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***Towards a generative network approach
of the epistemological, ontological and empirical
in sociological research***

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The primary aim of this paper is to ask questions. Questions about the scope of sociological theory and the way the relationships between its different elements, i.c. the ontological, epistemological and methodological, can be perceived. Coming straight to my point, I wonder whether a generative network approach would be an adequate perspective to deal with the complex relationship between theory and research and the inner structure of both elements, the inner structure of theory being the focus of this paper. The answer to this question is based upon the reflection on two other ones. Firstly, the question whether causality, if defined in linear chain terms, is an adequate notion for analysing the functioning of the social world and of social scientific knowledge, and whether it should not be adapted. And secondly, the question whether one must ascribe priority to ontological premises, being premises in the first place. This philosophical investigation is inspired by a critical reading of Derek Layder's "The Realist Image in Social Science" (1990). His notion of acausality and the concomitant generative network approach offer the leg up for my analysis of the theory-research connection in sociology.

1 INTRODUCTION

The primary aim of this paper is to tackle the question of the theory-research connection. The question of the relationship between theoretical and empirical observations is a complex one. I always felt uncomfortable with traditional positivist or humanist accounts of it. That is why I am so much attracted to the critical realist alternative. But I equally feel uncomfortable when trying to see the relationship between the different elements of theorizing in terms of priority of the one over the other. What comes first? What determines what? How determinative are the influences of one element to another? Even within the critical realist perspective, I found different and divergent answers to this question, ranging from Bhaskars priority of ontology to Layders priority of epistemology, as well as different strategies to integrate ideas of feedback loopings and mutual influences between ontology, epistemology, theoretical discourse, methods and empirical analysis. I wonder whether the traditional critical realist concentration on the nature of the intransitive reality and its definition of causality, oriented towards this intransitive world, are responsible for the difficulties one meets in defining the (privileged) status of epistemology and ontology, as became clear in the internal discussions between critical realists.

Taking into account the inherent concept-dependent character of social objects, and the rational nature and socially and linguistically mediated character of knowledge, it might be a good exercise to set aside the orthodox hierarchical perspective and replace it by a more open, polycentric one.

This philosophical investigation is inspired by Derek Layder's "The Realist Image in Social Science" (1990). I reflect on Layder's notion of acausality and its consequences for social ontology and its relationship with epistemology and methodology. I wonder whether Layder's perspective, and the critical realist perspective it is based upon, can be elaborated further. This elaboration is nothing more than a rational extrapolation of the critical realist amendment of

the notion of Humean causality, pointing to the mutual and simultaneous character of the rational connections between concept-dependent objects.

I will argue that, though Layder offers the major leg up for this endeavour, his vision upon the so-called linear-chain character of the critical realist definition of causality is too straightforward and his notion of acausality is not such a major alteration of the content of the idea of conditional causality in the social world. However, it is an interesting conceptual and linguistic elaboration of it. It evades isomorphism resulting from the traditional realist concentration on the nature of the physical world and its determinative relationship toward our knowledge of the social and ideal ones.

Furthermore, I will argue that Layer does not go far enough in extending his generative network approach. But this is merely a question of language, as he points out himself, stating that “it is difficult to find a descriptive language which can reflect this somewhat alien way of thinking” as an alternative to the “linguistically mediated habitual ways of thinking” (cf. Bohm) about the social world and social causation in particular (Layder, 1990: 98-101), i.e. the notions of linearity and hierarchy. Layder remains captured in the traditional linguistic habits, speaking of ‘levels’ and ‘strata’ of theorising. In this paper, I will consequently try to find linguistic alternatives to these notions, speaking of ‘elements’, ‘aspects’... Although I must admit that these are neither adequate enough to capture the point well enough.

