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Acta Sociologica 1992 35: 107
DOI: 10.1177/000169939203500203

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Causal Explanation of Social Action

The Contribution of Max Weber and of Critical Realism to a Generative View of Causal Explanation in Social Science

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Causal explanations of social actions are central to modern as well as to classic sociology. Even in its revised form, the most influential causal theory - the covering law theory - has not proved particularly fruitful for the study of social action. But there are alternative and potentially more fruitful theories. This article presents Weber's methodology and critical realism as two different contributions to a generative view of causality in social science which both try to transcend the protracted controversy between a hermeneutic interpretive sociology and a positivistic causal-explanatory sociology. From the generative standpoint, causal explanations are directed not towards the production of empirical correlations between variables or towards the making of predictions on the basis of empirical laws, but towards the uncovering of causal properties and the processes whereby social actions arise out of the complex interaction of internally related mental dispositions, meanings, intentions, social contexts and structures.

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1. Introduction

Common to a great deal of modern as well as classical sociological theorizing is a focus on explanations of social actions. In a recent article in Acta Sociologica, Therborn writes: 'Sociological theorizing is likely to change dramatically in the near future, moving from focusing on conceptualization onto explanation' (1991:177). That the basic aim of sociological theorization (and conceptualization) should be to contribute to an explanatory science is a notion which Therborn would appear to share with the majority of modern theorists. Giddens (1984:346, my emphasis), for example, writes: 'Now, it can be accepted that all abstract generalizations in the social sciences are, explicitly or implicitly, causal statements'. In an article about sociological analytical theorizing, Turner (1987) argues that sociological theorization must focus on causality in terms of abstract processes and operative mechanisms. Concerning Bourdieu's habitus theory, Broady writes (1990:232, translation and emphasis my own): 'Its purpose is to push in an explanatory link between the social circumstances and the behaviour of individuals.'

But what are the scientific-theoretical and methodological foundations of a causally explanatory sociology? The import and applicability of causal explanation, and its relation to other types of explanation and to understanding (Verstehen) - these are among the most central topics when it comes to the discussion of the methodology of social science in general, and the study of social intentional actions in particular. One can thereby distinguish at least four different positions that have been taken up with regard to these topics (cf. Lloyd 1986:8). First, there is the idea that, unlike in natural science, the endeavour in social science should not be directed towards causal explanation but towards the understanding and/or rationalization of social
actions in relation to intentions, meanings, and socio-cultural contexts. Second, there is the idea that social science should indeed strive for causal explanation, but that such explanation should have a particular structure and should be arrived at by way of particular methods. Third, there is a positivist naturalism that asserts the general applicability of the empiricist concept of causality in both natural and social science (albeit in a somewhat modified form in the case of the latter). Fourth, and last, there is an anti-positivist naturalism that questions the empiricist concept of causality and advocates a unified science of causal explanation resting on another foundation. In the debate about explanation of social action, there has long been recurrent controversy between, chiefly, the first and third of the above positions.

The most widely accepted specification of causality – the empiricist theory – was originally formulated by David Hume (Hume 1966; see also e.g. Stroud 1977). Causality is regarded as a matter of empirical regularities. Causal conclusions are assumed to be based on the observation of how a certain event is followed again and again by a certain other event, not on knowledge of causal mechanisms and the generative properties of things. To the empiricist view the relation between cause and effect is an external one. Cause and effect are regarded as separate and independent objects, i.e. objects that do not depend on one another for their constitution. This relation of independence becomes a central criterion of causality.

Characteristic of the deductive-nomological explanatory model (or the ‘covering law model’) that has been developed within modern positivism is that explanations of individual events or actions are derived from one or more laws (or law-like formulations). These laws express universal empirical correlations, usually formulated in terms of probability. Thus, according to this notion the validity of causal explanations depends on their capacity to predict empirical courses of events (see e.g. Hempel 1965) and, for a brief survey, e.g., Johansson & Liedman (1987), Keat & Urry (1975). The fact that empiricism and positivism have exerted such a strong influence has meant that the matter of causality and social actions has primarily become a question, first, of whether intentions and actions can be regarded as independent, i.e. externally related, and, second, of whether social actions can be explained and predicted with the aid of empirical laws (see e.g. the debate concerning ‘the philosophy of action’. Marc-Wogau 1980; von Wright 1971; see furthermore the debate in Scandinavian social science, e.g. Osterberg 1989). A central aspect of the latter question is, third, whether explanations are to be derived from directly observable patterns of events and of action, or whether – and if so, how – a science of social actions shall seek to expose not directly observable causal mechanisms.

It is unlikely that many present-day Scandinavian sociologists would describe themselves as adherents of the out-and-out empiricist notion of causality, or as adherents of the positivist covering law theory. In practice, however, the type of variable-oriented research that seeks causal explanations chiefly through studying empirical correlations between a few externally related variables is anything but uncommon. Partly in controversy with this mode of research, many have become adherents of an interpretive sociology that questions the very possibility of finding causal explanations for social actions. The representatives of this attitude often equate causality with the empiricist and positivist theory, as can be illustrated by the following quotation from Osterberg:

I shall be arguing ... that the principal task of sociology is to interpret what happens between people in this field of action. Interpretation is to be understood here as something else than causal explanation and/or causal-functional explanation. What happens in social life cannot be causally explained on the basis of sociological laws ... which would enable us also to deduce what will happen in the future. ... Descriptions of reasons, motives and intentions have the purpose of making our understanding of the behaviour both of others and of ourselves as deep as is desirable or requisite in the situation (Osterberg 1989 9 and 23. translation and emphasis my own).
time to be regarded as unfruitful (see e.g. Giddens 1984; Turner 1987). The dismissal of the empiricist and positivist notion does not necessarily imply a questioning of the causal-explanatory ambition in itself – quite the opposite. Giddens, for example, starts from the following:

That there are no known universal laws in social science is not just happenstance. If it is correct to say, as I have argued, that the causal mechanisms in social scientific generalizations depend upon actors’ reasons, in the context of a ‘mesh’ of intended and unintended consequences of actions, we can readily see why such generalizations do not have a universal form. . . . I propose simply to declare that reasons are causes, accepting that this no doubt implies a non-Humean account of causality (Giddens 1984:345).

