems must be regarded as 'conjunctures'" (p.119). Seen in this light, generative mechanisms in open systems cannot be experimentally produced or controlled, and hence the 'empirical testing' does not enable us to move from (2) to (3) in the open system case. Nevertheless if one wants to stress only the 'empirical testing' in such a move, the move from (2) to (3) becomes to be in effect the return from (2) to (1), which is implicitly implied in his selection of the term 'dialectic' in a crude sense, which otherwise may be regarded as a step-wise procedure.

Bhaskar states in another context that the ideas of various plausible hypothetical mechanisms by the creative employment of the scientist's imagination (Figure 2(c)) are subjected to "rigorous theoretical criticism and empirical test" (p.166). The implication of this view may be that the move from (2) to (3) requires not merely 'empirical test' but also 'rigorous theoretical criticism'. Although the notion of 'theoretical criticism' has been used in an unclarified manner in his work, this may be referred to something like hermeneutical or 'inter-subjective' dimension in scientific discovery. This is well expressed in his argument that "whereas recent philosophy of individual experience and found an answer in the intersubjective world of science, transcendental realism asks in addition for the conditions of the possibility of the social activity of

science, finding an answer in the intransitive world of things" (p.147, emphasis added). But in his suggestion of the logic of scientific discovery, there is no room for locating the hermeneutical or intersubjective dimension of science. Bhaskar at least in his first work (1975) does not appear to be fully aware of the significance of such a dimension or world of science. Perhaps this may be because his main attempt is to synthesize the writings of Kuhn, Popper, Lakatos etc. on the one hand, and the works of Hanson, Hesse and Harre on the other, both of which in their early phases have suffered from a lack of the hermeneutical dimension of science (this is not to say however that some of their later works, for example that of Hesse (1980), have ignored this dimension; but rather opposite in the case). In Bhaskar's view, "the concept of causal powers is not intended to figure in the discourse of science, but in the discourse of the philosophy of science" (p.176). But to provide something relevant to a 'philosophy for science', he should not, I think, deemphasize the power of discourse of science.

In relation to these issues, Bhaskar distinguishes between the linguistic metaphor which is being used to describe sequences of events or activities of generative mechanisms, and the actual presence of language as a part of human agents' action (pp. 196-7). However, he does not try to link between these two kinds of language in any detail: he mainly gives priority to the first, ignoring wholly the second. In other words, although he attempts to elaborate the social or transitive dimension of science, Bhaskar does not seem to realize fully the importance of 'Hermeneutically informed knowledge' such as has been developed by Giddens (1976; 1982). This is largely the same case in his following work (1979), in which he criticizes as implausible the idea that "the hermeneutical tradition is determined in the last instance by its acceptance of an essentially Humean account of natural science, and more generally of empiricist ontology" (1979, p.169).

4. BHASKAR'S CONNECTION BETWEEN SOCIETY AND AGENCY

4.1 The transformational model of social activity

For Bhaskar, societies are real objects irreducible to people: he argues that "social forms are a necessary condition for any intentional act, that their pre-existence establishes their autonomy as possible objects of scientific investigation and that their causal power establishes their reality" (1979, p.31). On the other hand, the properties that people possess, that is, the existence of certain fundamental powers, establish their irreducibility to societies (p.102). Hence Bhaskar wants to distinguish between the genesis of human agency, lying in the reasons, intentions and plans of people on the one hand, and the structures governing the reproduction and transformation of social activities on the other. I do not deny the notion of an ontological hiatus between social structures and human agency. But in Bhaskar's argument for it, there seems to be several kinds of difficulties and ambiguities which should be dispelled.

First of all, I want to simply reject the view that social structures are 'pre-existent' realities, though this has been a main locus of dispute in philosophy and history of social science. Bhaskar might hold this view inevitably at least for two reasons. In the first place, he uses this idea to criticize a 'dialectical' conception of the relation between societies and individuals such as has been developed by Berger and his associates. Bhaskar argues here that "it is no longer true to say that men create it/society/... People do not create society. For it always pre-exists them and is a necessary condition for their activity" (p.45). If so, one who argues that "intentional human action is necessary condition for it/society/" (p.46) may sustain the opposite view that people always pre-exist it. Secondly, and more fundamentally, this idea is concerned with providing a rationale for his argument that the objects of social science are (existentially) intransitive, as those of natural science (p.60). I shall have a lot more to say about this below. But I want to argue here that this view is also self-conflicting, just because in his view "social structures, unlike natural structures, do not exist independently of the activities they govern" (p.48), or because "society ... is an articulated ensemble of tendencies and powers which, unlike natural ones, exist only as long as they ... are being exercised" (p.49).

