

Methodology of Social Sciences

Positivism, Anti-Positivism, and the Phenomenological Mediation

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This article discusses the two dominant modes of social scientific enquiry by bringing out the philosophical underpinnings of positivism and its antithesis as exemplified by the interpretative school. Traversing the philosophical trajectory, it provides an account of the methodological discourse encompassing (a) the 'unity of method' cast in the positivist mould, (b) the methodological dualism advocated by the *verstehen* school, and (c) the new thesis of unity of method implied in the hermeneutic mode. It is claimed that phenomenology is capable of effecting mediation between the two rival modes of social scientific enquiry by integrating the different goals of social sciences, such as explanation and understanding, by synthesising the empirical and the interpretative dimensions of the social world.

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There are two distinct philosophical approaches regarding the methodology of social sciences: the 'positivistic' and, its opposite, the 'anti-positivistic'. The word 'positivism', as Giddens (1987: 3) has observed, has different connotations in different contexts. Generally speaking, in the context of the methodology of social sciences, positivism amounts to the claim that the methodological procedures of natural sciences can be applied to social phenomena so as to form a science of society. As against this, the anti-positivist approach advocates 'methodological dualism'. According to it, the method of social sciences is fundamentally different from that of natural sciences, and most of its exponents debunk the idea of forming a 'science' of society. In this article, I propose to look at how phenomenology attempts to mediate between these two diametrically opposite conceptions and thereby defend a conception of social science that does not violate the central tenets of anti-positivism.

VERSTEHENDE SOCIAL SCIENCE: POSITIVIST REJECTION AND ANTI-POSITIVIST DEFENCE

According to the exponents of logical positivism like Nagel (1961) and Hempel (1956), the problems of the social sciences are not qualitatively

different from those of the natural sciences and, hence, social sciences must follow the same methodological procedures employed in natural scientific inquiry. Thus, they contest Max Weber's (1949) stricture that social sciences must try to understand the meanings intended by the actors and the procedure for such an understanding involves the conceptual clarification of the motives and goals of actors.

Understanding social reality in terms of the meanings intended by the actors, Nagel (1963: 202) points out, presupposes some 'springs of actions' which are not accessible to sensory observation. The only way open to the inquiring scientist then is to imaginatively identify himself/herself with the participants. However, he criticises the view that in order to understand the other, one must oneself undergo other's psychic experience. According to him, knowledge is attained through controlled inference, and is statable in propositional form. It is amenable to sensory observations and, thus, verifiable. Nagel argues that, to understand the action of others, we do not require the method of *verstehen* or any such method that claims to be distinctive of social sciences. It is enough to rely on the evidence supplied by the overt behaviour of men to understand social reality. Moreover, explaining overt behaviour in terms of motives or goals is not warranted in itself, as the evidence for such imputations must be provided on the basis of the common empirical inquiry.

Weber's *verstehen* thesis assumes that the participants in a social phenomenon are in certain psychological states, and that there is a relation of concomitance between such states and certain overt behaviour. But Nagel (1963: 203) argues that both these assumptions do not stand before evidence, as the so-called psychical states that we impute to the agents may not be really possessed by them, or even if our ascriptions are correct, their manifest behaviour interpreted in terms of these psychical states would not be intelligible in the light of our own experiences. He says, if we mean by explanation of action nothing but the assertion that the action in question is an instance of a behaviour pattern that men exhibit under varying circumstances and that since the relevant circumstances are realised in the given situation, we can expect the manifestation of a particular form of behaviour, then the explanation in terms of meaning does not differ from that which invokes external knowledge of causal relations.