The purpose of the present article is to bring to the fore, and to indicate the contrast between, Weber’s perspective on causality and that of the critical realists. Weber represents the second of the above positions, while the critical realists – or at least certain of them – represent the fourth. It may be questioned whether it is fruitful to present these two side by side. Certainly the contributions of (on the one hand) Weber and (on the other) the critical realists are of different character, were produced in different contexts and had different intentions behind them. It is not, though, my intention in this article to carry out a comparative analysis in terms of the philosophy of science or the history of ideas, or to present a unique interpretation of the scholars. The intention is instead to bring to the fore Weber and critical realism as representatives of important (and at least in Scandinavian sociology underestimated) perspectives regarding causal explanations of social action. At the same time as there are a number of essential differences between these perspectives, they have in common that they develop generative views of causality, explicitly as attempts to overcome the contemporary polarization between positivism and hermeneutics.

2. Weber’s contribution to a causal-explanatory social science

2.1. Verstehen and causal explanation – an integrated approach
The interpretation and presentation of Weber’s methodology has to a large extent been affected by the tendency towards polarization in the discussion concerning methodology in the social sciences. Many have regarded him chiefly as a representative of the anti-positivist side in the controversies between understanding and causal explanation, and between qualitative and quantitative methods. By and large, Weber is most often presented as a ‘verstehen sociologist’, at the same time as his development of the concept of causality is either ignored or just mentioned in passing (see e.g. Herva 1988). He has been used – as Eliaeson (1982) puts it – as a ‘stick with which to beat opponents’ in ‘the verstehen/erklaren debate’ (p. 22, translation my own). In Swedish sociology the picture of Weber has been in part coloured by the long drawn-out ‘soft data debate’, where he has been cited as a representative of a ‘soft data sociology’ (Johansson 1966) or a ‘qualitative sociology’ (Hughes & Mansson 1988).

Sociology (in the sense in which this highly ambiguous word is used here) is a science concerning itself with the interpretive understanding of social action and thereby with a causal explanation of its course and consequences (Weber 1978:4, my emphasis).

This oft-quoted introduction to the first part of Economy and Society – a part devoted to a methodological and ontological definition of the object of sociological investigations – illustrates the fact that Weber did not regard understanding and causal explanation as distinct or opposed activities, but as two essential and integrated parts of one and the same methodology. The formulation of a Verstehende Soziologie involved the conviction that all meaningful human actions can be causally explained (Hekman 1979; Keat & Urry 1975; Salomon 1934; Turner 1986). This comes out both in the explicitly methodological writings and in the empirical studies.
The integrated perspective involves interpretive understanding as a crucial prerequisite for causal explanation in history and social science: it is required on the one hand for elucidating the social and cultural meaning of what is to be causally explained, and on the other hand for attaining knowledge of the processes that connect cause and effect. At the same time causal analysis is a prerequisite for the understanding of the cultural significance, distinctive character, interrelationship and historical foundation of different phenomena. A further expression of the integrated perspective is the fact that Weber in certain cases treats the concepts of understanding and explanation as virtually synonymous (see e.g. Weber 1949:72, 77 & 79; 1975:149; see also Aron 1974; Giddens 1977; Salomon 1934).

In the light of this there would seem to be little point in attempting -- as others have done -- to determine whether it is to understanding or to explanation that Weber assigns priority. In two Swedish theses we find conflicting conclusions regarding Weber’s position. Eliaeson writes: ‘But this interpretation to the effect that understanding has pride of place would seem less plausible than its opposite: that one explains through understanding, which is to say that the act of understanding is an indispensable but insufficient step on the path to explanation’ (Eliaeson 1982:101; my translation). Coniavitis, on the other hand, writes: ‘The conviction that “meaning” has priority over “cause” remained with Weber throughout his life. Causality is for him a stage in the interpretive process’ (Coniavitis 1977:100; my translation). The way I understand it, the important part of Weber’s contribution is that he (as we shall see) looks upon meanings as causes.

2.2. Causality and intentionality
Weber’s chief interest, both as a historian and as a sociologist, is persons who act and who give reality content and meaning by setting themselves into relation with other persons and with specific social and cultural contexts. In such a science it is principally by interpreting the intentions behind actions, and by relating actions to various complexes of meaning, that we can identify the causal mechanisms that produce actions and patterns of action. Weber does not regard intentional explanation as distinct from causal explanation, but rather as one form of it. Causal explanation is a matter of understanding concrete human action in terms of its motives (Weber 1949:52, 72; 1975:186, 197, 216; 1978:4; see also Goodman 1975; Hekman 1979; Keat & Urry 1975; Oakes 1975; Turner & Factor 1981).