My objection to the notion of 'pre-existence' of social structures of course does not deny the fact that some aspects of society, say, social institutions, are more enduring than human activities. But even in this case, we have to avoid conceiving of the objects of social science as a 'pre-given' universe, by distinguishing the notion of social structures from that of social institutions. For, to borrow Bhaskar's phrase, social structures, unlike social institutions, exist only as long as they are being exercised. It should be stated that social structures and human agency are co-existent at the same time, even though they are distinguished into different ontological levels. In short, they presuppose one another: one cannot exist without the other. This kind of difficulty in Bhaskar's study seems to stem from his synonymous use of the terms 'society', 'social structure', 'social form' and whatsoever which he regards as opposite to the notion of people or human agency. According to Bhaskar, for example, "society must be regarded as an ensemble of structures, practices and conventions which individuals reproduce or transform ..." (p.45). The notion of society should be distinguished from that of structures on the one hand, and from that of practices on the other (cf. Urry, 1982).

There is another difficulty in Bhaskar's terminology, that is, his use of the term 'relation' or 'relational'. He argues, following Marx, that "society does not consist of individuals/or groups/but expresses the sum of the relations within which individuals/a group/stand" (p.32). Bhaskar's concept of relation here includes "relationships between people and nature and social products ... as well as interpersonal ones" (p.36, p.52). To connect the notion of social structures and that of human agency, nobody can reject the significance of a 'relational' conception of the subject matter of social science. But Bhaskar's failure to distinguish (1) the relation between individuals (or groups); (2) the relation between the products of such relations; and (3) the relation between these relations are highly problematic. Just as social structures and human agency have their own ontological properties, as each of these relations has its own character. The relation (1) can be characterized as 'social interactions' which constitute a social system; the relation (2) may be regarded as relations between structural elements; and the relation (3) entails the connection between the relations (1) and (2), that is, between human agency and social structures. If one confuses or conflates one to another, then he hardly sustained the distinction between social structures and human

agency, and cannot attempt to connect them in any way. What is more, I want to argue that such relations cannot be exhausted by Bhaskar's Philosophical notion of 'relation', the main theme of which is to distinguish between internal and external relations. It is suspectable to argue for a 'natural necessity' in the social sciences in a view that "some relations are internal, and some are not. Moreover some natural relations ... are internal, and many social relations ... are not" (p.54). Although I do not intend to discard such a distinction altogether, this kind of argument seems to be too crude to cope with the several kinds of relations in social world which I just mentioned.

To connect between the notions of society and individuals, Bhaskar develops what he calls a 'transformational model of social activity'. In doing so, he rejects several kinds of models of society (see Figure 4).

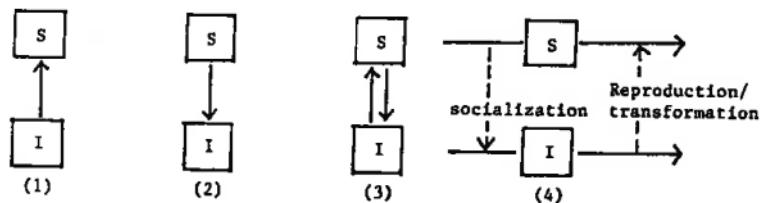


Figure 4. Bhaskar's classification of models of social activity: (1) the Weberian stereotype 'voluntarism'; (2) the Durkheimian stereotype 'reification'; (3) the 'dialectical' conception 'illicit identification'; and (4) Bhaskar's own model, the transformational model of the society/person connection. (S:society; I:individuals) (from Bhaskar, 1979, p.40 and p.46)

In his transformational model of social activity, entailed by the new critical naturalism and the 'relational' conception of society, "social structure and human agency are seen as existentially interdependent but essentially distinct" (1980, pp.17-18). Thus for Bhaskar, "society is both the ever-present condition (material cause) and the continually reproduced outcome of human agency. And praxis is both work, that is conscious production, and (normally unconscious) reproduction of the conditions of production, that is society. One could refer to the former as the duality of structure, and the latter as the duality of praxis" (pp. 43-44).

Bhaskar's transformational model of social activity, it should be admitted, has contributed in a significant degree to overcoming the deeply sedimented structure/agency dualism in the traditions of social science.

But if we take a close look at his model from a critical standpoint, we can find a number of ambiguities and limitations in the model and his account for it. First of all, apart from his disputable and simplistic presentation of the models (1), (2) and (3) which he links to particular features or traditions of social science, the rationale provided for his model (4) seems to be very crude and ambiguous. For instance, he rejects the model (3) as seriously misleading: "for it encourages, on the one hand, a voluntaristic idealism/such as implied in the Weberian type of model (1)/ with respect to our understanding of social structure and, on the other, a mechanistic determinism/such as implied in Durkheimian type of model (2)/ with respect to our understanding of people" (p.42). However he soon suggests that "if, following Durkeim, one regards society as providing the material causes of human action, and, following Weber, one refuses to rectify it, it is easy to see that both society and human praxis must possess a dual character" (p.43). These statements are an example which represents an ambiguous 'dual character' of Bhaskar's writing, syncretising the concepts of distinct theoretical fields which otherwise cannot easily be abstracted from those fields. In addition, Bhaskar's dealing with the concepts of 'efficient cause' in the Aristotelian terms and of 'material cause' in Marx's notions does not seem to me incompatible with a version of Humean concept of causality which he wants to discard in any step, because the production and reproduction of society necessarily involves the 'transitive' (or Humean, in a sense) causality in social activities (cf. Giddens, 1979, p.160). Moreover, Bhaskar conflates the distinction of the conscious (or acknowledged)/unconscious (or unacknowledged) conditions of action, which he relates to production and reproduction of society respectively, upon that of the intended/unintended consequences of human action. He provides an example to illustrate the reproduction of society; that is, "people do not marry to reproduce the nuclear family or work to sustain the capitalist economy" (p.44). This may be true in a sense. But Bhaskar is not aware of the facts that people know consciously that their marriage may reproduce the nuclear family, and that their work may sustain the capitalist economy, even though they may not intend to do so.

