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Beyond Positivism: Habermas' Critical Engagement with Scientific Rationality

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Abstract

There is an assumption that natural science and social science must use the same methods in order to have a methodological unity of natural and social science. This assumption is developed primarily due to the reliance on the dominant approach called positivism or scientism. The notion of positivism or scientism which means using scientific facts and data-driven methods can provide real knowledge. The objectives of this paper is to take up Habermas' position regarding this narrow views. Habermas' argues that the belief that only scientific facts and data ignore how human actually think and interact or understand the world. He explores how our personal and social goals influence directly and indirectly what we consider 'knowledge'. The paper also argued that Habermas' ideas are not perfect and has not solved the realist approach to sociology. Therefore, Habermas reviews his own social theories and his attempts to fix problems in traditional Marxism and mainstream sociology. Again it is argued that sociology can get better if it keeps questioning and engaging with these complex ideas about science and reason through a critical dialogue with Habermas' critical social theory.

Keywords: Positivism, Deductive-Nomological, Critical theory, Reductionism, empirical-analytic, historical-hermeneutic, critical-dialectical

Introduction

The question of whether the natural and social sciences share a unified

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methodology has been a central concern in modern philosophy of science. This paper analyses the major themes underlying this debate and argues that it has largely proceeded on a misconceived basis. This misconception stems from the dominance of positivism or scientism, which promotes a singular model of scientific rationality derived from the natural sciences. When this positivist conception of science is applied to the study of social phenomena, it obscures their interpretive, normative, and historical dimensions. Philosophy of the social sciences is a meta-theoretical enterprise in so far as it reflects on the practice of social research. This reflection can take different forms. Most philosophers of the social sciences try to determine whether particular theories or methodological options are appropriate for explaining social phenomena[1]. Habermas' main objective has been to contribute to a critical theory of contemporary society. Social research should do more than simply explain phenomena. It is also about assessing and criticising the contemporary constellation. It is about providing a normative yardstick to make this critique possible. It is about thinking of socio-political alternatives.

The deductive-nomological notion of theory

This particular theory is a key framework in philosophy of science that originated, in fact, presented and defended by C. G. Hempel[2], since his account is, in several senses, exemplary. This model is important for understanding how theories in social science (and other sciences) can be explained and tested logically. The deductive-Nomological (D – N) model of explanation is called the covering law model of explanation[3]. Here, the event is to be explained in terms of particular circumstances and particular law together. Both these conditions are necessary and responsible as well, for the occurrence of the present event. Here 'Nomology' is derived from the Greek word 'Nomos' which, means 'necessity' (Hemel, 1965 p. 243). So the conclusion or the present event is directly and logically derived from the premises, which consist of specified initial conditions and the universal law(s).

This notion of theory dominated post-war science. It originated from early 20th-century positivism. Two elements are crucial: First, the idea of logical deduction in axiomatic systems: theorems are deduced from a limited number of axioms. Second, a correspondence criterion of truth: empirical sciences depend on correspondence with facts (sense data), a comprehensible external reality (philosophical realism) [4] . There is a necessary relation between the explanans and the explanandum statements. It might be thought that the objection could be avoided if a suitably restrictive account were given of the law-statements that function as

premises in the deductive argument. Obviously, any direct appeal to the concept of 'explanatory law' is ruled out on the grounds of circularity, since the D-N model is itself intended to provide the analysis of scientific explanation. The deductive system generates hypotheses which are potential universal laws.

Given the laws, it is possible to specify a set of initial conditions under which a predicted result should follow. In an experiment, these conditions are established. If the result confirms the prediction, the hypotheses (laws) are strengthened. The experiment shows that the law represents general knowledge on how the initial conditions cause an outcome. This is also called the covering law model of explanation: The law is the black box which transforms causes into effects. Theory is a set of such laws. Theory is compact knowledge: Many regularities can be subsumed under the same general law, making research systematic and cumulative[5]. Such a notion of theory provides a clear-cut criterion of demarcation: testing of law-based deductions. (Hempel, 1965, p. 330) Explanations which do not satisfy this criterion are ad hoc explanations and must be avoided. Theory is thus an ever more complete system of universal laws. At the extreme end lies the vision of a complete unity of science possessing nomological knowledge of reality in its entirety. The explandum event is subsumed under these universal laws[6]. Most importantly, the event or conclusion is within the scope or range of premises. Moreover, the second thing is that there is a symmetry or identity relation between the past and the present event. There is a symmetry between explanation and prediction: under the same conditions, the same event would occur. Thus, schematically, the explanation may be conceived in the form of a deductive argument.