To Hempel (1963: 218) too, the alleged difference between the method of explanation in social sciences and that in natural sciences is a mistaken conception. Weber's insistence on the adequacy at the level of meaning in explaining actions comes under attack by Hempel. Hempel thinks that Weber talks of empathy as the way to understand the subjective meanings of human action and, like Nagel, Hempel argues that '... the occurrence of an empathic state in the interpreter is neither a necessary nor a sufficient condition of sound interpretation or understanding...' (1963: 218) According to Hempel, even in Weber's

own theory, subjective interpretation is superfluous, as Weber stresses the verification of subjective interpretation as something indispensable. The gist of Hempel's argument is that since ideal types are intended as an explanatory device, they must be construed as theoretical systems that yield testable hypotheses. Nevertheless, he poses the question whether this position can be reconciled with the position taken up by many who adhere to the method of *verstehen*, especially when they conceive ideal types as essentially deviant from facts, and hence not to be treated as hypotheses to be verified by empirical evidence. Hempel does not explain how an insistence on causal adequacy by empirical verification renders the subjective interpretation as an unnecessary exercise.

However, Schutz (1936b) envisages such a possibility of the verification when he points out that the ideal types employed by the social scientists are second order constructs, that is, they are constructs of the constructs employed in common-sense thinking. According to Schutz, Weber's postulate of subjective interpretation is primarily a structural feature of common-sense life. Schutz opines that Hempel and Nagel misunderstand Weberian methodology completely. Weber does not propose, contrary to what Hempel and Nagel make of him, that the social scientist should identify himself with the agent in order to understand the agent's motive. Weber advocates a method that makes reference neither to the private value system of the social scientist in order to select the observed facts nor to its interpretation. They are mistaken in thinking that the only alternative to objective sensory observation is subjective introspection.

For Schutz, the goal of social sciences is to gain an organised knowledge of the socio-cultural world as experienced by the common sense thinking of the participants about the world in their everyday life. This socio-cultural world is experienced as an intersubjective world and not as a private one. As Nagel himself admits, science with its self-correcting process is a social enterprise. A scientist needs to know what another scientist has observed and why he/she thought the observed fact as relevant to the scientific problem. This knowledge is called understanding. A description or explanation of the sensory observations does not constitute such an understanding. Schutz (1936b: 237) says 'such an intersubjective understanding between Scientist B and Scientist A occurs neither by Scientist B's observation of scientist A's overt behaviour, nor by introspection performed by B, nor by identification of B with A'.

Although Schutz agrees with Nagel that all empirical knowledge requires some process of controlled inference and must be statable in propositional form that can be verified through observation, he does not think that this observation is sensory. Confining 'experience' to sensory observation in general and to overt action in particular excludes several dimensions of social reality, including the behaviour of the observer.

The manifest behaviour as observed by a social scientist may have a totally different meaning to the participants. Overt behaviour fails to take note of what may be called 'negative actions' in which one intentionally refrains from acting. The beliefs and convictions of the participants, which are part of the social reality, escape the scrutiny of sensory observation. Moreover, observation of overt behaviour takes into account only a small sector of social reality, namely, face-to-face interaction. For Schutz, there are various other dimensions of the social world where the observer is not in such a relation with the participant.

Schutz distinguishes among three forms of *verstehen*: (i) as an experiential form of everyday life, (ii) as an epistemological problem, and (iii) as a method peculiar to the social sciences. In their everyday life, human beings have knowledge of the various dimensions of social reality and, despite inadequacies, such common-sense knowledge is sufficient to understand social reality. This common-sense knowledge that takes for granted our knowledge of the meaning of actions is what Schutz means by *verstehen*. Thus, *verstehen* is not primarily a method, but 'the particular experiential form in which common-sense thinking takes cognizance of the social cultural world'. *Verstehen* (Schutz, 1963b: 239) then has nothing to do with introspection, as it results from our learning processes in everyday life. *Verstehen* is not then a private affair of the observer. It can be controlled to the same extent as the private sensory perceptions of individuals can be controlled by other individuals. Schutz cites legal proceedings as an example for this controllable *verstehen*, since legal investigations proceed through certain 'procedural rules' furnished by the 'rules of evidence' and certain amount of verification of the findings result from the process of *verstehen*. Even predictions are carried out successfully to a large extent in our common-sense thinking.