The ambiguities and shortcomings in his account for the dual characters of society and human praxis appear apparently in his diagrammatic presentation of the relation between structure and praxis shown in Figure 5.

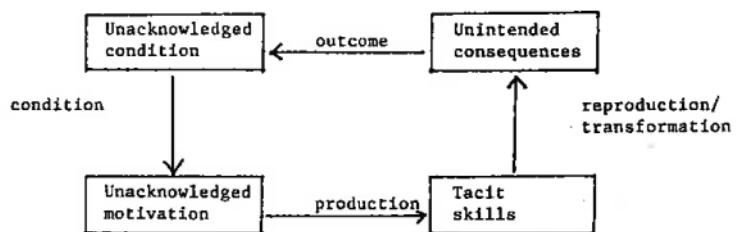


Figure 5. Bhaskar's presentation of the relation between structure and praxis (modified from Bhaskar, 1980, p.18)

In this figure, "unintended consequences, unacknowledged conditions and tacit skills ... limit the actor's understanding of his social world, while unacknowledged (unconscious) motivation limits his understanding of himself" (1980, p.18). But it is no doubt that 'tacit skills' do not limit, but rather enable, the actor's understanding of the social world. Although Bhaskar here appears to distinguish unacknowledged (or unconscious) condition and unintended consequences of action, we cannot see neither the 'duality of structure' nor the 'duality of praxis' in the figure. 'Production' cannot be distinguished from 'reproduction (transformation)' in the manner of which this figure is represented. Both unacknowledged motivation and tacit skills, with conscious intentions, are elements of human agency, which operate simultaneously in production and reproduction (or transformation) of social structures in a sense that all reproduction is necessarily production. On the other hand, social structures are 'outcome' of such production and reproduction, as intended and unintended consequences of action. Where can we locate 'intended' consequences in this figure?: there is no room for these consequences. In short, this figure does not represent properly the concepts of the 'duality of structure' and of the 'duality of praxis' in a genuine sense of 'duality'.

What is more, in this diagrammatic presentation(as well as his model (4) in Figure 4) of the relation between social structures and paxis (or individuals), there is no room for locating what he calls 'the position-practice system'. According to Bhaskar, combining the dual character of social structures and that of human praxis, "it is evident that we need a system of mediating concepts ... designating the 'point of contact' between human agency and social structures" (p.51). He calls this mediating system the positions (places, functions, rules, tasks, duties, rights, etc.)

-practice (activities, etc.) system. But his notion of the 'system of mediating concepts' are no longer examined in any detail, nor does this notion seem to play an important role in his model of social activity. Bhaskar does not make room for such a notion, as I mentioned above. In other words, the significance of this sort of notion cannot be elaborated further in the realist account of social activity, because its main concern is not practices but structures or mechanisms which govern them. But it is important to state that without such a notion, we can never attempt to clarify properties of societies and people, and to connect between them.

4.1 The limitations and possibility of naturalism in social science

Bhaskar wants to analyse the connection between social structures and human agency in terms of a qualified (or anti-positivist) naturalism. He commences his defence of naturalism in the investigation of emergent properties of society by asserting some ontological limitation on it. That is, social structures, unlike natural structures (1) do not exist independently of the activities they govern; (2) do not exist independently of the agent's conceptions of what they are doing in their activity; and (3) they may be only relatively enduring (so that the tendencies they ground may not be universal in the sense of space-time invariant) (pp. 48-49). To these major ontological limits on the possibility of naturalism, Bhaskar adds two other types of limit of it, which may be characterised as epistemological and relational respectively. The chief epistemological limit is raised by the fact that the objects of social scientific inquiry only ever manifest themselves in open systems. The relational limit is that the social sciences are part of their own field of inquiry so that they are internal with respect to their subject matter in a way in which the natural sciences are not (pp. 56-59). In short, it is Bhaskar's argument that "ontological, epistemological and relational considerations all place limits on the possibility of naturalism ... and that these considerations all carry methodological import" (p.3). What is transpired here is, Bhaskar continues to argue, that "it is not in spite of, but rather just in virtue of, these differences that social science is possible" (*ibid*). In other words, social science is possible, as natural science, when it is based on a realist view of science, *viz.* a 'qualified anti-positivist naturalism'.