Deductive Nomological (D – N) Model of Explanation

(Antecedent –conditions)	C1, C2…, Ck	Explanans sentences/premises
(Universal laws)	L1, L2…, Lr	
	———————	
(Present event)	E	Explandum sentence/conclusion

From the above argument, the single line separating the premises from the conclusion signifies that the argument is deductively valid[7]. Let us begin with the following passage (1965a, p.246), in which Hempel describes a typical case of scientific explanation and presents an analysis of it which indicates his general conception of such explanations:

> A mercury thermometer is rapidly immersed in hot water; there occurs a temporary drop of the mercury column, which is then followed by a swift rise. How is this phenomenon to be explained? The increase in temperature affects at first only the glass tube of the thermometer; it expands and thus provides a larger space for the mercury inside, whose surface therefore drops. As soon as the heat conduction increases temperature, it reaches the mercury; however, the latter expands, and as its coefficient of expansion is considerably larger than that of glass, there is a visible rise in the mercury level. This account consists of statements of two kinds. Those of the first kind indicate certain conditions which are realised prior to, or at the same time as, the phenomenon to be explained; we shall refer to them briefly as antecedent conditions. In our illustration, the antecedent conditions include, among others, the fact that the thermometer consists of a glass tube which is partly filled with mercury, and that is immersed in hot water. The statements of the second kind express certain general laws; in our case, these include the laws of the thermal expansion of mercury and of glass, and a statement about the small thermal conductivity of glass. The two sets of statements, if adequately and completely formulated, explain the phenomenon under consideration: they entail the consequence that the mercury will first drop, then rise. Thus, the event under discussion is explained by subsuming it under general laws, i.e. by showing that it occurred in accordance with those laws, in virtue of the realisation of central specified antecedent conditions. (Keat & Urry, 1975, p. 10)[8]. Here, a scientific explanation is presented as a form of deductive logical argument. The conclusion of the argument is a statement of fact which is to be explained.

In the context of social science, the D-N model suggests that social phenomena can be explained by identifying general laws (like laws of economics, sociology or psychology) and showing how specific social events or behaviours logically follow from these laws under particular circumstances. Some American positivists have shown that it is possible to explain social events, like suicide, by applying Hempel's model to it, and so prediction is possible. Durkheim's theory of suicide could be explained by Hempel's model. Durkheim's law of suicide[9] states: 'Suicide varies inversely with the degree of integration of the social groups of which the individual forms a part'.

From this, it is possible to derive three lower-level laws that suicide varies inversely with the degree of integration of religious society, domestic

society and political society. Finally, from these lower-level laws, we can deduce, with the help of initial conditions, empirically testable hypotheses. Thus, schematically, we will be in a position to show the Durkheimian theory of suicide. (Durkheim, 1952, p. 210)

	L1	(Suicide rates are inversely with the degree of integration of Domestic society)
Explanans	C1	(There are two groups, one of married, one of unmarried People)
	C2	(Married people are more integrated)
		_____
Explanandum	E	(There is a lower suicide rate among the married group compared with the unmarried group)

Thus, positivists argue that we will be in a position to predict that in certain groups there is a lower level of suicide rate. But even if positivists have shown with the model of explanation that social events are explainable like natural events. Moreover, in social sciences, we cannot make controlled experiments, and also prediction is highly impossible. Here, in the case of suicide, rather uncritically, positivists have used statistical data. Also, the use of operational definitions seems to be vague. They have been rather imported from other disciplines[10]. A deductive approach is concerned with developing a hypothesis (or hypotheses) based on existing theory, and then designing a research strategy to test the hypothesis. A deductive approach can be explained by means of hypotheses, which can be derived from the propositions of the theory. In other words, the deductive approach is concerned with deducting conclusions from premises or propositions. Deduction begins with an expected pattern that is tested against observations. In studies with a deductive approach, the researcher formulates a set of hypotheses at the start of the research. Then, relevant research methods are chosen and applied to test the hypotheses to prove them right or wrong. It is a method of scientific knowledge, which consists of the transition from certain general premises to particular results and consequences[11]. Deductive approach as a method of cognitive reasoning that proceeds from already known laws and principles. Therefore, the method of deduction does not allow for obtaining meaningful new knowledge. The method of reasoning based on the conclusion (deduction) of consequences-conclusions from hypotheses is called hypothetico-deductive method[12]. Since there is no logic of scientific discovery, no methods that guarantee the receipt of true scientific knowledge, scientific statements are hypotheses, i.e., are scientific

