

The Intersubjective Ideal of Knowledge and the Critique of the Empiricist Science

Pius V. Thomas*

Dept. of Philosophy, Assam University, Silchar, Assam, India

ABSTRACT

The controversial relation between philosophy and science has many faces and many more historical phases. Conceptually, philosophy always confronted science as a method of establishing knowledge distinct from primeval epistemic concerns by questioning its foundations epistemologically and metaphysically. Science, on its turn, challenged (I use both the words philosophy and science in the broad sense as nomenclatures designated to represent two distinct methods of search for truth) the philosophical orthodoxy by projecting the empiricist methodology of science as superior to the idealist or metaphysical or speculative method. Thus the philosophy-science interface most often as located in the philosophy of since historically poised a divide in understanding the concept of knowledge, favoring the idea of 'science as knowledge appropriate'. Till it was forced to take a new turn along with the post empirical scenario in scientific enterprises, which was inspired mainly by the relativity theory, quantum mechanics and subatomic physics against the Newtonian mechanics, non-Euclidian geometry against the Euclidian geometry, and developments in molecular biology and, genetic engineering etc., the conception of knowledge proper and the legitimacy of acquiring it was sanctioned by the empiricist concept of knowledge. The post-empirical concept of knowledge/the post-empirical gist of science was later discussed elaborately by philosophical, critical theories on science by Thomas Kuhn, Imre Lakatos, Roy Bhaskar, Saul Kripke and Paul Feyrabend, to name a few of them, in a major way.

The paper, however, is in line with the view that the post empirical theoretical necessities sanction more urgently and systemically the need to associate the cleavage between philosophy and science as something which is to be more prominently addressed from the point of view of multi-vocal frames of knowledge and in what follows tries to address two issues: Firstly, science as knowledge and secondly, how to impart knowledge pedagogically.

Like the sciences, philosophy continues to focus on questions of truth; but unlike them, it maintains an intrinsic connection to law, morality, and art. It investigates normative and evaluative issues from the internal perspective of those domains themselves-

Juergen Habermas

*Corresponding author's Email: piustomjsc@gmail.com

THE CONCEPT OF KNOWLEDGE AND THE EMPIRICIST CONCEPT OF SCIENCE :

A common definition of knowledge is that it is justified true belief. Knowledge is the awareness and understanding of facts, truths or information gained in the form of experience or learning. Knowledge is an appreciation of the possession of interconnected details which, in isolation, are of lesser value. Knowledge is a term with many meanings depending on context, but is (as a rule) closely related to such concepts as meaning, information, instruction, communication, representation, learning and mental stimulus. More prominently, perhaps more concretely, knowledge is defined as processed information.

The fundamental question that comes up in this regard is what information is and how it can be processed. The contemporary and arguably the most convincing precept on processed information which rolls up the dominant perceptions and perspectives on knowledge to make it into a discourse names it science and its method empirical observation. In other words, knowledge is equated with information processed empirically, which allows some kind of verifiability.

The verifiability intent and claim of empirical scientific method declares that 'any knowledge claim is testable by experience (observation or experiment). It rules out knowledge-claims about beings or entities which cannot be observed. Scientific laws are statements about general, recurring patterns of experience. To explain a phenomenon scientifically is to show that it is an instance of a scientific law. This is sometimes referred to as the 'covering law' model of scientific explanation. If explaining a phenomenon is a matter of showing that it is an example or 'instance' of a general law, then knowing the law should enable us to predict future occurrences of phenomena of that

type (Beton *et al.*, 2001). Here what we see is the mutual reduction of knowledge and empirical science by each other by way of testable, verifiable objectivist and positivist ideal of knowledge. Both strong and weak verifiability criterion of empirical scientific method was questioned by later developments both in science and philosophy of science as the growth of science as knowledge was demanding more extended purview of operational domain and reflectivity (Thomas *et al.*). In this context it is put across to us that science as a multi-faced project of knowledge has been communicated to us in many ways: As a handmaid of society, a neutral source of knowledge, a benevolent master, a dominating dictator and so on (Richard, 1983).

I attempt here to carry on the discussion further along with the second generation critical theorist Juergen Habermas, whose conceptual intervention into the philosophy of science was with his critique of scientism and positivism (Habermas, 1971). He puts forward a common frame to locate and situate science as knowledge, which is to be subjected to critical scrutiny by the intersubjective critique of knowledge. Habermas' concept of knowledge transforms epistemology into social theory through a mutual overcoming of positivism with hermeneutics and hermeneutics with a theory of intersubjectivity (Habermas, 1971).