Those who view the painstaking labor of causally understanding historical reality as of secondary importance can disregard it, but it is impossible to supplant it by any type of “teleology”. From our viewpoint, “purpose” is the conception of an effect which becomes a cause of an action. Since we take into account every cause which produces or can produce a significant effect, we also consider this one (Weber 1949:83).

The question whether motives can be regarded as externally related to actions – a question that has been at the centre of the debate concerning the applicability of causal explanation in social science, and that has led certain researchers to advocate an intentional explanatory model basically diverging from the causal one — does not appear to constitute any sort of problem for Weber. Intentionality is regarded as one of various causal processes jointly contributing to the production of a certain action and its effects (Weber 1978:11 and 1949:83).

2.3. Causality as quantifiable regularities or qualitative connections and processes
Weber, like for instance Hume and also the critical realists, discusses the concept of causality in relation to two ideas regarding its import: (1) ‘the idea of an effect, the idea of a dynamic bond... between phenomena qualitatively different from one another’, and (2) ‘the idea of subordination to rules’ (Weber 1975:195; cf. e.g. Hume 1966; Harré 1986). The purpose of causal explanation is to identify particular concrete causal relationships between individual affected and effective phenomena (Weber 1949, 1975:196). Weber focuses chiefly on the import of these relations, on how and through which processes a certain influence comes about, and on how concrete phenomena have been produced out
of the past. Generalizations in terms of statistical correlations cannot replace an interpretive understanding of the causal properties that explain a certain action:

Suppose that somehow an empirical-statistical demonstration of the strictest sort is produced, showing that all men everywhere who have been placed in a certain situation have invariably reacted in the same way and to the same extent. Suppose that whenever this situation is experimentally reproduced, the same reaction invariably follows. Which is to say: suppose that this reaction is, in the most literal sense of the word, ‘calculable’. Such a demonstration would not bring us a single step closer to the ‘interpretation’ of this reaction. By itself, such a demonstration would contribute absolutely nothing to the project of ‘understanding’ ‘why’ this reaction ever occurred and, moreover, ‘why’ it invariably occurs in the same way (Weber 1975:128, my emphasis).

This view of causal explanation of social action implies a criticism of the tendency within positivism to regard causality as primarily a question of empirical correlations between quantified variables, and the idea that the goal of science is to establish generalizations/laws. Causality is a question of properties/qualities which bind the effect to the cause, i.e. what Hume, through his notion of empirical regularity, denied that we can arrive at knowledge of (Hume 1966:63), and which is all too often ignored in positivist variable-oriented research (Outhwaite 1987:102). As Manicas (1987:130) points out: ‘For Weber the scientific investigation begins only after these correlations have been established.’ Quantified correlations can be a starting-point or a causal analysis in the sense that they bring into focus the processes that are then to be investigated.

Concurrently with the shift in Weber’s focus from economic, social and cultural history to what can be described as more purely sociology, there occurs a certain change in his evaluation of empirical regularities as a goal of causal-explanatory science. Assuredly, sociology is largely based on the same concrete processes, intentional actions and cultural meanings as history, but sociology is concerned with typical action”, and “seeks to formulate type concepts and generalized uniformities of empirical process’ (Weber 1978:19). In Economy and Society Weber differentiates between adequate on the level of meaning and causally adequate. The first of these refers to the content of the relations between the specific context of meaning in which an action is embedded, the import that the actor ascribes to this context, the actor’s motive and the act itself. Causally adequate, on the other hand, refers to the probability that a certain specific event will always be followed by a certain other specific event. These two types of adequacy represent two types of Sociological knowledge which presuppose and fructify each other.

2.4. Contextuality, abstraction and empirical generalization

Weber’s methodological reasoning represents the taking of a particular attitude to the question of the relationship between contextuality, abstraction and empirical generalization, a question that permeates both the methodological conflicts in which Weber was involved and the similar conflicts that have taken place during the present century. The starting-point for his positions – as they are formulated in, principally, the early methodological writings – is a notion of reality as consisting of an infinitely manifold and inexhaustible course of empirical and individual phenomena. The standpoint Weber develops – a standpoint influenced by neo-Kantianism – involves a repudiation of a number of possible ways of handling this complex context. First, there is a rejection of the radical contextualism where the aim is to capture a part of reality in its total manifoldness without the aid of any conceptual framework: ‘... an exhaustive causal investigation of any concrete phenomenon in its full reality is not only practically impossible – it is simply nonsense’ (Weber 1949:78). Second, there is a rejection of the nomological approach, of the endeavour to formulate general laws on the basis of which it would be possible to deduce the concrete causal relations, this chiefly because the universal concepts will be devoid of content and meaning, without roots in concrete reality. Third, by taking as the goal of causal-explanatory science the achievement
of knowledge of the individual concrete configuration of reality, Weber is rejecting a science that through concept formation seeks to uncover abstract non-observable essential structures and processes which operate behind the stream of events in reality (Weber 1975:56, 64, 66; see also Outhwaite 1983; Manicas 1987).

Influenced by Rickert and the concept of Wertbeziehung, Weber asserts that it is the researcher's socially and culturally determined values, notions of what is of importance, that constitute the necessary criteria for the selection from the unstructured empirical reality. This neo-Kantian position leads to a repudiation of the idea of value-neutral knowledge. However, explicitly defined and justified criteria for focusing on partial causal relationships form at the same time the basis for objectivity – or rather intersubjectivity – in science. With a certain fixed and common perspective regarding the object of investigation, researchers can compare and evaluate their results (see e.g. Weber 1975:124 and 1949:81; see also e.g. Eliaeson 1982 and 1990b; Turner & Factor 1981; Turner 1990).