assumptions or assumptions whose truth value is uncertain. This provision forms the basis of the hypothetico-deductive model of scientific knowledge. (Adey & Frisby, 1976, p. xiii).

In the context of social sciences, its importance can be understood through the following points: First, this approach enhances predictability and generalisation. This model emphasises the use of general laws or principles to explain specific social phenomena. By applying general social theories (e.g., economic laws, sociological theories, psychological theories) to particular cases, researchers can predict outcomes more effectively. This helps to understand and generalize social behaviour across different contexts. Second, it provides a logical structure to theories. This model forces social scientists to construct theories that are logically consistent. By deducing particular events from general principles, researchers can ensure their theories are clear and well- organized. This approach helps identify causal relationships and isolate variables that contribute to social phenomena. Third, by adhering to the D-N model, social science theories can be tested through empirical observations. A valid deduction must match observed events, which offers a pathway for falsifying theories if predictions do not hold true. This testability is crucial for the scientific rigor of social sciences. Fourth, this model also makes a framework for integrating disparate theories. That is, social sciences encompass a variety of theories from fields like sociology, economics and political science. The D-N model provides a common methodological framework for integrating and comparing these theories, which can help construct more comprehensive models of human behaviour and social systems. Social science research often blends qualitative and quantitative methods. (Keat & Urry, 1975, pp. 11-12) The D-N model allows for a systematic approach to integrating both by providing a clear method for deriving general laws that can be qualitatively tested, while still accommodating qualitative insights that may help explain underlying causes. It also encourages the refinement of theories over time. By continually comparing deductive predictions with observed outcomes. Social scientists can revise and improve existing models, leading to the evolution of better, more accurate theories.

The law-oriented notion of theory

This notion retains a nomological focus at the cost of deductive strength. This solution can be related to an ambiguity in Popper's original discussion. Despite his support for the covering law model, Popper was critical of the unity of science programme. He rather accepted the distinction between generalising sciences and history. Causal explanations in history relate to singular events, and universal laws here prove empty. For the theories or universal laws of generalising science introduce unity as well as a `point of

view'; they create, for every generalising science, its problems, and its centres of interest as well as of research, of logical construction, and of presentation[13]. But in history, we have no such unifying theories; or, rather, the host of trivial universal laws we use are taken for granted; they are practically without interest, and totally unable to bring order into the subject matter (Popper, 1944, p. 264). Popper notes particularly that such trivial laws do not define the initial conditions.

Popper mostly classified social science together with the generalising natural sciences. But at times, he also regarded social sciences as specifying. The law-oriented notion of theory emerged as a response to this dilemma. The deductive-nomological ideal is retained: social science is seen as generalising, distinct from the historians' focus on singular processes. But it is admitted that universal laws in the social sciences have proven trivial. Social science must still generalise, but given the absence of truly universal laws, we should focus instead on regularities that apply only within specific contexts. Such a notion of theory as a collection of law-like regularities or quasi-laws[14] is less strict that then deductive-nomological ideal.

The dissonance between the deductive-nomological ideal and real-life explanatory strategies, Merton solved by treating middle-range theories as temporary. He claimed that social science was still too young. When they matured, as physics already had, the body of middle-range theories would converge into a system of universal laws on the model of experimental natural sciences[15]. Until social science matured, he concluded, it should give priority to middle-range theories, deliberately avoiding universal theory. On this notion, the social sciences would be weak in deductive rigour and parsimony, but strong in contextual explanations.