2 THEORY IN EMPIRICAL RESEARCH: A BROADENED VIEW

The distinction between theory and research is an empirical one. Dependent on the point of reference, theory-oriented versus research-oriented, it gets a different content. I would like to broaden the research oriented perspective, incorporating both researchers’ theory and theoreticians’ theory (distinction from Menzies, cited in: Bryant, 2001: 73). I am deeply convinced that the relationship between theory and research, albeit viewed from a

research oriented standpoint, can only be adequately conceived as a complex network of mutually and simultaneously influencing epistemological, ontological, methodological and substantive theoretical clusters of ideas. I believe that theory and empirical research are intimately linked and that every attempt to separate them inevitably creates difficulties, resulting in endless discussions about priority and utility. In viewing their relationship from a research oriented position, I do certainly not deny the tradition and merits of 'pure' theorizing. On the contrary, in abstract and self-reflexive theory building, social theorists reflect on their epistemological, ontological, methodological premises. Their theories of the social and of social scientific knowledge should not be ignored by practitioners. On the contrary, clarifying ones own ontological and epistemological positions in confrontation with these abstract theories is, in my opinion, a major requirement for informed empirical sociological research. In the generative network approach of the relationship between theory and research, these pure theories will have their place, in their own right, as well as in relation with empirical research. The mutual and simultaneous interchanges between abstract theorizing and empirical research, now often tacit or ignored, are important resources for improvement in theoretical and empirical knowledge.

To see this, one must acknowledge the transitive character (cf. Bhaskar, 1975) of both theoretical and empirical statements and observations (cf. Sayer, 1984). And one must also recognize the important role that rational connections (cf. Layder, 1990) play between them. I will make this clear in due course. Let us first consider how "researchers' theory" is intimately linked with other forms of theorizing, albeit not in a linear causal manner, which later on will precisely be my point.

2.1 Theory in Sociological Research

Sociological theory has a long history of taking stock of itself, leaving no shortage of discussions of trends in the theory area; the theorists, texts and intellectual currents making up these trends; and the substantive arguments and conceptual frameworks associated with these developments (Camic & Gross, 1998: 453-454). However, for many practitioners today, this world of theoretical discourses is a world on its own. From their point of view, the “theoreticians’ theory” refers to remote, abstract, self-referential theoretical work, not immediately suitable for their own empirical research. Their theory, on the other hand is, often in a very narrow sense, “a proposition relating two or more variables, open to empirical testability or verification” (Layder, 1990: 4). Sayer calls it the ‘ordering framework perspective in theory’, in which theories as ordering frameworks, permit observational data to be used for prediction and explanation of empirical events (Sayer, 1992: 50). It is this (simplified) dual vision on theory, based upon a hierarchical perspective of the relation between theory and research, that accounts for the apparently insurmountable gap between theory and empirical research. Many contemporary practitioners have a problem with theory, both in its narrow research oriented as in its abstract form: on the one hand, the orthodox, hypothetic-deductive model, most strongly related with empirical research, proved to be inappropriate in the post-empiricist era, on the other hand the idea of grand or supertheory is no adequate alternative to them. On the contrary, “the abstract, self-referential theorizing that distances itself from the substantive issues that arise in areas of empirical social research” is seen as a threat to the principle task of sociology (Camic & Gross, 1998: 455).

However, I don’t think the gap is that deep. I even don’t think there is a gap of that sort. It is the definition of ‘theory’, being either too narrow or too remote that accounts for the experienced malaise. In this paper, I would like to search for an alternative approach, combining theory and empirical research in a model that overcomes the dualities between theoreticians’ theory and

researchers' theory and between theory and empirical research. I will start this investigation with an exploration of the narrow definition of theory, once successfully proposed as the middle ground between theory and research: research theory.

A research theory, according to Layder, specifies in advance the form and nature of theoretical propositions as they emerge from the research process (Layder, 1990: 38). Merton's middle range theory is an outstanding example of a research theory. Merton's view of what counts as 'theory proper' has been exceedingly influential in sociology for a long time. According to Merton only deduction of propositions to be empirically tested and their codified cumulation constitute theory proper. It is the orthodox view of theory, modeled on natural science. More general types of work which have gone by the name of theory in sociology, such as methodology, general orientations, analysis of concepts, post factum interpretations and empirical generalizations are not deemed to be theory proper, according to Merton. The growth of theory is central to this conception of theory (Bryant, 2001: 52-53).