The core of the method that Weber advocates for arriving at causal explanations of social actions is rational interpretation, which in brief is a matter of reconstructing a context of meaning for the purpose of understanding why persons act as they do. Meaningful actions are explained by being set in relation to the categories ends and means, and at the same time to the meanings they have for the agent. meanings in the form of socially and culturally determined motives for action. Such understanding and explanation is not to be attained by way of introspection or empathy but first and foremost by way of analysis of the social and cultural contexts in which people act (Weber 1949:69, 72, 83; 1975:181, 194 and 1978:4; see also Hekman 1979; Jacobs 1990; Oakes 1975). Weber’s methodology is more much sensitive to the processes of interpretation, and to different causally significant properties of socio-cultural contexts, than the mainstream variable-oriented sociology (cf. Blumer 1956; Ragin 1987), but transcends at the same time the intuitionist and psychologizing understanding represented by Dilthey (Eliaeson 1982, 1990a; Jacobs 1990; Goodman 1975). He repudiates the tendency to subjectivism that is to be found in a method geared to empathy and the reproduction of immediate experience, and he emphasizes that also interpretations of contexts of meaning have to be verified, have to be valid and objective, or rather intersubjective in the sense that others understand the specific circumstances in the same way (see e.g. Weber 1975:148, 179; see also Turner 1986:180). This is at the same time a point with regard to which there has been a great deal of misunderstanding of Weber.6

Concept formation (abstraction) has a central role in Weber’s causal explanatory methodology. If we are to be able to differentiate between what is causally relevant and what is not, then our interpretation must be conceptually articulated. Since causal explanations concern substantial relations, meanings and qualities, and not correlations between quantifiable phenomena, the concepts must also be rich in meaning, and thereby relatively limited in extension (Weber 1975:56–65, see also Manicas 1987).

Through the concept of the ideal type Weber indicates the importance of constructing idealized abstract contexts of meaning. This ideal type is an expression of how persons would act if they were to act rationally in relation to a certain goal in a certain situation. Not that this means that Weber took it that persons do always act rationally – quite the contrary. The ideal type is a heuristic artificial construction, an aid (and not a goal in itself) in the discovering of causal relations. The chief function of concepts is to make clear the distinctive concrete empirical character of actions, partly by directing attention towards deviations from the idealized pattern of action (Weber 1975:189, 1949:90, 1978:9, 21; see also e.g. Eliaeson 1982; Jacobs 1990). This view of conceptualization rejects empiricism, nomological positivism and conceptual realism in favour of a nominalism influenced by neo-Kantianism.

At the same time as Weber clearly points out that knowledge of quantitative correlations and empirical generalizations is not the goal of causal explanations, he
emphasizes the importance of such knowledge as a means for determining the causal significance of a concrete relation, and as a means in concept formation (Weber 1975:63, 195 and 1977; see also Salomon 1934). Rational interpretation, adequate on the level of meaning and causally adequate, is based on knowledge of the result that we generally expect a meaningful action to have. It is not, though, a matter of nomological regularities, but of either common-sense expectations or formalized probabilistic regularities (Weber 1977:127 and 1975:171; see also Turner 1986; Turner & Factor 1981). However, the fundamental problem of distinguishing causal relations from statistical correlations cannot be solved by replacing deterministic/nomological regularities with probabilistic regularities. Instead it demands knowledge about the content of the relations and generative processes. Perhaps this conviction is the most important difference between Weber’s view of causality and the one held by many of his contemporaries.

Weber’s view of causality involves him in a position regarding one of the central issues in the German Methodensreit – the issue of the relation between natural and social science (Oakes 1975:19) – which diverges both from the unified science of the positivists and from the intuitionists’ (e.g. Dilthey’s) emphasis on a specific non-causally-explanatory social-scientific methodology. Weber’s view of the relationship between social science and natural science is complicated and is capable of being interpreted in several ways. Here I shall be devoting attention only to a number of ways in which it diverges from common present-day notions.

More or less directly aiming at the intuitionists of the time, who maintained that social science could not be causally explanatory inasmuch as it had to do with complex and non-calculable unpredictable human actions, Weber maintains the following: The explanation of intentional action diverges from explanations in natural science, but not in such a way as to make the processes of nature generally easier to explain or more predictable. Since interpretive understanding makes it possible to identify the motives behind actions and the specific context of meaning in which the actions are embedded, the social scientist can identify the processes that link cause and effect. In Weber’s view this has no equivalent in natural science, a science that is obliged to have recourse to empirical generalizations. Another thing in this connection, says Weber, is that actions are if anything more calculable than events in nature and that nature is at least as manifold and complex as social reality. The repudiation of a nomological social science is a consequence of the interest in meaningful actions and substantial causal relations, and not a consequence of people’s actions being in principle more difficult to capture in general laws than inanimate nature (Weber 1975:96, 120–127, 191, 216; see also Hekman 1979; Goodman 1975; Manicas 1987). Hekman catches Weber’s position well in the following words:

The modern critics claim that causal analysis is inappropriate to the social sciences because these sciences must deal with human action as meaningful. Weber’s theory of causality, however, is rooted in the assumption that the social sciences are distinct from the natural sciences precisely because their subject matter is meaningful action (Hekman 1979:67).