But Bhaskar's continuing commitment to realism in which he argues for a 'qualified anti-positivist naturalism', it seems to me, prevents him from seeing and describing essential differences between the nature of objects of the social and the natural sciences. For example, Bhaskar in this position states two quite but entirely opposite (at the points of the added emphases) arguments. It is his arguments that

if social activity ... constitutes an analogue of natural events, ... /and/if social structures constitute the appropriate mechanism-analogue then an important difference must be immediately registered - in that, unlike natural mechanisms, they exist only in virtue of the activities they govern and cannot be empirically identified independently of them (pp. 47-48, emphasis added);

and that

society, as an object of inquiry, is necessarily 'theoretical', in the sense that, like a magnetic field, it is necessarily unperceivable. As such it cannot be empirically identified independently of its effects (p.57, emphasis added).

Needless to say, the term 'unlike' and 'like' provides a radically different meaning to each statement; but Bhaskar's arguments are stated as if these terms do not alter the sense which he wants to stress. Moreover, social activity, I think, cannot be examined in an analogue of such natural events as the effect of magnetic field. For social activity is produced by human agents, and at the same time governed by social structures which, according to him, are also *sui generis* real agents, while the events in nature are generated only by the natural structures. This is why, whereas the natural world may be closed systems, the social world should be considered as an open system. Along this line, we can compare other two arguments in his study; that

social systems are not spontaneously, and cannot be experimentally, closed. .../hence/the real methodological import of the absence of closed systems is strictly limited: it is that the social sciences are denied, in principle, decisive test situations for their theories (pp. 57-58);

and that

once a hypothesis about a generative structure has been produced in social science it can be tested quite empirically (p.62).

These statements seem to be too conflicting with each other to give something for our understanding of testability of theories or hypotheses in the social sciences. In addition, our understanding of it is further confused by his highly diffused claim in another context, namely that

hy; theses about them / meanings in the social sciences / must be expressed in language, and confirmed in dialogue. Language here stands to the conceptual aspect of social science as geometry stands to physics (p.59).

What Bhaskar intends, at the expence of these serious inconsistencies in his arguments, to derive from the consideration of several kinds of limits on naturalism in social science is the defencence of a possibility of naturalism in social science, vis. the notion that social science is possible, as natural science, if it is based on a realist view of science. One of the implications of this notion which is of reverence here is that the difference between causal laws in the open and closed systems "has in itself no ontological significance whatsoever. .../hence/there is no reason to suppose that the model of application of social laws will be any different from natural ones" (p.58). Although there may be a number of writings which provide quite plausibly the reason to suppose it (cf. Giddens, 1979, pp. 242-45), this argument, I think, is no longer true even on his own ground. My objection to this is as follows. What Bhaskar suggests as ontological limits on naturalism in social science, that is, the activity-, concept-, and space-time-dependence of social structures can be entailed only by the openness of the social world and the 'relational' conception of it. It is because of the existence of radically (ontologically) different kinds of thing in the social world (p.42), ie. human agents and social structures, that the social world should be treated as an open system. And it is because of the openness of the social world in which two kinds of mechanisms (or tendencies) operate simultaneously and relationally that these mechanisms, ie. human agents and social structures, should be connected in terms of the 'relational' conception of the world. Finally, the relationship between them entails the activity-, concept-, and space-time-dependence of social structures. Seen in this light, Bhaskar's categorization of ontological, epistemological and relational limitations of naturalism in social science is highly problematic. We have to consider an openness (or closure) of systems not merely on the epistemological level, but also on the ontological one. It is no longer true to say that the difference between causal laws in the open and closed systems has in itself no ontological significance whatsoever. In other words, the openness of the social world and the relationship between social structures and human agents, as well as the threefold dependence of social structures, all of them have their ontological significance, just as they should be considered on the epistemological level.

Bhaskar's commitment to a naturalist analogue raises also several difficulties in his analysis of agents. Having rejected some kinds of arguments designed to show that reasons cannot be causes, he argues that reasons can and must be causes. Moreover, according to him, the transcendental realist defence of the naturalism needs to show not only that reason explanations play a role in the discourse in a causal kind of way, but that reasons are analogous to the causal structures of nature (p.106). Therefore reasons must be analyzed as tendencies: an agent's belief corresponds to a tendency possessed, a want to a tendency exercised and an action to its manifestation in the appropriate circumstances (p.121; 1980, p.18). This view is represented in Figure 6.