Parsons defined theory in a similar orthodox way, i.e. as 'a body of logically interdependent generalized concepts of empirical reference' (Parsons in Smelser, 1994: 22). He stated the establishment of an empirical-theoretical system of interdependent classes and definitions, plus laws which specify the relationships between its elements, affording predictions under real (as distinct from experimental) conditions, to be the ultimate task of sociological theorizing (Bryant, 2001: 54). Merton did not believe generation of such a nomenclature was a task for any single theorist, but nevertheless he hoped it would be developed from the contributions of numerous sociologists who would take care to consider various past and present uses of a term before engaging in concept formation. In practice, this was not the case. Was it not Merton himself who stated in the end that "it is not so much the plurality of paradigms as the collective acceptance by practicing sociologists of a single paradigm proposed as a panacea that would constitute a deep crisis with ensuing stasis" (Merton in Camic & Gross, 1998: 461)?

However, the hypothetic-deductive model of theory, based on the ideal of natural science, has long continued to dominate (American) empirical sociology. It is the vision on theory promoted by Lazarsfeld and Rosenberg, Stinchcombe, Dubin and Blalock (Bryant, 2001: 53). Today Chafetz, Rule and Wallace are the most vivid contemporary proponents of this line of thought, though in various ways (Camic & Gross, 1998: 455-456). Encouraging an eclectic approach to the theoretical enterprise in sociology, they state that theory must be generated from the substantive area in question. Chafetz argues that theory must be a diverse set of practical tools from which one can select those most helpful in solving any given (empirical) problem, articulating a multivariable, eclectic structural theory of the causes of gender stratification. Rule searches for general propositions about the sources of civil violence. Wallace's project is more ambitious still, in his attempt to create a metalanguage, a single conceptual matrix for empirically oriented work, a general nomenclature for the creation of many kinds of descriptions and explanations (Camic & Gross, 1998: 456-457).

However, the orthodox positivist researcher's definition of theory is challenged by proponents of the linguistic turn and of anti-foundationalism, both leading to what Alexander calls post-positivism, and what Bryant prefers to call post-empiricism. For at the end of the 1960s all basic assumptions of the empiricist foundation of this orthodox theory-vision had been undermined. The naive realism, the quest for a universal scientific language and the correspondence theory of truth were challenged by historical philosophical analyses of science (cf. Kuhn, Feyerabend, Toulmin a.o.), the anti-foundationalist epistemology of Quine, derived from Duhem and Rorty's analyses of the development of scientific knowledge and the linguistic philosophy of Wittgenstein (Bryant, 2001: 61) and other philosophers of the french and german schools of linguistic philosophy, such as Gadamer, Winch, Schütz, Lévy-Strauss, Saussure, Derrida, Lyotard (cf. Gurnah & Scott, 1992; Delanty, 1997). As such it strengthened the longstanding claims of the hermeneutic or interpretive tradition in social science as well as the findings of

studies in the sociology of science, pointing to the internal and external social influences on the development of scientific knowledge. Whereas Weber, Mannheim and Merton, albeit in a different argument, still believed in ways to overcome these influences, Knorr-Cetina and Mulkay for example, most convincingly showed the social constructive character of scientific knowledge (Mulkay, 1979; Knorr-Cetina, 1981; Knorr-Cetina & Mulkay, 1983). As such, not only the inherent interpretive or concept-dependent character of the social world and the social and linguistic character of scientific knowledge were fully recognized, the positivist model and the concomitant theory conception of the natural sciences were rejected. Defeated as they were, they could no longer serve as an ideal model for the social sciences (nor for the natural ones). The whole world of science was turned upside-down by this 'Copernican Revolution' (Bhaskar after Harré, 2000(1975): 9) in the philosophy of science.

One of the earliest alternative research theories, developed as an alternative to the defeated positivism of (functionalist) middle-range theory, is Glaser and Strauss's 'grounded theory' (1967) (Layder, 1990: 91). In search for an alternative empirical foundation of theory, they ground their theoretical concepts in exploratory, qualitative research. Guided by a hermeneutic interest in the accounts, experiences, perceptions and attitudes of the actor, Glaser and Strauss developed a methodological protocol in which concepts emerge from qualitative data. It attends to the possibilities of theory generation through exploratory fieldwork. As such, Glaser and Strauss explicitly reject the scientific empiricism of positivism and endorse an experiential or phenomenological empiricism. They reject the fixed choice questionnaire survey and emphasise the importance of qualitative observational techniques (Layder, 1990: 157).