Verstehen, as an epistemological problem, raises the question of 'how verstehen is possible?' As the socio-cultural world is an intersubjective world, the problem of other minds — the experience of the existence of fellow beings and the meaning of their actions — is taken for granted in the common-sense knowledge. As has been pointed out by Husserl (1970), it is within the life-world that all our understanding, including scientific knowledge, originates. This intersubjective world of everyday life is the background within which our inquiry is carried out. It is this intersubjective life-world which is the object of inquiry of social sciences in understanding social reality.

The epistemological problem of *verstehen* leads us to the methodological aspect of the *verstehen*. Once we grant that *verstehen* is an experiential form of everyday life and that social sciences have to investigate the life-world itself, then the principle of concept formation and theorising akin to the natural sciences will not lead to the knowledge of social reality (Schutz, 1963b: 241–42). Theorising in natural sciences is done by idealisation and abstraction. However, such

abstraction cannot inform us of the everyday life in the life-world. Thus, Schutz says that there is an essential difference in the structure of mental constructs formed by the social sciences and that of the natural sciences. This is so because the natural world does not mean anything to itself. On the contrary, the social world has specific meaning and relevance structures for the participants in the social reality (Schutz, 1963a: 308–09).¹ Thus, the mental constructs of the social scientists have to be second order constructs, as they have to be based on the constructs of the common-sense thinking of humans in their everyday life. Therefore, the first task of the social scientist is to explore the typifications with regard to which one organises one's experiences in the everyday life. These typifications are based on the interests and system of relevances involved in a given situation. This is what the interpretive school means by subjective understanding, the subjective meaning which the actor bestows on his action. Thus, 'strictly speaking, the actor and he alone knows what he does, why he does it, and when and where his action starts and ends' (Schutz 1963b: 243). Nevertheless, as a member of an intersubjective community, one understands other's behaviour if one grasps their motives, goals or plans in their biographically determined situation.

According to Schutz, 'ideal types' originate in the common-sense thinking of the everyday life. Contrary to the claims of Hempel, at the level of everyday life, the type formations do not involve intuition or theory, but are the experiential form of everyday life. Thus, the constructs of the first level have reference to the subjective elements of the actors. The second level construct, as 'constructs of the constructs' at the first level, then must also include a reference to the subjective meaning of the actors, if it seeks to explain social reality. Schutz points out that this is the underlying spirit of Weber's postulate of subjective interpretation (1963b: 245). However, social sciences have to be objective in that their propositions must be amenable for verification. Now, the question is whether it is possible for subjective meanings to be objective in this sense. According to Schutz, the fact that the constructs of social scientists are constructs of the constructs employed in common-sense thinking points to such a possibility.

The second order constructs are objective, as they are formed on the basis of procedural rules valid for all empirical sciences. These are ideal typical constructs akin to the theoretical systems that yield testable general hypotheses. Thus, the second level constructs of the social scientists differ from the common-sense constructs. Whereas the system of relevance pertaining to common-sense interpretation originates in the biographical situation of the observer, it is the scientific situation that determines the relevance system of the social scientists. This, in turn, determines the conceptual framework employed by him/her in understanding the social phenomena. The social scientist observes the relevant facts within the social world that

refer to human action. Based on this, he/she constructs 'types' of course-of-action patterns coordinating the action-patterns modelled on ideal actors embodied with consciousness. Thereby, he/she ascribes a set of typical purposes, goals to these ideal actors that are supposed to be invariant. The general systems of relevance of these model actors, thus, meet the requirement of the scientific problem at hand for the understanding of which the social scientists construct these ideal types. Nevertheless, these constructs are not arbitrary as they are subjected to the postulates of logical consistency and adequacy. Schutz (1963b: 247) says:

... each term in such a scientific model of human action must be constructed in such a way that a human act performed within the real world by an individual actor as indicated by the typical construct would be understandable to the actor himself as well as to his fellow-men in terms of common-sense interpretation of everyday life.

The requirement of logical consistency ensures objective validity of the constructs, and the compatibility of these constructs with that of everyday life is warranted by the requirement of adequacy.