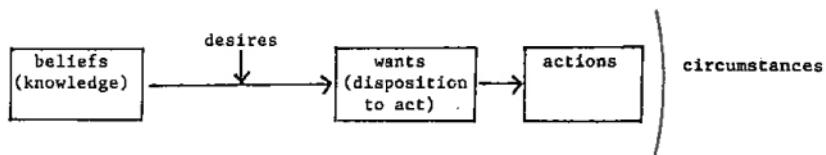


Figure 6. Bhaskar's view of belief, wants and actions (modified from Bhaskar, 1980, p.18)

There may be several objections to Bhaskar's consideration of human agents. First of all, although he wants to connect between cognitive and connative components of human agents, his analysis is confined to a psychological research. That is to say, he rarely shows how the powers and liabilities which agents possess depend upon the structures and meanings of the circumstances in which actions occur. Secondly, a considerable confusion is generated in his argument that reasons must be causes. Bhaskar ignores (or could not see) the fact that 'reasons' are logically related to what actors explain - hence the explication of them should be subject to verstehen - whereas 'causes' are related through some psychological mechanisms (even though both of them are important, and should be connected, for the analysis of human agents). Finally the analogues of reasons to the causal structures of nature, and of actions to the manifested events of them are highly unpalatable. Although I do not intend here to provide an elaborated view of human agents, the subject of human agents may be much more complicated than natural structures in a sense, and the actions cannot be simply regarded as events, as natural ones, but should be treated as 'practices' (such as developed in Giddens's work).

Now we discuss briefly Bhaskar's peculiar concept of 'existence' or 'being'. According to him, "the concept of existence is univocal: 'being' means the same in the human, as in the natural world, even though the modes of being may radically differ" (p.60). He might develop this kind of concept not merely to provide directly a rationale for the transitive/intransitive dichotomy of the objects of social science, but also to justify other arguments, for example, the indifference of the mode of application of social laws from that of natural ones, and the naturalistic analogue of structures in nature for the analysis of social structures and human agents. I have already discarded the latter views, discussing their difficulties or limitations. Now I want to reject the transitive/intransitive dichotomy of the objects of social science, as long as this is supported by the univocality of the concept of 'being' in the human and the natural world. My objection to this is that Bhaskar fails to connect between transitive/intransitive dimensions of the objects of social science. For example, if there are 'existentially intransitive' or 'ontologically pre-given' objects in social science, then it is untrue to say the "for ontological, as distinct from purely epistemological, reasons, social scientific (unlike natural scientific) theory is necessarily incomplete"(p.62). This kind of difficulty, I think, can be hardly resolved within the transitive/intransitive distinction of the objects of social science: to do so, we need to overcome such a dichotomy. It would be true in a sense that "once some object O_t exists, if it exists ... it constitutes a possible object of scientific investigation" (p.60). But in opposition to Bhaskar, the objects of social science, unlike those of natural science, do not exist independently of the act or process of investigation, just because their existence (or not) and properties cannot be identified without 'recording' or 'writing' (in our memory and text) about them, which is the very outcome of the act or process of investigation. (There may be an exception to this, that is, material evidences for their existence, but even in this case it might be denied by Bhaskar himself that such material evidences are sufficient for the existence of objects, because causal laws are not concerned with evidences (or effects or events), but with properties of the objects which generated them). In other words, the objects of social science do not exist independently of our memory-trace and text-trace capacity, and hence they are a 'virtual existence', while those of natural science may be a universally real existence which can be reconstructed in any place and time. This is not to say of course that

intransitivity of the objects of social science should be dissolved; but rather the transitive/intransitive dichotomy should be transcended in any way.

In short, 'existence' or 'being' must be construed differently when applied to objects recognized as belonging to different categories. The univocality of the concept of 'existence' in the social and the natural science does give nothing except such a contentless formalism as a naturalist analogue of structures in nature for the analysis of social structures and human agents.

4.3 Ideology and/or emancipation

In this final section, I discuss Bhaskar's concepts of ideology and emancipation which appear to be further extended in his two books in preparation. According to Bhaskar, Marx made two errors, which have been long recognized by Marxists: theoretical idealism, "dislocation of a superstructure from the base", and economic reductionism (or economism), "reduction of a superstructure to a mechanical effect or epiphenomenon of the base" (1979, p.84). To avoid these errors, he suggests that "the crude distinction economic base/ideological superstructure must be rejected; and replaced instead by a conception of the different ideologies associated with the different practices" (p.85). Bhaskar however still defends the opposition between ideology and science in a sense that science can be conceived as a weapon in the emancipation of the dominated, while ideology is categorically false consciousness, grounded in the existence of a particular historically contingent form of class society and serving the interests of a dominating class (or classes) intrinsic to it (p.86). In opposing ideology to science, Bhaskar provides a schema, adapted from J. Mepham (1972).

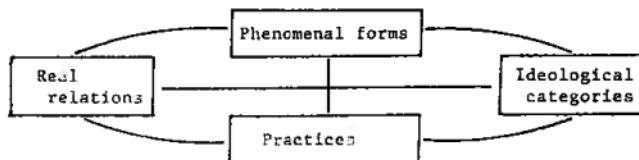


Figure 7. Bhaskar's consideration of ideology (modified from Bhaskar, 1979, p.89)

In the figure, 'real relations' generated 'phenomenal forms' (or manifested phenomena), which in turn are reflected in the categories of 'ideological discourse', which sustain and underpin ordinary practices. These are in turn necessary for the reproduction of the real relations (p.89).