How differing both research theories may be, it is clear that both middle-range theory and grounded theory are enmeshed in a straightforward attempt to connect theory and empirical research, to ground theoretical statements in empirical observations. According to Layder, their methodological prescriptions

are embedded in an empiricist theory of knowledge.¹ As research theories they both attach great interest to empirical observation as a sure foundation of scientific knowledge. Albeit connected with a different theory of social science and a different methodological perspective (Layder, 1990: 91).

As such it becomes clear that to reduce theory to research theory means not only to ignore the vast tradition of 'pure' theorizing, but also to overlook the rational connections between methodological protocols and epistemological and ontological premises. Layder argues that it is precisely because of the differences in theories of science and methodology that the 'level' of theorizing called research theory, is intimately linked with other theoretical 'levels', such as epistemological and ontological and that, "if they are not admitted to the definition of theory, a narrower definition of theory will overlook both the prescriptive (theoretical) assumptions themselves and, more importantly, their implications for research practice" (Layder, 1990: 91).² Merton's middle-range theory for example, draws together empiricism and positivism in its methodological protocol and there is a strong compatibility between both middle-range theory and functionalism and middle-range theory and empirical research (Layder, 1990: 85-91). Likewise, there is a strong compatibility between both grounded theory and symbolic interactionism and grounded theory and empirical research. Though these relationships between methodological, epistemological and ontological presumptions are neither deterministic, nor unique. One does not have to be a functionalist to use middle-range theory or vice versa. Furthermore, they are both related with specific research methods, although, once again, this relationship is not a deterministic or unique one.

¹ Steven Vaitkus, in a review on Layder's 'Realist Image in Social Science', states that Layder's definition of empiricism is too vague and limited. So he would be guilty of the name-calling game he condemns so violently in his introduction (Layder, 1990: 2-3), condemning phenomenology too easily as empiricist and neglecting pragmatism as a most interesting alternative. His vague and limited conceptions of empiricism (and rationalism) is the major source of the complains of misrepresentation and criticism of writers such as Bulmer and Platt (Vaitkus, 1994). I agree with Vaitkus. Although I see Layder's linguistic amendments of the notion of causality for the social and ideal world as an amelioration of the traditional realist perspective.

² As I will argue in due course (par. 2.2), I will not speak of 'levels'. In doing so, Layder remains captured in the hierarchical model of theory and research he wants to reject.

This complex, non-contingent but neither necessary causal (cf. *infra*) interplay between ontological, methodological and epistemological premises is clearly illustrated by another, contemporary alternative research oriented account of the relationship between theory and research. Presented as a research theory, but explicitly embedded in ontological and epistemological prescriptions, Sayer's critical realist 'method in social science' (1984) is meant as an alternative to positivist middle-range theory and humanist grounded theory. Sayer tried to provide an alternative answer to the post-empiricist critiques of the orthodox definition of theory and to the complaints of many practical researchers in social science about the remote and highly relativistic character of theoretician's theories (especially the so-called 'post-modern' ones) in social science. Like Glaser and Strauss's grounded theory, his critical realist methodology is a response to anti-foundationalism. In line with Bhaskar's realist ontology, Sayer argues for a definition of theory as a way of conceptualization in which reference to concrete objects in the world is established by abstracting the different aspects of the object studied and recombining them in structural and causal analysis, in order to represent theoretically the stratified, hierarchical, emergent and contingent character of the (social) world. Although the conceptualized causal mechanisms may be unobservable, their contingent effects are visible and by reference to other theories about similar phenomena and the critical realist ontology, one can a posteriori acknowledge their functioning (Sayer, 1992). Though Sayer defines theory rather narrowly, as a means of describing the relations between the unobservable causal mechanisms (or structures) and their effects in life, throughout his book he explicitly refers to the whole generative network of mutually simultaneously influencing epistemological, ontological and methodological premises, named 'critical realism'.