According to Schutz, based on these ideal types, one can predict the course of action-patterns of the model actors and discover the determinate relations between a set of variables, on the basis of which we can explain the empirically ascertainable regularities. This is what Nagel insists of a scientific theory. Thus, according to Schutz, social scientists may agree with the proposition that both natural sciences and social sciences follow essentially the same logic of validation of our knowledge. However, this does not mean that social scientists have to abandon the special devices they employ in understanding social reality for the sake of an ideal 'unity of sciences'.

Natanson (1963: 275) points out that the method of natural sciences and that of social sciences are different at a conceptual level. Natural sciences cannot be self-reflective, while social sciences are necessarily so. As Natanson notes, the natural sciences are grounded in a theoretical system, which is not amenable for scrutiny without going beyond its own categories. Social sciences, on the other hand, from a phenomenological perspective, necessarily submit themselves for self-scrutiny. In that, the social sciences remain within the ambit of philosophical analysis.

Nevertheless, Natanson hastens to add that this does not amount to a claim that knowledge involved in social sciences are of a different kind, rather it shows that the object of knowledge is different as social sciences are concerned with the intentional dimension of social reality. It is this ambivalence of the earlier interpretivists with regard to the status of 'science' that prompted Carr (1994: 329) to criticise thinkers like Schutz and even Maurice Merleau-Ponty. Carr contends that these thinkers, even while abandoning transcendental phenomenology in

favour of an existential phenomenology, still attempt to build a 'science' of society.

ANTI-POSITIVIST CRITIQUE OF THE POSITIVIST CONSTRUAL OF SCIENCE AND THE NEW INTERPRETIVISM

The post-positivist philosophy of science has called into question the received understanding of science. Science is no more conceived as an epitome of rationality and objectivity that yields truth. Thus, the claim of the positivists, that the social sciences must follow the method of natural sciences in striving for objectively valid knowledge, has lost its *raison d'être*, as there is no 'one method' that passes for 'the method' of natural sciences without any exception. At the same time, *verstehen* method or the interpretive social science itself was subjected to reevaluation and its supposedly distinctive nature of 'interpretation' is shown to be at the root of any inquiry, social or natural scientific. Thus, the exponents of hermeneutics as a universal method for all inquiry, in a sense obliterated the earlier distinction between natural sciences and social sciences drawn by the *verstehen* school. With this, the trajectory of the methodological question took a full circle, starting off with 'unity of method' cast in the positivist mould to methodological dualism advocated by the *verstehen* school and finally back to unity of method in the hermeneutic mode. In this context, Hesse (1980: 169) observes that, 'the imperialism previously claimed for natural science in the empiricist tradition has now turned in some quarters into its opposite, namely an assimilation of natural science itself to something approaching the hermeneutic critique'.

The traditional view of natural science assumes that what forms the basis of natural science is 'the given' in experience and thus a theory-independent description of the given is available. However, recent works in the philosophy of science as evidenced by the writings of Karl Popper, Norwood R. Hanson, Thomas Kuhn and Paul Feyerabend challenge the notion of theory-independent facts. These scholars convincingly show the theory-laden characteristic of observation. It follows then that, in all our empirical assertions, we make use of some concepts that interpret the data in terms of one or the other world-view. This suggests an interesting parallel with the human sciences. In the human sciences, there occurs the 'hermeneutic circle' as human beings interpret their own actions. Thus, the data and concepts in the human sciences can be understood only in terms of a theory and the context, which are in turn dependent on the relations of data and concepts. Now, Hesse (1980: 173) argues that even in the natural sciences this seems to be the case. There is circularity in the logic of science, as data are interpreted and sometimes even corrected in terms of its coherence with theory. Moreover, she points out that in some cases theory is also restricted by empirical data. The question of scientific truth and the notion of objectivity also suffered at the hands of post-positivist

philosophers of science. They held that the empirical reference of science could not be captured directly, as the observation statements are permeated by successive theories. Then, truth becomes internal to theory, and there can be no claims to objectivity that is independent of any theory. Thus, one finds certain common features between the social sciences and the natural sciences, as both are equally hermeneutic.