The law-oriented notion of theory in social science[16], as a philosophical approach, is grounded in the belief that social phenomena can be explained through general laws or principles, similar to the methods employed in the natural sciences[17]. Philosophically, this perspective draws from positivism and the scientific realism tradition, which asserts that scientific theories aim to discover and describe the laws governing both natural and social worlds. The law-oriented notion is heavily influenced by positivism, especially as articulated by philosophers like Auguste Comte and Emile Durkheim[18]. Positivism holds that valid knowledge comes only from empirical data and observation, excluding metaphysical or speculative explanations. Social scientists, therefore, are tasked with uncovering empirically observable laws of society. According to this view, social phenomena can be observed, measured, and quantified in ways that lead to the discovery of general social laws (similar to the laws of physics). These laws are objective,

universally applicable, and discoverable through careful empirical investigation. Empiricism emphasises that only data derived from observation and experience can yield credible knowledge.

The law-oriented theory of social science adopts a scientific realist stance[19], which suggests that the laws we discover in social science are real and exist independently of our perception of them. (Adey & Frisby, 1976, p. 176-177). This is aligned with naturalism, which proposes that social phenomena can be explained in the same way as natural phenomena. The goal is to find regularities, patterns, or generalisations that hold true across various societies or time periods. Just as the natural sciences aim to discover the laws of the natural world (e.g., gravity, thermodynamics), social sciences aim to discover laws that explain human behaviour and social organisation. A fundamental philosophical belief in the law-oriented theory is the universal applicability of social laws. These laws are not context-dependent but are seen as generalizable across different societies, cultures, and time periods. The idea is that there are objective, immutable truths governing social phenomena that can be discovered through scientific methods. This reflects an assumption of objectivity: the belief that social sciences can be as objective and value-neutral as the natural sciences.

Philosophically, the law-oriented theory uses deductive reasoning to develop theories that generate hypotheses about how social phenomena will behave under certain conditions. The law-oriented model is linked to the hypothetico-deductive method, which starts with a theory or law, derives specific predictions from it, and then tests those predictions through empirical observation. Social theories aim to uncover causal relationships. The causal explanation is at the heart of this approach: a social law should not only describe regularities but also explain why they exist and predict their outcomes in the future. This notion of causality is often rooted in the belief that laws of social phenomena are both explanatory and predictive. For example, in economics, the law of supply and demand is not just a description of how markets behave but an explanation of why changes in supply or demand lead to changes in prices.

Critiques and Challenges in the Law-oriented notion of theory

While the law-oriented approach has provided a rigorous framework for social science, it has also faced criticism, particularly from schools of thought like interpretivism and critical theory. Some of the main critiques include:

- **Reductionism**

  Critics argue that the law-oriented approach tends to reduce complex social phenomena to simplistic laws or regularities, ignoring the multidimensionality of human behaviour. Social behaviour is often shaped by subjective experiences, emotions, and interpretations, which may not be easily captured by universal laws. This critique comes from scholars like Max Weber, who emphasised the importance of interpretation and meaning in understanding social actions.

- **Contextual Relativity**

  A significant critique is that the law-oriented theory, in its pursuit of universal laws, overlooks the importance of historical context and cultural diversity in shaping social phenomena. The idea that social laws are universally applicable is contested by those who argue that social realities are context-dependent and that laws that work in one society may not apply in another.

- **Human Agency and Social Construction**

  The law-oriented model has also been criticised for neglecting the role of human agency and social construction in shaping social reality. Constructivist theories, such as those put forward by Michel Foucault and Pierre Bourdieu, emphasise the socially constructed nature of reality and argue that social phenomena cannot be reduced to deterministic laws. Foucault emphasises the inseparability of power and knowledge, where he argues that knowledge is not just an objective representation of the world, but is always tied to systems of power. These systems of power shape the very way people think, what they know, and how they act. Moreover, he rejects the idea of autonomous human agency that can simply choose to act outside these systems of knowledge and power. Instead, he posits that individuals are shaped by societal structures in ways they often do not recognise. This challenges the idea that human action is purely based on free will or subjective choices. For Foucault, social realities are constructed through power relations, and individuals' actions are deeply influenced by these hidden structures. (Adey & Frisby, 1976, p. 251).