In discussing the concept of ideology considered by Bhaskar, we concentrate upon three aspects; the science/ideology opposition, the source of ideology in a society, and the significance of the hermeneutical dimension in the analysis of ideology. First, although the confrontation between ideology and science is a long-enduring issue in philosophy and social science since the Enlightenment, the science/ideology opposition, I think, can be no longer sustained. This is precisely because, as Giddens expresses it, "there is, strictly speaking, no such thing as an ideology: there are only ideological aspects of symbol-systems" (Giddens, 1979, p.187). In so far as Bhaskar wants to defend this opposition, he shares a view with Althusser and Popper. If one excludes science from ideology, it becomes impossible to treat science as itself ideological. Secondly, Bhaskar fails to present precisely the source of ideology (or the ideological). He argues that "the phenomenal forms that are reflected or rationalized in ideology actually mask the real relations that generate them", and continuously, borrowing Godelier's phrase (1972), that "it is not the subject who deceives himself, but reality (that is, the structure of society/Bhaskar's R.B./) that deceives him" (p.38), as if there is no strain between them. But to emphasize the significance of real relations in opposition to ideology or ideological discourse, which is implied in the first argument or in his schematic representation in Figure 7, is certainly inconsistent with saying that what deceives people (or put in other words, what is ideological) is not people but reality or the structure of society. It should be stated that real relations themselves involve 'ideological aspects of society, and hence that ideology must be conceptualised on the level of social structures or real relations as well as on the level of social practices. Finally Bhaskar's ignorance or (conscious) rejection of the hermeneutical dimension in the analysis and critique of ideology is highly problematic. This kind of difficulty may be well discussed in connection to his conceptualization of 'emancipation'.

It is Bhaskar's contention that "the conditions of being are not the conditions of the linguistic expression of being, that is, accounts are

corrigible and susceptible to critique, and that social science ... always and necessarily consists in a semantic, moral and political intervention in the life of the society under study" (p.199)². Along this line, he rejects the insistences of Wittgenstein, Heidegger and Gadamer, namely the view that 'being is manifest in language' (in Gadamer's dictum). Furthermore he argues that "the linguistic fallacy even finds a quasi-materialist displacement in Habermas's reformulation of the goal of social emancipation as 'communication free of domination' and 'a general and unforced consensus'" (ibid). Bhaskar's alternative is a 'non-idealistic critique of ideas' which is both 'emancipatory' (in as much as the necessity for false ideas can be explained) and 'self-reflexive' (in as much as social science is a part of the totality it seeks to explain), and which sets a spiral in a 'material context'; "so that although it is worked out in the discourse of social science this process of elaboration has practical (extra-theoretical) conditions and causes, whose elaboration is itself the work of the spiral" (p.202).

It may be true in a sense that 'being cannot be exhausted by its linguistic expression'. But the linguistic expression or description of being should not be confused with the linguistic practice which itself is a part of being. Language in social science cannot be seen as geometry in physics. As I mentioned repeatedly before, Bhaskar's commitment to realism suffers from a lack of hermeneutical dimension of social science. His eventual admission of the view that "the hermeneutical tradition is correct to stress that social reality is pre-interpreted, so that *Verstehen* is a condition of social science" (p.204) seems to be radically divergent from his "early view. But despite such an admission, Bhaskar still undermines the significance of this aspect of social science in a systematically confused way. For example, he dismisses 'lay accounts' as corrigible and susceptible to critique on the one hand, and he argues quite oppositely that a critique of false ideas "is worked out in the discourse of social science" on the other. But it is important to see that lay accounts are significant for social sciences not less than theoretical discourse. Lay accounts which have been established by lay actors in their daily life are not easily corrigible to the social scientific observer. In addition, 'lay critiques' of social science should be emphasized, just because "any characterisations of beliefs of practices made by a sociological observer logically presuppose the possibility of their

"justification" (Giddens, 1979, p.253; but see for Bhaskar's objection to this, Bhaskar, 1982, pp.288-94, and 1983). Furthermore, indeed, the emancipatory and self-reflexive aspects of the critique of false ideas which Bhaskar suggests as an alternative to hermeneutic tradition have been examined in a much more significant way by Habermas, though there may be some difficulties in his work as well.

Bhaskar attempts to develop further his conception of 'emancipation' in his journal article (1980; and 1982). Having summarised his transcendental realism and the transformational model of social activity, Bhaskar criticizes the hermeneutical tradition as fundamentalism, and argues for the 'corrigibility of agents' accounts'. Emancipation, he argues, depends upon our possession of (1) adequate grounds for supposing that a belief is false (i.e. a critical condition), and (2) adequate grounds for supposing that a relevant source of false consciousness explains the belief (i.e. an explanatory condition). And hence "emancipation is conceived of as the transformation of the sources of determination from unwanted to wanted ones" (192, p.295; 1980, p.22). To illustrate the possibility of an explanatory critique which constitutes the kernel of the emancipatory potential, Bhaskar develops an argument on a series of level regarded as 'ratchets of reason' (or of rationality). Such a series of level of emancipatory rationality can be outlined in the following table.