2.5. The application of causal explanation in The Protestant Ethic and the Spirit of Capitalism

A number of researchers have argued that there is crucial disparity between Weber’s explicitly formulated methodology and his applied methodology (see Kolko 1959; Lloyd 1986; Turner 1981). When it comes, however, to the treatment of the concept of causality in one of his best-known empirical studies, The Protestant Ethic and the Spirit of Capitalism, what strikes one is in fact the continuity and agreement between formulated and applied methodology. Here are applied the principles that were formulated in the methodological writings that were penned at about the same time (1913–6). Just as the methodological formulations change over time, so also does the direction of his applied research, but this we shall not go into here.

In The Protestant Ethic Weber takes as his starting-point certain general patterns – correlations between occupation and
religion, and between high economic development and the breakthrough of Protestantism. These quantitative correlations are not used for giving explanations but for formulating the problem on which the study is then to focus, namely what causal processes – what effective forces – lie behind the correlations (Weber 1976:35, 68).

A distinctive feature of Weber's procedure is that he does not seek the causal explanations – the effective forces – by breaking down the original variables in order to find new correlations, nor through empathy or introspection. Instead he performs a contextual interpretive analysis, and constructs abstract ideal types, for the purpose of reconstructing certain complexes of meanings and motives. Intentional action is the core of causal explanation in The Protestant Ethic. Protestantism acted as a causal force in that it influenced the context of meanings affecting the motives of workers, businessmen and entrepreneurs – motives which in turn gave rise to patterns of action, a life-style, fostering the rise of capitalism (Weber 1976, e.g. pp. 153, 170; see also e.g. Keat & Urry 1975:149).

When it comes to Weber's repudiation of the empiricist concept of causality it is important to note that the causal explanations in The Protestant Ethic focus on substantial internal relations. It is not relations between distinct and independent objects that are studied, but how one phenomenon comes out of another, how certain motives, certain ideas concerning work and wealth, grow up out of a certain socio-cultural context (Weber 1976:68, 180).

There has been extensive discussion concerning to what extent Weber employs a moncausal deterministic perspective – looks upon the Protestant ethic as the causal factor – and thereby repudiates any effect of other factors on the specific development of capitalism (see e.g. Kolko 1959; Warner 1973). Weber at more than one point rejects the idea (Weber 1976:89, 183). Whilst it is true that Weber lays the main emphasis on identifying the causal properties of the Protestant ethic, at the same time he asserts the important role played by the legal system, the accumulation of capital, the division of labour, etc., in the development of the specific form of capitalism – and of the economic rationality – that appears in Western society. A reasonable interpretation is that Weber, on the basis of his ontological view, saw various conditions (cultural, social, political, material and psychological) as effective tendencies that reinforced or neutralized one another in a complex interplay (see Weber 1976, e.g. pp. 26, 91, 174). It is also important to remember the fact that abstraction in terms of isolation is one of the central aspects of Weber's causal explanatory methodology.

Furthermore – and this is also completely central with regard to the import and direction of a causal-explanatory social science – Weber's principal ambition was in any case not to determine how large a significance Protestantism had for the development of capitalism, how large a proportion (in quantitative terms) of the causal influence was to be ascribed to this particular factor. His ambition was instead to, on the one hand, demonstrate that it had been of crucial importance in respect of the emergence of the specific form of rationality in question – to demonstrate, that is, that this part of history would here have taken another shape if what he designates the Protestant ethic had not had an influence on the way persons acted – and, on the other hand (and perhaps chiefly), to identify how this influence came about, i.e. to arrive at knowledge of the content of the causal processes (see Weber 1976:183; Turner 1986:201).

3. Critical realism and the development of a generative concept of causality

The most important scientific-philosophical contributions to critical realism, and to the generative view of causality that has emerged within this tradition, have come from Rom Harré and Roy Bhaskar (see e.g. Bhaskar 1978a, b. 1979, 1989, 1990; Harré 1979, 1986; Harré & Secord 1972; Harré & Madden 1975). During the 1970s and 1980s the generative view has been developed and applied by philosophers of science, sociologists, psychologists, econ-
omic and social historians and geographers (see e.g. Keat & Urry 1975; Layder 1990; Lloyd 1986; Manicas 1987; Outhwaite 1987, 1990; Sayer 1984, 1989; Shotter 1973; Urry 1985). In the following account I shall not be going into the internal debate in critical realism, but shall concentrate instead on the overall contribution of a number of central figures to an anti-positivist causal theory.

The interest in explaining social actions is common to the critical realists. A core concept is causal powers, focusing on the structuration of capacities to act and bring about change in reality. The theories and perspectives that have been developed include underlying processes on different levels: the development of personality, self-consciousness and habits (Harre 1979; Harré, Clarke & De Carlo 1985; Shotter 1973), intentionality and the processes whereby human beings reflect on their situation and develop ambitions and motives for action (Bhaskar 1978a, b; Isaac 1990; Outhwaite 1987), and the relations between social actions and properties of social situational contexts (Layder 1990), of social orders (Harré 1979; Harré, Clarke & De Carlo 1985), and of relatively enduring social structures (Bhaskar 1978a, 1979; Layder 1990; Patomaki 1991). In relation to the concept of causal powers a number of theorists have attempted to clarify the relation between social structure and intentional action (see e.g. Layder 1985; Patomaki 1991). Bhaskar, for example, whose philosophy of science and view of social science are strongly rooted in the Marxist tradition, argues in favour of a transformational model of social activity. Social actions are regarded as the reproduction and transformation of practices and structures that are relatively enduring and already exist for the individual. But individuals are not passive conveyors of roles and structures. They possess causal powers, capacities for bringing about change in reality, this through conscious and intentional activities (Bhaskar 1978a).