Habermas' Social Theory

Habermas' analysis of knowledge is primarily articulated through his theory of communicative action. It is an attempt to establish a connection between methodological rules and knowledge-constitutive interests. The notion of Knowledge-constitutive interests as a link between scientific

methodology and social action. Knowledge- constitutive interests or cognitive interests are transcendental in the sense that they are necessary for particular types of knowledge. They are fundamental orientations to knowledge and action rooted in the underlying conditions of the evolution of the human species. For Habermas, there are three distinctive types of knowledge: empirical-analytic, historical-hermeneutic, and critical-dialectical. Empirical-analytical knowledge is that which is embodied in both the natural sciences and economics, sociology and political science. Empirical-analytic sciences are aimed at the discovery of nomological knowledge about natural and social relations. Their particular status as knowledge is constituted by their interest in technical control, in increasing the possible extent of human domination over natural and social reality[20]. These sciences provide us with the information that is required for rational, feedback-controlled instrumental activity.

Now, two questions can be asked: what does Habermas mean by 'technical interest'?[21] And in what sense is this interest 'constitutive' of knowledge? Concerning the answer to the first question, Habermas does not mean that scientists typically engage in their enquiries intending to discover laws that can be used for instrumental control. Rather, it is related to an essential characteristic of the manner in which the human species historically transforms itself to labour, productive activity upon nature, by which the human species reproduces itself biologically and culturally. These productive activity both requires and generates a specific 'interests' in technical control[22]. Thus, Habermas maintains that his concept of interest is neither purely empirical nor purely transcendental. And concerning the answer to the second question[23], about 'constitution'. Habermas argues that technical interest constitutes knowledge at two related levels. First, it provides a criterion for what is to count as 'real', that is, for what counts as an 'object', about which the propositions of empirical-analytic science give us knowledge. In relation to the technical interest, what is real is what can be detected, measured and manipulated in the situation of controlled experiments, in which information is received through our perceptual mechanism. Second, the technical interest determines the general character of the standards employed in assessing the truth and falsity of statements made about these objects. For Habermas, it is only by reference to the technical interest that we can only justify, understand and analyse the limitations upon what is real as well as what is acceptable statement or system of statements about such real that are imposed in the empirical-analytic sciences[24].

However, Habermas makes two major points about empirical- analytic knowledge: he criticises the positivistic interpretation of it, and he argues

that it is too restrictive for social phenomena. Habermas argues that the dominant approach to the philosophy of science has treated a distorted view of analytical-empirical knowledge as the paradigm for all knowledge. And he terms this approach 'positivism' or 'scientism'. Habermas is critical of the 'positivistic self-understanding' of analytical-empirical knowledge, which fails to recognise its underlying technical interest. Moreover, he claims that Popper himself has been consistently critical of elements of positivism, although he has never taken these criticisms to the logical conclusion.

Therefore, Habermas's criticism of the empirical-analytic approach in social science is that it is unduly restrictive. Specifically he criticizes its empiricism in favour of a realist or essentialist position, according to which it is necessary that theory grasps the real structure of the social totality[25]. Despite criticism (Albert, 1976, p. 169). Keat & Urry (1975) see it as an argument for realism. The historical-hermeneutic knowledge of the cultural sciences is constituted by the practical interest. It works through a cycle of interpretation (the hermeneutic circle) in which theorising always depends upon a prior understanding of the object of knowledge. It aims to relate ordinary utterances and social products to the social life-world in which they are constituted. The object of these sciences (that is, what is defined as real) is inter-subjectively established meanings. Their criteria of validity, or standards of assessment, are those of interpretation, the pragmatic example of which is the interpretive understanding of linguistic communication in everyday discourse[26]. Hence, historical-hermeneutic knowledge yields 'interpretation' and is structured into the process of 'understanding'. Interpretations are practically relevant knowledge, in the sense that they aid 'mutual understanding in the conduct of life' (Keat & Urry, p. 223.)

The third form of knowledge [27]that Habermas distinguishes from the other two is by recognising their limitations and the need to reconcile them in a higher synthesis. It is that constituted by the emancipatory interest, that is, an interest in human autonomy and responsibility. This is a form of knowledge that involves self-reflection (Keat & Urry, p. 225) and is itself involved in critical theory. To understand what Habermas means by these claims is to criticise and oppose positivism. His central criticism of positivist philosophy is that it is unable to account for the epistemological status of its own claims. Consider the principle proposed by many logical positivists in the twentieth century, that all statements are either empirical (synthetic), a priori (analytic), or meaningless[28]. Here, the objection is that this principle conforms to neither of the two 'meaningful' types of statement allowed by it. Again, it has the paradoxical character of being meaningless if true. Habermas would regard it as a philosophical claim, for which various

grounds could be developed, but such grounds could not justify it in either of the ways that logical positivists[29] allow as legitimate types of knowledge.