This makes me once again agree with Layder's statement that the definition of theory as a research theory should be broadened, even in an explicit research-oriented perspective, to incorporate all the elements used in the rational activity of theorizing theory and the social world.

Layder would call this broadened vision on theory “the construction of theoretical discourses”, i.c. “relatively discrete clusterings of concepts which provide the internal conditions and theoretical shelter for the posing of certain problems and arbitrating the validity of certain kinds of answer” (Layder, 1990, 35). To speak of discourses is to refer to their different contents which make particular subject matters and particular forms of discussion and investigation more in line with them than others. This way the criteria of valid knowledge are closely related with these contents. Bryant also prefers to speak of discourses, referring to Purvis & Hunt’s definition of it as “a term in which to grasp the way in which language and other forms of social semiotics not merely convey social experience, but play a major part in constituting social subjects... their relations and the fields in which they exist” (Bryant, 2001: 63). Although Bryant accentuates the constructivist character of the term more strongly than Layder, who states that the knowledge produced within these discourses is also influenced by the concrete reality which the concepts and language used in the discourse are describing or symbolising. And of course, the internal and external referents influence one another (Layder, 1990: 34). A critical realist statement I fully agree with. Furthermore, Layder argues that it is important to recognize that theoretical discourses are in no way monolithic blocs. The network and meaning universe conceptions of discourse do not imply consensus within their parameters, they only serve as boundary defining functions of the linguistic/conceptual structure (and, I would like to add, the social network) of a discourse, vis-à-vis other discourses. Well-known theoretical discourses in sociology are the theoretical schools recognized in many overviews, such as functionalism, symbolic interactionism, ethnomethodology, critical theory, structuration theory... But, as we all know, the differences within the respective discourses (e.g. between the Chicago and the Iowa schools in symbolic interactionism) are often greater than the differences between some of them (e.g. between the Chicago school of symbolic interactionism and ethnomethodology). Therefore it is more appropriate to see the various theoretical elements of these discourses as relatively distinct but

closely related to one-another. As I will argue later on (par. 2.2), the relationships between these elements are not necessary causal, nor historically contingent. And here I will borrow an insight and a definition from Layder: they are 'acausal' (Layder, 1990: 68).

From the argument above it will be clear that, as I mentioned before, abstract or 'pure' theorizing should not be excluded from our definition of theory. This abstract theorizing is often meant as initiation of a new or reflection on an existing theoretical discourse. In sociology this reflection concerns the ontological question 'what is the social?'. This kind of ontological theorizing can be found in the theoretical writing of sociology's founding fathers and of the initiators of all well-known 20th century theoretical schools. At the end of the 20th century it can be found in the theoretical writings of authors, outlining their 'structuralist' syntheses of the various ontological premises of the theoretical discourses mentioned above. It can be found in Berger and Luckmann's dialectical conception of society and individual, in Bhaskar's transformational model of social activity, in Archer's morphogenetic approach, in Giddens' structuration theory, in Randall Collins' aggregation hypothesis and in Bourdieu's theory of the habitus and the field, to name but one outstanding, non-anglo-saxon example, and in J. Turner's synthetic theory of social interaction and Alexander's post-Parsonsian micro-macro synthesis, as non-european ones. Though their common interest lies in the formulation of a social ontology, combining contrasting ontological concepts, the differences between their perspectives are great. These differences concern the different ontological accentuation of the one or the other side of the reconciled distinction (e.g. Giddens' accent on agency versus Bourdieu's determinism of the habitus), as well as the different epistemological status ascribed to their ontology in the validation of social scientific knowledge (ranging from ontological priority in an empiricist way (cf. Bhaskar) to rationalist hermeneutic (cf. Giddens)) and the different methodological prescriptions (going from Randall Collins' reduction of macro-sociology to its micro-foundations to Archer's non-reductionist morphogenesis).

It is important to recognize that, whether implicitly or tacitly, these ontologies with their respective connections with other 'levels' of theorizing, play at the back of the mind of researchers who are empirically analyzing social phenomena, whether eclectically choosing theoretical perspectives to frame their findings, or deliberately positioning their research in a certain theoretical discourse.