Following Martin Heidegger, Kockelmans (1993) observes that understanding is not a particular mode of knowledge, but is the basis of any knowledge and, as such, it is the basic mode of man's being. Understanding, in its primordial sense, implies that we anticipate the object to be encountered, and achieve explicitly what we have anticipated in our encounter. Thus, understanding has the character of anticipating or interpretive conception. Interpretation consists in the development of the projected possibilities of the anticipation. Kockelmans (1993: 101–02) says, 'In interpretive explanation we take something as something. The *hermeneutic as* constitutes thus the structure of the explicitness of whatever it is that is understood in a particular manner; the *hermeneutic as* is the constitutive element of all interpretive explanation'. The *as*-structure of understanding, understanding something 'as' something, is primordial. It is not that the 'as' is emerging for the first time in our articulation. Rather, in our explicit statements the 'as' gets merely expressed. Thus, any understanding presupposes a meaning context within which alone anything can appear as meaningful. It implies that our understanding cannot be a presuppositionless comprehension of something given in experience. This means that even our scientific knowledge of nature is inherently hermeneutical.

History of science reveals that scientists, at times, are faced with the option of more than one interpretation of the same data, and this situation cannot be solved merely by an appeal to empirical grounds.² Kockelmans (1993: 105) points out:

This state of affairs implies at once that no scientific theory ever *comprehensively* will express the ontological structure of the real world. Every scientific theory, even though it is and remains a theory of what is real, is truly no more than a possible interpretation of a large set of data on the basis of certain principles ... [Thus] the basic statements of a scientific theory do not express mere facts, nor can they be proven by facts alone.

According to Heelan (1977), the scientific observer learns to 'read' the perceptual or instrumental data much in the same way one learns to read a text, and so our scientific observations are hermeneutical. However, for Kockelmans, to speak of natural sciences in the metaphor of a text is slightly problematic, as the way in which natural science is concerned with nature is not nature itself as a text, but that about which the text speaks. One can talk in terms of 'texts' in the case of human sciences, as the actions of members of a society manifest

characteristics pertaining to texts. Nevertheless, focusing on the way we do science, rather than concentrating on an aspect of scientific research and discovery, can bring out the hermeneutic nature of natural sciences significantly. Thus, Kockelmans makes a distinction between 'actually doing science' and 'teaching science', instead of focusing on the distinction between 'scientific explanations' and 'scientific discovery'. 'Teaching science' is to present the things already known in a systematic fashion. It is to train someone who has not yet become a scientist to do science. One may compare it with what Kuhn (1970) characterises as the 'text-book' culture of science, the normal period in science. On the other hand, doing science is a complex activity. Kockelmans (1993: 113) writes:

What each scientist does, is to ask meaningful questions in regard to natural phenomena and one does so in light of a large theoretical framework of meaning ... Someone who answers a meaningful and relevant question satisfactorily can be said to explain something just as much as one can be said to discover something ...

Although Kockelmans acknowledges the distinction between the logic of scientific discovery and the logic of scientific explanation, he opines that such a distinction is only relevant at the level of analysis; it does not correspond to what scientists actually do. The basic issue is to be found in the objectifying thematisation of scientific activity. According to him, 'observation' or 'perception' is not a truly original act; it is rather an act whose meaning can be discovered only by an analysing attitude. The primary disposition of human beings is not one that engages in 'perception', but is to 'care', 'work', and 'wonder'. These are all forms of understanding and, as such, essentially interpretative. Thus, it is more rewarding to probe into the actual doing of science in order to show the hermeneutics of scientific practice. The hermeneutic dimension of natural science comprises not just the experiment, observation or verification, nor the process of discovery. Rather, the scientific practice is hermeneutical in every respect (Kockelmans 1997: 299).