| Level | Rationality | Contents |
|-------|---|--|
| I | Technical rationality | rationality for explanatory theories used to generate technical imperatives. |
| II | Contextually-situated instrumental rationality | Instrumental rationality rationality of explanatory knowledge not merely related to domination, but regarded as a necessary condition for rational self-emancipation. |
| III | Intra-discursive (non-explanatory) critical rationality | Critical rationality rationality for intra-discursive criticism, i.e. criticism of actually or possibly believed theories, hypotheses etc. |
| IV | Explanatory critical rationality | rationality for value judgments on the causes, as well as the contents, of consciousness. |
| V | Depth explanatory critical rationality | Depth rationality rationality for a critique of conditions explaining such consciousness |
| VI | Depth rationality | rationality for an application of the above inference at transcendently necessary |

TABLE 3. Bhaskar's consideration of emancipatory rationality (source: Bhaskar, 1980, pp.22-27; 1982, pp.296-306)

At the first two levels, instrumental rationality has "emancipatory implications (contingently) in virtue of (i) their use as sheer technique and (ii) their effects in the context of the existence (or relations) of domination ..." (1980, p.22). The next three levels III, IV and V indicate a triple critique, which Bhaskar thinks was implied in Marx's work: "of theories, of the practical consciousness such theories reflect or rationalise, and of the conditions explaining such consciousness" (1980, p.25). The final level of rationality refers to any co-operative inquiry of agents' activities which actually transform an unwanted source of determination into another, initiating preserving or restoring agents' ability to act and think rationally. In short, "emancipation depends upon explanation, which depends

upon emergence. Given the phenomenon of emergence, an emancipatory politics (or therapy) depends upon a realistic science" (1980, p.23; 1982, p.276).

Before outlining some difficulties or limitations in Bhaskar's own framework for analysing 'emancipation', it should be stated that we must be careful with using the term *emancipation* or *emancipatory* because this term can be easily taken away merely from more abstract and *metaphysical* ideas of, say, wanted (or good) society rather than critical analysis of societies on the substantive level. This kind of view can be applied not only to Bhaskar's realist analysis of *emancipation* but also to Habermasian *emancipatory interest*. What we need further is to link a trust of *emancipation* on the philosophical level to a more substantive analysis of contemporary societies. Having this kind of criticism in mind, we outline some difficulties in Bhaskar's own framework.

(1) The first concern: Bhaskar's definition of *emancipation* in terms of the wanted/unwanted dichotomy. This dichotomy seems to be interpreted in two ways; but in neither case, Bhaskar's definition appear plausible. Firstly, if he uses this dichotomy to judge good (wanted) or bad (unwanted) sources of determination, this cannot be regarded as an appropriate criterium for such judgement. For such judgement itself conceals an ideological aspect: that is, whose wanted? Secondly, according to him, wants (or real reasons) are regarded as efficacious beliefs or intentions which may be conscious or unconscious (1980, p.18). If he uses along this line the wanted/unwanted dichotomy to indicate the intended/unintended one, this also cannot be sustained. For it is a chronic feature of human life that social actions in any situation produce and reproduce a mix of intended and unintended consequences.

(2) Although it may be true that "even on an instrumental interpretation, explanatory knowledge appears as a necessary condition for rational self-emancipation" (1980, p.22), Bhaskar rarely criticizes the instrumental or technical rationality which should be properly evaluated. It seems to me that the critique of instrumental rationality might not be pursued further in the realist conception of science, because according to it scientific knowledge, no matter how it is instrumental or not, should be regarded self-contradictorily as having its own significance against its ideological aspect.

(3) Bhaskar calls the third level of rationality 'intra-discursive (non-explanatory) critical rationality', while he regards all of the other levels as 'explanatory' rationality. Of course, there is no doubt that to deny any ontological connection between theory and practice is to suppose that a change in the theoretical does not entail a change in practical judgements; "but denying such a connection makes practical discourse practically otiose" (1980, p.23). But his seemingly sound admissions of the ontological connection between theory and practice, and of the significance of practical discourse, are in effect inconsistent with his argument for intransitivity of objects of social scientific investigation which I mentioned before, that is, the thesis that properties of the objects are independent of the act or process of investigation.

(4) The levels IV and V are concerned with critiques of the practical consciousness which the theories criticized at the level III reflect, and of the conditions explaining such consciousness. Bhaskar here argues, following Marx, that "the criticized (discursive and practical) consciousness is regarded not just as false but as 'ideological' - where 'ideology' is counterposed to 'science'" (1980, p.25). As I argued before, the ideology/science opposition should be discarded. In addition, I want to argue that the critique of the conditions explaining the criticized (discursive and practical) consciousness is not exhaustible in the analysis of emancipation. What is required further is a critique of unconscious ideas or beliefs, which are socially created and a part of the ideology of society.