As such, the differing epistemological and methodological premises of different theoretical discourses produce different and sometimes competing versions of social ontology and hence, competing conceptions of the nature of social structures (Layder, 1990: 62).

Unlike Layder, I would not use the metaphor 'produce', because I am inclined to reject the idea of priority in these matters. In defining the epistemological, the linguistic or conceptual and the ontological as different 'levels of discours' and stating the epistemological to be the primary one (Layder, 1990: 29-30), I think Layder remains captured in the hierarchical model he wants to decline, arguing the epistemological level to be more basic or prior to the ontological. As such he contributes to the never ending debate about the status of ontology and epistemology. As I said before, I wonder whether it would not be a refreshing exercise to leave this debate about priorities and just concentrate on the mutually simultaneously influencing elements of theorizing. An argument I will try to develop in the next paragraph.

2.2 Towards a generative network approach of theory

As I argued before, to see the mutual and simultaneous interchanges between the various elements of theorizing and empirical research, one must acknowledge the *transitive character* (cf. Bhaskar, 1975) of both *theoretical and empirical statements and observations* (cf. Sayer, 1984). And one must also recognize the *acausal character of the rational connections* between them (Layder, 1990). As I promised, I will now elaborate on this.

Theories are about objects in the world. The objects of science form the intransitive dimension of science (Bhaskar, 1975). They exist independently of our knowledge about them. They have an external substance, whether material or ideal, which make them recalcitrant to inappropriate or incorrect theories about them. The intransitive objects may feed back and influence (though not determine) the way in which we come to know and understand them (Layder, 1990: 30-32). Far from rejecting this realist ontology and adhering to the idealist stance of a reality understood as nothing more than a reflection of internal relations between concepts and ignoring the (at least relative) autonomy of the ontological, I am committed to the basic realist tenet of an objective reality. But the traditional realist concern with the privileged nature of ontology, is embedded in a particular (and restrictive) epistemology, i.c. a latent empiricist theory of knowledge. This latent empiricism comes to the fore in the statement that “the nature of objects and processes (including human behaviour) determines their cognitive and practical possibilities for us” (Bhaskar in: Layder, 1990: 31). The naïve empiricist statement that knowledge is given to us by observation or experience is replaced by the latent empiricist one that our knowledge is determined by the (often unobservable) prior structures of the world. According to Layder, the empiricism lies herein that Bhaskar denies the influence of the rational discourse in the determination of knowledge (Layder, 1990: 59). Which is in fact quite contradictory to his central tenet that there can be no ahistorical, asocial and theory neutral descriptions of the world (Layder, 1990: 31). A tenet that Layder, and I with him, fully accept. The contradiction lies herein that if ontological features should really determine our cognitive possibilities then our knowledge of them must be isomorphic or corresponding with these ontological features. The latter would have to reach us in a manner which eludes contamination by prior theoretical presuppositions (Layder, 1990: 31). This is certainly not the case, as is recognised by Bhaskar himself in the idea of transitivity of our knowledge.

I think Layder overemphasizes the ontological determinism and underestimates the recognition of rational, linguistic and social mediation of

knowledge in Bhaskar's critical realism. But I agree with his argument that privileging the nature of the real world of intransitive objects as the prime arbiter of our knowledge of it, is not adjusted to the specificity of the world of intransitive objects and therefore not adjusted to describe the way our knowledge is built up, and that we need an alternative language to describe the nature of world of the social and ideal.

Especially the notion of causality needs amendment. As the social world is not only made up by the real phenomena but also by concepts about them, the relationships between these concepts, being of a rational character, cannot be grasped in terms of linear causal mechanisms. I leave it to critical realists to argue whether and how strictly they do define causality in linear chain terms, as Layder states, but I am attracted by Layder's particular way of conceptualizing causality in the social and ideal world.

Layder defines the relationships between concepts or rational ideas as acausal, being generative in a different sense from the causal mechanisms of the real world of intransitive objects. Just as there is no immediate correspondence between intransitive and transitive objects, 'causality' in the world of transitive objects is not the same as in the intransitive one. Layder argues that Bhaskar has overlooked this consequence. This is not to say that his idea of causality is not adequate to describe the intransitive world. Layder only posits the need for an alternative notion of causality for the transitive world, appropriate to its specific character.