Ihde points out that there are two opposing views of hermeneutics with regard to its relation to science. One, which he terms as 'modernist' view, holds that science is hermeneutical insofar as it is a socio-cultural and historical phenomenon. However, the modernist view does not hold that the 'objects' or 'products' of science can have any hermeneutic dimensions. The other view, a 'postmodernist' hermeneutics, Ihde says, is one which stands for an 'expanded hermeneutics'. Postmodernist hermeneutics practises a 'hermeneutics of the thingly' besides a hermeneutic philosophy of science. According to Ihde, the difference between these two hermeneutics hinges not so much on how hermeneutics operate, but on how philosophy of science operates. The modernist retains some aspects of the positivist philosophy of science, whereas the postmodernist argues that the

positivist philosophy of science has been surpassed by the post-positivist developments in the philosophy of science. Thus, not only observation or discovery and explanation, but also the whole of science is hermeneutical.³

There are philosophers who take this new call for the 'unity of science' based on hermeneutics with a pinch of salt. Thus, Taylor (1980) opines that the claim of universal hermeneutics, which argues for a new unity of science, is not in tune with the reality. He is in agreement with post-positivist philosophers of science in holding that logical positivist's understanding of science is unacceptable, as it failed to assign any place for interpretation. Nevertheless, Taylor is of the opinion that such an interpretative element within the ambit of natural science is different from the kind of understanding that is central to human sciences. Taylor points out that our scientific understanding arises as a refinement of our ordinary understanding. This ordinary understanding, or 'pre-understanding', is prior to any theoretical stance and cannot be exhaustively formulated. Rather, our formulation of how to deal with things or theorisation makes sense to us because of this background knowledge or pre-understanding. This does not mean that our pre-understanding is not the result of experience, but experience does not tell us how to organise this massive corpus of knowledge by following the isolated occurrence of experience.

Taylor, thus, concedes that even natural sciences have a hermeneutical dimension wherein a kind of understanding, namely an 'implicit grasp on things' holds an essential role. However, Taylor argues that the kind of understanding involved in natural sciences is different from that of human sciences. Understanding in the latter case is more than the implicit grasp of things; it is the kind of understanding that one needs in order to grasp the 'desirability characterisations'. Understanding in human sciences, Taylor (1980: 30) points out, 'is bound up with the understanding the way in which the relevant courses of action can be desirable or undesirable.... In that way, human understanding is closely bound up with being able to apply terms of a certain kind ... [namely] "desirability characterisations"'. These desirability characterisations are descriptions that lie beyond the limits of natural sciences. Accordingly, the natural sciences are characterised by the requirement of 'absoluteness'. That is, natural sciences seek an account of the world independent of the meanings it has for human beings. Thus, an absolute account avoids any subject-related properties. Now, Taylor argues that even in the human sciences we must describe a situation in absolute terms and then attest such a neutral description with our pro-attitude towards it. For this, we should make an operational split between the things that affect us and our reaction to these things. The former are then characterised in absolute terms and the latter are identified independently. Thus, according to Taylor, our behaviour can be understood as following from

both the absolute description of reality and as our attitudes and desires in experiencing it.

Kuhn (1991) questions Taylor's contention about the natural sciences. He characterises social sciences as existing in the pre-paradigmatic stage, as there is no consensus over how to practice social sciences. On the other hand, natural sciences have made a transition from pre-paradigmatic stage to the paradigmatic stage as evidenced by the disappearance of plurality of the modes of practising natural sciences. However, from this Kuhn does not draw the conclusion that the natural sciences are essentially different from social sciences. For him, natural sciences are as much dependent on cultural categories as social sciences. Thus, he says that grasping a concept, whether of natural or social sciences, is not to internalise some features that give necessary and sufficient condition for its application. Even though, we all understand the sorts of objects that fall under a concept, the features of these objects may vary from individual to individual. Much like the social concepts, the concepts of natural sciences do shape the world to which they are applied.

This point is brought out clearly in Kuhn's (1970) concept of 'scientific revolutions', wherein occurs a paradigm shift. When the reigning paradigm is crisis-ridden, as anomalies accumulate, the search for an alternative paradigm begins. The choice of a new paradigm is not a matter to be settled by logic, rather it depends on the consensus of the relevant scientific community, on the perceptions and value judgements of the community, and these lie outside the domain of normal science. It is these extrinsic criteria that mark the revolutionary characteristic of paradigm debates. According to Kuhn, the two successive paradigms cut the world differently as they speak different languages. Thus, when a paradigm changes, the world also changes. The notion of paradigm as a historical product reveals the hermeneutical nature of natural sciences. A paradigm serves as the hermeneutic basis for the science of a particular period. Kuhn (1991: 222) says:

the natural sciences of any period are grounded in a set of concepts that the current generation of practitioners inherit from their immediate predecessors. That set of concepts is a historical product, embedded in the culture to which current practitioners are initiated by training, and it is accessible to non-members only through the hermeneutic techniques by which historians and anthropologists come to understand other modes of thought.