These theoretical starting-points are not in themselves particularly original. What is new and fruitful is that they are set in relation to a theory of causality that can include this research object. 7

3.1. A dialectical perspective
The basic standpoint of critical realism can to a large extent be regarded as representing aspects of a dialectical philosophy of science. The dialectic perspective, which is perhaps expressed in its clearest form in the works of Bhaskar, influences both the notion of what objects of study are proper to social science and the epistemological and methodological guidelines.

Social reality, like nature, is regarded as a changeable, complex and open system, consisting of causally efficacious mechanisms in interaction (Bhaskar 1978a, 1989; Outhwaite 1987). There is a sharp rejection of, on the one hand, the Humean mechanical and atomistic ontology, and the view of society as a ‘mass of separable events’, a view on which positivism is considered to rest, and, on the other hand, the notion of reality as constituted by subjective interpretations and meanings (Bhaskar 1978a, b; Harré & Madden 1975; Sayer 1984).

The generative theory of causality implies a fundamental criticism of the succession view of causality, i.e. causality as a question of events following one another with a certain regularity, and of the idea that causal explanations can be expressed in the form of general empirical laws. The essence of causal analysis is instead the elucidation of the processes that generate the objects, events and actions we seek to explain. Things, mental processes, social relations and structures are taken to have causal power, a potential for bringing about change; not that this is a question, though, of some mystical independently existent power – it resides in properties of the things and relations themselves. Causes are neither events nor objects but properties. These properties are effective/productive and lie behind the sequences of events and constant changes that can be observed in the real world (Bhaskar 1978b, 1989; Harré & Madden 1975; Keat & Urry 1975; Outhwaite 1987; Sayer 1984).

A central feature of the dialectical perspective is the notion of reality as stratified. Concrete events and abstract causal powers are looked upon as two levels of reality – related, but not reducible, to each other. The abstract level is not associated with heuristic concepts but is taken as capturing
actually existing causal powers relatively autonomous in relation to the concrete complex context they operate in (Bhaskar 1989 and 1978b: Outhwaite 1987: Sayer 1984). Bhaskar goes a step further and says that empiricism's concentration on observations of sequences of events in fact represents a double reduction which brings together – mixes up – three levels: the real (properties and mechanisms), the actual (the events that are produced) and the empirical (observations of events).

The difference in level, the 'ontological gap', is also formulated as the difference between 'natural necessity' and 'contingent relations'. The operative properties that causal analysis attempts to uncover exist by necessity relatively independent of their effects, but the relations between these properties and the observable effects are contingent inasmuch as they are dependent on the specific context that we are studying (Bhaskar 1978b: Keat & Urry 1975: Outhwaite 1987: Sayer 1984).

This being the perspective, causality has to be analysed in terms of tendencies. These tendencies are always manifested in open systems, in a complex interaction with other tendencies. On the concrete level the causal powers are never to be found expressed in their purity but are always reinforced, modified or neutralized by other powers, and it is the context in which they operate that determines the specific effects. The force of gravity is assumed to exist even though we cannot observe its effect on the stationary objects that surround us in space (Outhwaite 1987), and certain social norm structures exist even though we may observe actions that infringe them.

The dialectical generative concept of causality implies a crucial distinction between causal explanation and empirical prediction. Prediction has to do with empirical regularities which – no matter how general they are – constitute contextually dependent patterns of events and not causal powers (Keat & Urry 1975:5; Manicas 1989:187, 191). Bhaskar (1978b, 1989) and Sayer (1984) argue that regularities are neither a necessary nor a sufficient condition of causality.

Most critical realists regard motives and intentions as central causal mechanisms in social-scientific research: intentions, developed within a socio-cultural framework, have a productive power that plays its part in causing the persons to act as they do (see e.g. Bhaskar 1989; Outhwaite 1987, 1990; Sayer 1984). That motives and actions are internally related, and that thus the empiricist requirement of logical independence remains unfulfilled, does not constitute for the realists the problem that it has constituted for the positivists and intentionalists. On the contrary, the causal-explanatory research has to take into consideration the internally related nature of social actions (Layder 1990; Sayer 1984).

Internal relatedness is defined in the following illuminating way by Patomaki (1991:224, based on Bhaskar 1979): ‘A relation $R_{AB}$ is internal if and only if $A$ would not be what it essentially is unless $B$ is related to it in the way that it is’. Internal relatedness is more than a question of formal logical definitions. The reconstruction of the mechanisms and structures whereby social entities are interwoven – of how they are constituted in relation to one another – can in fact be seen as the very essence of a causal-explanatory social science. How causal properties bring about changes is not in the first place a question of how distinct and separate objects or phenomena influence the relative occurrence of one another, but of how the effect issues from the cause (cf. Harré 1986; Outhwaite 1987; Pawson 1988; Sayer 1984).

3.2. Methodological implications
It seems to me that there are certain overall methodological (but on the other hand not concretely methodical) implications of the generative and realistic view of causality – ones of the utmost importance for social science. Let me conclude with a few all-round comments on this.