The critical realist amelioration to the orthodox (Humean) concept of causality (expressed in the idea of observable, regular conjunctions of events) offers the leg up to Layder's alternative conception of causality in the social world. The critical realist's notion of causality goes beyond the establishment of observed empirical regularities and posits causal or generative mechanisms which underlie these regularities and actually produce them. So knowledge in realism does not have to be construed as a simple conceptual appropriation of the observed or experienced world (Layder, 1990: 13-14). However, this amelioration has to be extended with respect to social reality. Layder argues

that critical realists have not done this sufficiently thus far. Thusfar, according to Layder, whilst the positivist version of causality uses the metaphor of a punctuated linear chain produced to follow-on effects of one phenomenon after another, the realist version reproduces it in the form of the activation of the powers of generative mechanisms and their ability to produce new phenomena or transform existing ones. This conception of causality may be convenient for the explicate order, that is for the real objects in the world that bear some relation to the status and doing of human social activity, it is not adequate to describe causality in the implicate order of concepts and ideas. Social reality is not only made up by real phenomena, but also by concepts about them. These concepts should better be defined as acausal phenomena. Acausal, meaning that they possess powers and produce effects by virtue of their internal structure and their relationship with each other, but in a diffuse and reciprocal way (Layder, 1990: 68-69). The relationships between acausal phenomena are neither necessary causal nor merely historically contingent. "The concatenations of generative loci produce emergent generative powers that cannot be understood as an isolated linear chain sequence of causal effects; they have to be understood as complex interrelations with diffuse reciprocal influences. The relative strengths of influence of specific generative loci have to be understood in terms of the operations of the composite relations of the network and not simply in terms of intrinsic powers which can be defined outside the context of specific networks" (Layder, 1990: 104). Therefore, Layder argues that the orthodox linear chain definition of causality should be replaced by a more open generative network approach, "understanding generative phenomena in terms of circuits of generative loci and the conduits which bind them together through reciprocal effects and interdependencies" (Layder, 1990: 103).

I think Layder's vision on the critical realist notion of causality is too straightforward. Though I fully agree with his argument that the critical realist language is too restrictive, because too much concentrated towards the natural world (the explicate order), he does not pay enough attention to the idea of

conditionality in the critical realist notion of causality in the social world, and the fact that critical realism points to the intentions and motives, as well as the concepts of the social actors (cf. Sayer, 1998: 14). Though this critique does not rule out Layder's conceptual alternative of acausality. His remark that the network of ontological concepts is not adjusted to the social reality and should be elaborated further remains interesting. His notion of acausality and the critical realist's notion of conditioned causality are perfectly compatible, with Layder's offering a convenient linguistic alternative to describe the relationships in the social and ideal world (the implicate order).

Furthermore, in my opinion, in the generative network approach one cannot speak of 'levels' or 'strata', as Layder keeps doing. There are only loci (perspectives about objects, knowledge and methods) and diffuse reciprocal influences between them. Therefore, I would not attach any priority to the ontological (as Bhaskar does) nor to the epistemological (as Layder maintains).

Applying this alternative way of reasoning to what we actually do when we are theorizing, we can say that we are constantly making complex interrelations between epistemological, ontological and methodological ideas in a specific theoretical network, thus reproducing and transforming more or less stable clusters of theoretical concepts and rational connections between them.

3 DISCUSSION

Broadening the meaning of theory within the research oriented perspective is disputable. With respect to 'sociological' theory, one can doubt the necessity of this endeavour. One can ask whether philosophical questions should be part of a sociological theory of substantive empirical phenomena. Whether sociological theory must be seen as comprehensive, incorporating epistemological, ontological and methodological elements and the complex rational connections between them. One can answer this question positively (as I am inclined to do), arguing that these general philosophical positions always

go hand in hand with each substantial sociological theorizing and that one should make them more explicit, just as one should make their interrelations more explicit. One could also argue against this option, stating that this comprehensive approach leads to unnecessary theoretical complication... However, I am deeply convinced that reflexive empirical sociological research is the only way forward for theoretical and empirical analysis.

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