Nevertheless, Kuhn admits that, in the period of normal science, what the practitioners do is not hermeneutic, as they are involved in a puzzle-solving activity by extending the match between theory and experiment. On the other hand, social sciences are hermeneutic through and through.

PHENOMENOLOGICAL MEDIATION OF POSITIVISM AND ANTI-POSITIVISM

Let us look at the bearing of the above discussion on the method of science on the phenomenological perspective. Husserl (1970), the founding father of phenomenology, believes that the social sciences cannot adopt the method of natural sciences. The natural sciences aim at objectivity in the sense that the relationship between the natural scientist and the object of inquiry is one of detachment. That is, natural science is not concerned with the meaning an object has for the investigator. Moreover, the individuality or particularity of the object is not at all relevant for the natural sciences, as its goal is the formulation of a general law.

Husserl (1970: 316–17) says,

The scientific attitude which aims at objective knowledge (as practiced by natural science), and this universally, as objective knowledge of the world, the universe of realities existing in themselves, would be the attitude with the intent of knowing being-in-itself through truths in themselves.

This scientific attitude, Husserl says, is naturalistic in which there is a craving for objectivity and universal knowledge, which results in a crisis of the natural sciences. The crisis occurs because the foundational acts by which the object is abstracted from the life-world are forgotten in the natural sciences.⁴ According to Husserl, natural sciences ignore the subjectivity that constitutes the primordial meaning of the objects of scientific inquiry from our pre-theoretical experiences. This way of relegating the pre-theoretical experience or ignoring the constitutive subjectivity is, in fact, what facilitates the technical success of science (D'amico, 1981: 6).

The human sciences, on the other hand, are characterised by what Husserl calls the 'personal attitude'. In personal attitude, our thematic interest is directed toward human beings as persons who are related to the world through their actions. Husserl (1970: 318) remarks:

Humanistic science is the science of human subjectivity in its conscious relation to the world as appearing to it and motivating it in action and passion; and conversely, [it is] the science of the world as the surrounding world of persons, or as the world appearing to them, having validity for them.

The personal attitude is not generally a theoretical one in the sense that it does not seek things in themselves or how they are in objective truth. As Husserl says, it is the particular world with its specific properties that is valid for persons and not the world as it actually is. Nevertheless, the distinction in the attitude of the two sciences does not call for a separate method in the manner earlier *verstehen* school made it to be. Rather, all the sciences have the same essential structure as far as the foundational aspect of meaning constitution is concerned. The *verstehen* school took the objectivism of the natural sciences at face

value without questioning it, and thus was led to the division between natural and the human sciences (D'macio, 1981: 7). Husserl claims that even in the human sciences we can have objectively valid knowledge by revealing the realities themselves and not just their being for a particular group or community. This is the general sense of any science. Husserl (1970: 320–21) writes:

the personal world is not other than the 'objective' world. But the world pre-given in every person, valid for every human culture at every time and for every individual human being in his particular praxis.... [P]ersonal surrounding world, can, by entering into or already being in relation with one another, have or attain an overlapping, common surrounding world.... Only through science does it become determined as reality in terms of 'objective' (that is, scientific) truth, as it is in itself, when the science of reality determines it through its particular personal actions and lasting accomplishments.

In a similar vein, Wittgenstein (1979) exhorts us to look for the concepts of human commonalities. He suggests that the procedure for social sciences is to construct 'overviews' by collecting different practices related to the given problem in such a manner that the interconnections among the varied practices can be seen. According to him (1979: 69), 'This overview brings about the understanding which consists precisely in the fact that we see how these (practices) hang together. Hence, the importance of finding connecting links'.