A causal analysis of social action should strive for a methodology permeated by a continuous interplay of conceptualization/theory construction and contextualization. These two fructify each other but also lead to two completely different types of knowledge, each a goal for science. Conceptualization and theory construction refer to a process whereby we abstract from context-dependent data in an endeavour to
capture the not-directly-observable causal mechanisms and structures that generate observable phenomena and events. The search for hidden causes is nothing metaphysical or less than scientific but a fundamental aspect of causal analysis of social actions, which calls for constructions of concepts and theories (Bhaskar 1978a). Theories are seen here neither as ordering frameworks in the form of models of relations between independent and dependent variables, nor as empirical generalizations. As Keat & Urry (1975:35) put it, the making of generalizations — going from some to all — is 'not a move from observables to unobservable structures and mechanisms which explain them' (see also Manicas 1989; Sayer 1984).

The concrete import and effects of causal mechanisms are always related to the open complex context in which they operate, whereby it becomes of central importance in social science to reconstruct the relevant social, temporal and spatial context, and to study — guided by concepts and theories — how certain causal mechanisms are expressed in such a context, and furthermore to compare the import and effects of the mechanisms in different contexts. Empirical generalizations are always conditional, and dependent on how generally occurring the context in question is. It is because social contexts are so various, complex and changeable that it is difficult to make exact predictions, not because of lack of causality.

Causal-explanatory research calls for quantitative and qualitative strategies that are much more sensitive to complex and changeable contexts than mainstream variable-oriented research (cf. Lieberson 1985; Ragin 1987; Pawson 1988; Sayer 1984). Instead of there being an attempt to emulate the perfect quasi-experimental situation by statistically controlling traditional sociological variables (sex, age, income, etc.), research has to be directed towards constructing — through deep knowledge of contexts — relevant objects of comparison (Pawson 1988; Sayer 1984).

Interpretive analysis and causal analysis appear here not as opposed but as interdependent (Outhwaite 1987:60; Sayer 1984:37, 104, 115). Hermeneutically oriented research practice has much to offer a contextualizing approach. It is a question of a process whereby we can constantly deepen, develop and revise our knowledge of different social contexts — which presupposes openness and sensitivity in the face of new aspects and meanings. The interpretation and understanding of the meaning with which persons invest different situations and actions becomes of central significance to causal explanations of social actions. Variable-oriented/extensive research — characterized by the study, under statistical control, of correlations between a limited number of variables with unequivocal, unchangeable and predefined properties (in the form of variable values) — provides important knowledge of descriptive general empirical correlations. Sayer (1984) emphasizes, however, that knowledge regarding substantial internal relations, regarding the meanings of social properties and regarding how these properties change over time and in different contexts, calls for more intensive comparative research strategies. These strategies are of course not new — quite the contrary (see e.g. Glaser & Strauss 1967; Layder 1982). Paradoxically enough, however, they have been developed and practised chiefly in research that has not been directed towards causal explanation.

4. Concluding remarks

The covering law theory (likewise the succession theory) of causality has not been successful when it comes to causal explanations of social actions (see e.g. Bhaskar 1978a; Giddens 1984; Turner 1987). I have here taken up what I regard as two fruitful alternatives to this very influential notion of causality. The fact that the discussion within Scandinavian social science has been strongly influenced by the polarization between positivism and hermeneutics has meant that such contributions have remained in the background or have been interpreted in the light of polarizing perspective on understanding and explanation." Hellenius (1990), for instance, looks upon critical realism as an expression of 'impure crossing' and an
example of how 'the positivism debate' has been 'muddied' (pp. 36 and 68, translation my own).

Some of the control components of the contributions from Weber and critical realism are set out—in such a way as to draw attention to similarities and differences between them—in Table 1.

I think many social scientists today would agree that social reality must in principle be regarded as a constantly changing complex totality made up of interwoven, and partly non-observable, effective and affected social properties and processes on different levels. Yet there is often a disregard of this in concrete causal-explanatory research practice. Even though, for instance, the mixing up of analysis of variations with causal analysis has long been criticized, a crucial proportion of the work in social science directed towards causal explanation still has to do with precisely the production of statistical correlations between observable and externally related phenomena (Lieberson 1985; Manicas 1989; Turner 1987).

Weber and the critical realists show the way to a generative view of causality. The causal explanation of social action is to be found in social properties and meanings operating in different contexts, and in the processes whereby social phenomena are produced out of pre-existing conditions, but not in conjunction of events. They also show the way to methodologies where contextualization and conceptualization are central, indispensable and interrelated parts of the search for causal explanations. It is at the same time in the view of concept formation that we find the perhaps most essential difference between Weber and critical realism. With the latter comes a methodology geared to attempting to uncover real existing structures and causal mechanisms by going behind what is directly observable, this through empirically based abstraction and generation of theory. In the Weberian methodology, on the other hand, concept formation represents idealizations, artificial constructions, whose purpose is to lead the way to the discovery of causal relations between concrete empirical and individual phenomena.

Acknowledgements

I am grateful to Mats Franzén, and two anonymous referees, for commenting on earlier versions of this article. I also thank Malcolm Forbes for generous help with the language.

Received November 1991
Final version accepted February 1992

Notes

1. Here I am consciously avoiding going into the protracted and wide-ranging debate concerning the notion of causality held by the positivists, and all the variants and modifications that have been set forth. I content myself instead with formulating these—as I see it—fundamental starting-points for the debate.

2. Weber's writings concerning methodology were prompted largely by the current—first and foremost German—debate on the subject (Eliaeson 1990a): they are polemical essays rather than systematic scientific-philosophical works, and they contain certain assertions and arguments that are neither consistent over time nor given precise definition and subjected to systematic discussion (Outhwaite 1983; Tenbruck 1980; Turner 1986). But what in the first place the critical realists represent is precisely a scientific-philosophical current, one which was to be further developed about 70 years later in Britain and the USA.