Habermas's critical social theory comprises both a philosophical and a sociological component. Its philosophical component is grounded in the theory of communicative action and the importance of rational discourse. It takes the connection between knowledge and interest as it object. Habermas emphasises the role of language and communication in shaping social reality, advocating for an ideal speech situation where participants engage in dialogue free from coercion. He explores concepts like public sphere, democracy and the conditions for achieving mutual understanding. While the sociological component examines the structures of the various forms of society, the empirical analysis of societal structures and processes which have existed in human history. (Habermas, 1971, pp. 74-77.) Moreover, Habermas examines how social institutions influence communication and power dynamics. He analyses modernity, the relationship between the lifeworld (everyday social context) and the system (economic and political structure), and how societal changes impact individual and collective action. These two components are so interlinked, in as much as evolution is seen as a process of historical 'self- reflection'. According to which, philosophical knowledge involves self-reflection, by which we reflect upon particular features of human existence and especially upon the nature and status of human knowledge itself. Thus Habermas regards the examination of the relations between technical and practical interests and their respective forms of knowledge as itself a case of self-reflection, which positivism, through its implicit abolition of philosophical knowledge, cannot comprehend[30]. In this way, actors can achieve a historically conditioned autonomy and so engage in rational social change. Therefore, critical social theory goes beyond the nomological knowledge of the analytical-empirical approach in order to discover when theoretical statements[31] grasp 'invariant regularities of social action as such' and when they express 'ideologically frozen relations of dependence'. The result is a critically mediated knowledge of laws[32]. In order to make this, it combines the understanding of subjectively intended meanings with real causal mechanisms.

Habermas criticised positivism primarily because he believed it limited the scope of human understanding and neglected important aspects of social life, particularly in relation to human agency, meaning, and communication. His critique centres on several key points:

Reductionism: Habermas argued that positivism reduces social phenomena to mere observable data, ignoring the deeper meanings, intentions, and social contexts that shape human behaviour. According to him, positivism fails to account for how individuals interpret the world and construct meanings through communication. Habermas believed that this reductionism was insufficient for explaining social life and its underlying structures.

Instrumental Rationality: Positivism emphasises a form of 'instrumental' or 'technical' rationality, which is primarily concerned with achieving goals efficiently through objective, scientific methods. Habermas believed that this overlooks other form of rationality, particularly 'communicative rationality', which involves the pursuit of mutual understanding and consensus in human interaction. He saw positivism as overly focused on controlling nature and neglecting human relationships and social integration

Neglect of Human Subjectivity: Positivism, in Habermas's view, fails to account for the role of human consciousness, communication, and social interaction in shaping knowledge. Human beings are not just passive objects of observation; they actively interpret and give meaning to their experiences through communication. Habermas emphasised the importance of subjective experience and communicative action, which he felt positivism had overlooked by focusing solely on objective data. Moreover, Habermas believed that positivism's focus on objectivity and the external world disregarded the subjective experiences of individuals, which are central to understanding human society. His concept of 'lifeworld' (the shared background of beliefs, practices and norms) is essential to understanding human action, which positivism fails to capture adequately.

Inability to address Normativity: Positivism, according to Habermas, avoids questions about values, ethics and norms, focusing only on what can be empirically observed and measured. Habermas believed that social theory should not just describe reality but also address normative issues, such as what is just or ethical, and be concerned with social change.

Lack of Emphasis on Communication: Habermas emphasised that social reality is created through communication and interaction. He proposed the concept of 'communicative rationality', which stresses the role of language and dialogue in shaping human understanding and social order. Positivism, however, tends to treat knowledge as objective and external to the communicative processes that are central to human society.

Failure to Address Social Change: Positivism's focus on scientific neutrality and objectivity, Habermas argued, made it incapable of

critiquing or transforming social structures. In contrast, Habermas' approach, influenced by the Frankfurt School, emphasised the need for critical theory to challenge and change societal conditions, especially those related to power, domination and injustice. For Habermas[33], philosophical knowledge involves self-reflection, by which we reflect upon particular features of human existence and especially upon the nature and status of human knowledge itself. Thus Habermas regards the examination of the relation between technical and practical interest, and their respective forms of knowledge, as itself a case of self-reflection, which positivism, though its implicit abolition of philosophical knowledge, cannot comprehend.