With the construction of overviews, the multifarious practices get 'associated' and thereby display common features amongst the multiplicity of practices. We may argue that, in Husserlian phenomenology, such overviews are generated from the transcendental perspective which liberates us from the realm of the mundane, the naturalistically given.⁵ The act of constituting such commonalities can be seen as the hermeneutic basis of science. As Kuhn (1991) has pointed out, natural sciences has hermeneutic basis, though what the scientist does itself is not hermeneutic. The same can be said of Husserl's view, though in many other respects they disagree. Thus, Husserl (1970: 332), like Kuhn, maintains that natural science 'is a culture, [and] it belongs only within the cultural world of that human civilisation which has developed this culture and within which, for the individual, possible ways of understanding this culture are present'.

As different from the naturalistic attitude, there is an attitude toward nature, which is not naturalistic. Husserl (1970: 329) calls such an attitude the natural attitude:

When we live in the natural — the non-transcendental — attitude, different thematic directions, and thus different directions of theoretical interest, open themselves to us in accord with the structure of the pre-given world.... The theoretical attitude can be directed toward nature alone, in which case we have a 'natural' attitude which is nevertheless not 'naturalistic'.

In fact, the plausibility of social sciences from the phenomenological perspective takes off from such a stance of natural attitude, as persons, the focal point of social sciences, are to be understood in the context of nature.

CONCLUSION

To conclude, a phenomenological methodology of social sciences is one that attempts to steer clear of the pitfalls of adhering to methodological monism of either the positivists or that of the new hermeneuticists and the insistence on a methodological dualism as argued by the *verstehen* school. From the perspective of social sciences, the importance of a phenomenological method as enunciated here may be defended by highlighting the limitations of other methods. Positivist methodology in its quest for objective knowledge completely relegates the perspective of the actors. This amounts to imposing the perspective of the scientists or the policy makers upon the people. Much of the problems related to the programme of 'planning from the above' result from this inadequate methodology that suppresses the voice of the people. The methodological dualism of *verstehen* does justice to the perspective of actors, but it institutes a sharp boundary between the natural sciences and the social sciences and tends to insulate the social from the domain of nature. This has the grave consequence of making nature irrelevant for the study of society, the implications of which unfolds in our own times in the environmental crisis. The new interpretivism that calls for a 'unity of sciences' undermines the very objectivity of science and spins off a welter of interpretations that lead to the impasse of unmitigated relativism. A phenomenological methodology, unlike the other dominant methodologies, opens up the possibility of integrating the different goals of scientific inquiry, namely, explanation, description and critique by synthesising the empirical and the interpretive elements of social scientific inquiry.

NOTES

1. The expressions 'relevance structures' and 'system of relevances' are used synonymously by Schutz. According to him, relevance structures are essential to 'typifications' or type-formations. Moreover, social groups may be distinguished in terms of their commonly held relevance systems. Schutz prefers this conception of 'relevances' to that of 'interests', as he held the latter concept to be too psychologistic. To quote Zaner (Schutz, 1970: xix-xx): 'Each of my projects at hand is itself determined by something — and it is to this something that Schutz addresses himself with his conception of "relevances." [...] What is at stake, indeed, is a *principle of structurisation of the life-world* itself, a principle that is also determinative for my various interests and plans within the life-world in the sense that it is what accounts for "why" I turn to "this" rather than to "that" at "this" time in my life, in the course of "this" action'.

2. Isaac Newton's interpretation of the phenomenon of light in terms of particle theory and Thomas Young's interpretation of the same in terms of wave theory basically rest on the same data (see Spangenburg and Moser, 1999a: 65–77 & 1999b: 56–57).
3. For an account of the hermeneutical aspect of the works of Kepler, Galileo and Newton see Kockelmans (1993: 99–169).
4. Husserl construes the origin of natural sciences as a result of mathematisation of nature. Thus, the world of natural sciences is a theoretical construction from the life-world, the world of immediate everyday experiences.
5. Here, I wish to stress that the transcendental is not different from the empirical in any ontological sense that suggests a different realm of existence, but only the empirical, freed from the mundane.

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