3. It goes without saying that Weber and critical realism do not offer the only examples. For instance Ricoeur (1988), from within the framework of the hermeneutic tradition, has criticized for example Dilthey and has argued for a dialectical perspective eliminating the dualism of understanding/explanation. Bunge (1959) has formulated some important but not very influential ontological and methodological starting-points for a generative causal-explanatory science, first and foremost directed towards the uncovering of the processes and causal powers whereby things in reality are produced.

4. The account below is chiefly based on three works that are completely central in respect of Weber's explicit discussion of methodology: the essay Objectivity in Social Science and Social Policy, which came out in 1914; Roscher and Knes: The Logical Problems of Historical Economics, which was published in parts during the period 1903–6 in Jahrbuch für Gesetzgebung, Verwaltung und Volkswirtschaft; and the first part of Economy and Society, which was a reworking of the essay Über einige Kategorien der Verstehenden Soziologie from 1913. In order to illustrate Weber's methodology in its application I also focus on The Protestant Ethic and
| Table 1. Weber and critical realism – two contributors to a causal-explanatory social science |
|-----------------------------------------------|-----------------------------------------------|
| **Ontological definition of the object of social science** | **Weber** | **Critical realism** |
| Social reality as comprising an infinite quantity of complex and manifold empirical phenomena |  | Social reality as a complex changeable totality comprising causally active properties of interaction |
| Culture-bound, culture-creating and valuing individuals |  | The structuration of causal powers, of capacities for bringing about change in reality. The relation between social structure and conscious, intentional activities |
| **Causal explanation** | Internal relations | Internal relations |
| A generative view of causality |  | A generative view of causality |
| Repudiation of the Human definition of causality, and of ‘covering law’ theory. Causality as concrete partial relations |  | Repudiation of the Human definition of causality, and of ‘covering law’ theory. Causality as transactive causal powers and generative mechanisms |
| Causal analysis focusing primarily on qualities/properties and substantial relations |  | Causality as a question of qualities/properties/effective powers, not of patterns of events formulated by way of statistical correlations |
| **Abstraction, contextualization and generalization** | Conceptual idealism | Conceptual realism |
| Theory and concept formation (incl. the ideal type) as artificial heuristic aids in uncovering concrete empirical meanings and relations (this the goal of science) |  | Abstractions as properties in reality |
| Concept formation and theory construction as central goals of science in themselves |  | Concept formation and theory construction as central goals of science in themselves |
| **Scientific-historical roots** | General regularities as an important aid in establishing causal explanations | Theories as related to – but not reducible to – empirical reality |
| Laws as empirical generalizations that can be means but not goal for science |  | Radical criticism of the succession theory. Regularities say nothing about causality |
| **Natural vs social science** | Contextualizing approach | Causal laws are abstractions from reality and an important goal for science |
| Nominalism influenced by neo-Kantianism |  | Contextualizing approach |
| **Relationship between understanding, intentional explanation and causality in social science** | Realism influenced by dialectical Marxism | Anti-positivist naturalism. Criticism of positivism and the succession theory applies to all science |
| Indicates both basic similarities and basic differences. Criticism of positivism does not apply to natural science |  |  |
| Integrated in one and the same causal-explanatory social science |  | Integrated in one and the same causal-explanatory social science |
the Spirit of Capitalism, the first part of which came out in 1904 (i.e. the same year as the above-mentioned essay on objectivity). In addition the interpretations of these works are set in relation to relevant secondary literature. For a presentation of Weber's writings on methodology, see e.g. Eliaeson (1982) and Hughes (1977).

According to Outhwaite (1975) Dithey originally employed an individualistic and psychological perspective, where the focus was on mental processes, but then moved increasingly further away from this perspective in favour of (as Outhwaite puts it) 'the hermeneutic interpretation of cultural products and conceptual structures' (p. 26).

Oakes writes: 'It would be difficult to exaggerate the extent to which Weber has been misunderstood on this point. Weber's methodology – so the conventional scholarly wisdom goes – rests upon a commitment to some mysterious, unobservable, unverifiable species of intuition or empathy which he sees as a reliable method for establishing conclusions and solving problems in sociocultural science' (Oakes 1975:29). A tendency to such a dubious interpretation of the Verstehen methodology is to be found in Hughes & Mansson (1988), who regard Verstehen as: 'a form of analysis emphasising empathetic understanding'. They write further: 'Weber's methodology means quite simply that the social scientist should become involved in the interpretation of cultural products and conceptual structures' (pp. 141 and 143, my translation).

Critical realism is not in the first place a tradition associated with a certain perspective regarding the old ontological and epistemological discussion about realism vs nominalism, but is characterized chiefly by its development of the generative view of causality in opposition to the empiricist and positivist concept of it (Outhwaite 1987). This concept of causality implies at the same time a realist ontology and epistemology based on the conviction that science shall seek to uncover processes and mechanisms that are actually existing but not directly observable. Regarding the debate within critical realism, see e.g. the discussion that has been going on for two decades in the Journal for the Theory of Social Behaviour.

Sayer (1984) argues for the importance of the intensive/qualitative methods in respect of causal-explanatory research, whilst Pawson (1988) has chiefly contributed to the development of a more quantifying research, largely inspired by critical realism.

Critical realism has for instance been touched upon only by a few social scientists in Sweden (Gullberg 1984; Karlsson et al. 1991). Finnish social scientists, on the other hand, have also taken part in the international discussion (see e.g. Patomaki 1991).

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