(5) At the final level, Bhaskar attempts to vindicate his transcendental realism in terms of his definition of 'depth-investigation'. He argues, for example that "what is rational cannot be stipulated a priori, but must itself be discovered/a posteriori" (1980, p.26). But if the analysis of emancipation must involve a critique of the unconscious dimension of beliefs, such a critique should be subject to an a priori self-reflection. For only the a priori self-reflection can bring the unconscious condition to consciousness. This of course does not deny the a posteriori rationality (such as 'rational reconstruction' in Habermas's terms), which is highly important for dealing with anonymous social structures, and hence which does not encompass subjectivity.

In short, Bhaskar's continuing (though not in a way, but in a sense) identification of social science with natural science seems to prevent him from understanding properly the conception of emancipation of human being.

5. CONCLUDING REMARKS

In recent human geography as well as social science in general, the dissolution of the orthodox consensus has been succeeded by the Babel of theoretical voices that currently clamour for attention. Among prevalent reactions to the seemingly disoriented situation of social theory is the (new) realist components which has been developed on the basis of the works of Harre and Bhaskar. Sayer's recent attempt (1984) to extend these works can be seen along this line. But most of the difficulties which I mentioned previously in the discussion of Bhaskar's work may be directly applied to his work, even though he starts from adopting the distinction between labour (or work) and interaction derived from the work of Habermas, and admits the significance of hermeneutical dimension of social science.

Of course it should be admitted that the study of Sayer as well as of Bhaskar has made a contribution to dissolve the orthodox consensus which has been at the centre of internal crisis of philosophy for human geography. But despite such a contribution, the first statements in their studies seem to be still sustained: that "the status of social science is seriously in doubt" (Sayer, 1984, p.11); and that "it has often been claimed, and perhaps more often felt, that the problems of philosophy have been solved. And yet, like the proverbial frog at the bottom of the beer mug, they have always reappeared" (Bhaskar, 1978, p.6).

NOTES

1. By 'a version of humean concept of causality' I refer to something like 'Nietzschean view of causality; which has invoked Derrida's conception of difference. To understand this kind of view, it is important to see the temporality (and spatiality) of causality, which Bhaskar does not consider in any detail. In Harre's view of causality, "by referring individual things and materials to space, and happenings and processes to time, the relations between things can be expressed by the relations between their places, and the relations between happenings by reference to some standard process like clock" (Harre, 1972, p.113). In this respect certainly Harre's view of causality shares with an aspect of Humean view that "the process which is the cause is running contemporaneously with the effect and not after it: a cause cannot come later than its effect" (ibid. p.115). I have no intention of defending this aspect of similarity between Harre's and Humean views of causality. Rather among several difficulties in Harre's concepts of space and time, I think, is one that he does not make explicit the fact that 'the cause can come later than its effect' in a rhetorical sense (though he emphasizes the concept of causality in terms of intelligibility).

In the Nietzschean view, the concept of causal relation is not something given as such but rather the product of a precise topological or rhetorical operation, or a chronologische Umkehrung/chronological reversal/. Suppose as an example that one feels a pain. This causes one to look for a cause and spying, perhaps, a pin. In this sequence of activities, one posits a link and reverses the perceptual or phenomenal order, pain ... pin, to produce a causal sequence pin ... pain. "The fragment of the outside world of which we become conscious comes after the effect that has been produced on us and is projected a posteriori as its 'cause'. In the phenomenism of the 'inner world' we invert the chronology of cause and effect. The basic fact of 'inner experience' is that the causes get imagined after the effect has occurred" (Nietzsche in Culter, 1983, p.84). Whether this kind of causal relations can exhaust the concept of 'causality' should be further examined, but this view in its emphases has several advantages to analyse causality in the social world, which Harre and Bhaskar ignored or could not understand. (1) This view, unlike Harre, supposes that a cause can come later than its effect in terms of the relation between the inner and outer worlds.

- (2) Although this view is not the same as Humean notion for causality, they have something in common in a different sense than that shared between Harre's and Humean views, as I mentioned just before: if we adopt such a view, we can acknowledge the fundamental importance of the 'presence/absence dialectic' (in Giddens's terms) without sacrificing the analysis of 'transitive' (or Humean) causality as involved in social production and reproduction.
- (3) This notion of causality reverses the hierarchical opposition of the causal scheme, and hence it presupposes logically the interpretation of contiguity and succession of events.

2. Bhaskar's contention seems at the first sight to be developed in a way parallel to Giddens's arguments. Especially his emphasis on the 'semantic, moral and political intervention' can be regarded as corresponding to the latter's three-fold relations of social practices: that is, communication-interpretative scheme-signification, sanction-norm-legitimation and power-facility-domination. But Giddens's argument for language is exactly opposite to Bhaskar, even though he rejects the conception that 'society is like a language'. It is Giddens's argument that "Heidegger and Wittgenstein are often associated with the so-called 'linguistic turn' in modern philosophy. Stated thus, I think this is misleading" (1979, p.4). We should not undermine the significance of language in practice in terms of 'the limits of language'. "In Wittgenstein's later philosophy 'the limits of language' are made explicit, and made the basis of a semantic theory. Language is intrinsically involved with that which has to be done: the constitution of language is 'meaningful' is inseparable from the constitution of forms of social life as continuing practices" (*ibid*).

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