> A critical discussion, regardless of whether it concerns the acceptance of proposals or propositions, includes a threefold use of language: the descriptive, in order to describe a state of affairs; the postulatory, in order to establish rules of procedure; and the critical, in order to justify such decisions. Logically, these forms of speech mutually presuppose each other. The descriptive usage is in no way limited to a certain class of 'facts'. (e.g. the facts about the 'objects' of empirical-analytic science). The postulatory usage covers the establishment of norms, standards, criteria and definitions of all kinds, no matter whether practical, logical or methodological rules are involved. The critical usage employs arguments for considering, evaluating, judging and justifying the choice of standards; it includes, therefore, language-transcendent approaches and attitudes in its discussion. (Keat & Urry, 1975, p. 225)

Habermas argues that positivism prioritises empirical data and scientific methods while neglecting the subjective and normative dimensions of human life (Popper, 1972, p. 185). This can result in a rigid framework that limits critical reflection and perpetuates the existing power structure. In Habermas view, the emphasis on objectivity can obscure the socio-historical contexts in which knowledge is produced, leading to a kind of intellectual dependency on established norms and values. He advocates for a communicative approach that acknowledges the interplay between facts and values, encouraging a more democratic discourse that can challenge these frozen relations and foster social change. By addressing this, Habermas aims to develop a more reflective form of social inquiry that is sensitive to the complexities of human experience.

Habermas believes that Marx's critique of political economy is an exemplar for critical social science[34] because political economy has its object, the social system of instrumental action. Habermas, while critically

engaging with Marxist theory, emphasises the role of social labour in shaping social life. He views social labour not just as economic production, but as a fundamental aspect of human interaction and communication. From the standpoint of Habermas' Marxism, social labour is the universal element of all social life through which man seeks to satisfy his basic needs as well as connect individuals within society. It highlights how people collectively engage in processes that create meaning, establish norms, and foster social bonds. It consists of the natural interchange between man and his environment. This 'material' relation of man to nature is a condition of existence for the individual, the dynamic of social evolution. This interconnectedness is crucial for understanding how individuals navigate their social worlds and how societal structures evolve. Habermas argues that social labour encompasses more than material production; it includes communicative action, where individuals share experiences and negotiate meanings. This communicative aspect allows for the development of a public sphere where discourse can lead to social change and democratic engagement. Ultimately, for Habermas, social labour reflects a duality: it is both a material basis for society and a catalyst for the development of rational communication, making it a key element in understanding the complexities of social life. Marx's contribution to critical social science was to show that in all known modes of production, labour was performed under conditions of alienation from its true nature as an expression of species-being. 'Exploitation' in any structure of the relations of political economy is to show that exploitation is a historically specific form of domination which can be dispensed with in a fully rational society. (Habermas, 'Beyond Philosophy and Science: Marxism as Critique'; idem., Knowledge and Human Interests, Part I, p. 94,) As discussed, Habermas identifies at a more abstract level the emancipatory interest involved in liberating [35] men from historically contingent constraints through a process of 'self-reflection'. Hence the emancipatory interest is a derivative, 'meta-interest'. (Habermas, 'Knowledge and Human Interests'. For a general discussion of the Cognitive interest. F. Dallmayr, Critical Theory Criticized' in Philosophy of Social Sciences, Vol. 2, No.3, 1972.)

Conclusion

By concluding the whole idea that Habermas[36] is facing with the difficult epistemological problems of a realist social science. But to some extent, the problems have been clarified by contributing important solutions to those problems. Since Habermas seeks to synthesise fruitful developments in the theorising of the social scientific approach, it involves many serious omissions. However, his effort to make an integrated social science and the achievement of a rational society are some kind of serious reflections. There

are clear ties between substantial theoretical perspectives and notions of theory in the social sciences[37]. A number of the fundamental debates on social science between constructivists and positivists, between critical theorists and constructivists, between methodological individualism and collectivism, and between rationalists and empiricists, in fact, imply debates between different understandings of theory and of knowledge more generally[38]. This should not surprise us that social science research is after all in itself a social activity.

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