JUERGEN HABERMAS' CRITICAL PARADIGM OF KNOWLDGE/SCIENCE :

Habermas does not align himself with the presuppositions held by Relativism as he rejects the stances of Realism and Naturalism. Habermas positively recognizes the Kuhnian theory of paradigm change and its insight that actual languages and conceptual schemes change, but rejects its relativist idea of science. Habermas's 'consensus theory of truth' and the

concept of ‘ideal speech situation’ make his stance strictly an anti-relativist one. He remains a different kind of social constructivist with a distinct concept of reconstructive science and objective science and proposes a critical paradigm for science.

Critique of Scientism and Positivism:

The leitmotif of Habermas’s critique of positivist philosophy’ says Thomas McCarthy, ‘is formulated tersely in the preface of *Knowledge and Human Interests*: ‘that we disavow reflection is positivism” (McCarthy T., 1978). The classical epistemological question that how reliable knowledge possible was vanished in the height of positivist philosophies of the late nineteenth and early twentieth century, as knowledge was identified with science and its empirical method. So, Habermas says that ‘Positivism marks the end of the theory of knowledge. In its place emerges the philosophy of science’ (Habermas J., 1971). Positivism lacks the investigative dimension into the ‘constitution of the possible object of casual – analytic knowledge’ since it ‘prejudges its answer’ and which in the process immunizes sciences against philosophy (Ibid p.67). So, the ‘questions about the conditions of possible knowledge were answered with a universal genetic history’ and it is flattened to the status of mere methodology instead of being epistemology with a conceptual idea of the constitution of the objects of possible experience (Ibid, p.67).

**EPISTEMOLOGY AS SOCIAL THEORY-
HUMAN KNOWLEDGE AND INTEREST**

Habermas makes an inquiry into the foundations of knowledge, human interests and language to put forward a theory of tripartite mould of knowledge and corresponding human interests, supported by the theory of ‘Universal Pragmatics’ and the ‘Theory of Communicative

Action/Rationality’, which, according to Habermas, proves the human interests in autonomy, rational consensus, responsibility etc, ‘for they can be apprehended a priori. The positivistic / scientific misappropriation of knowledge was that despite of all the epistemic and theoretical difference within, it conceives and postulates knowledge as a definable single field. In his effort to go beyond this objectivistic illusion of single categorical reduction, Habermas recognizes how knowledge is constituted by human interests. He writes:

There are three categories of process of enquiry for which a specific connection between logical methodological rules and knowledge constitutive interests can be demonstrated. This demonstration is the task of a critical philosophy of science that escapes the snares of positivism. The approach of the empirical –analytical sciences incorporates a technical cognitive interest; that of the historical –hermeneutical sciences incorporates a practical one; and the approach of critically oriented sciences incorporates the emancipatory cognitive interest that, as we saw, was at the root of traditional theories (Habermas J.1971).

The Consensus Theory of Truth:

The ‘consensus theory of truth’, as part of the theory of communicative competence, tries to answer the problem of the mutual understanding between speakers. Truth, for Habermas, is a quality of prepositional assertions contained within language use. Truth as validity claim is generated and associated with the factual content of statements. Truth is not representational but an agreement reached through critical discussion/discourse. Without the consensus concept of truth a speaker cannot have a concept of communicative competence (which is the ability to make the justifiability of a statement of the theme of a discussion) and vice versa, according to Habermas, since mutual agreement is the

need and nature of rational agreement. Habermas' intersubjective critique of the correspondence, coherence, pragmatist, semantic and redundancy theories of truth, come to the conclusion that 'universal consensus under ideal conditions is the ground or criterion of correct truth claims and truth is constituted by this criterion'. So, truth for Habermas is that which is agreed on ideal conditions of communication or intersubjective agreement (Strawson *et al.*). The concept of truth without the notion of rational agreement fails to understand the paradigmatic belongingness of truth claims to the assertive speech acts. '... the ability to raise a truth claim requires an awareness of and the ability to understand possible demands for its defense(as well as the point of making such demands), truth on this account to be understood as a kind of warranted assertibility (Habermas *et al.*, 1984).

The above initial theoretical positions of Habermas are elaborated into the notion of universal pragmatics, the Habermasian theoretical programme of rational reconstruction of human understanding.

The Universal Pragmatics:

'The task of Universal Pragmatics', according to Habermas, 'is to identify and reconstruct universal conditions of possible understanding (Habermas, 1979). Demanding improvement on the earlier theoretical versions of 'performative aspects of speech', such as of late Wittgenstein, Austin and Searl, Habermas searches for a rational basis in which the illocutionary force of the speech acts is guided to recognize four distinguishable validity claims, such as, intelligibility, truth, truthfulness/correctness, sincerity, which constitute the consensus background of language. Every communicatively competent speaker must possess pragmatic or dialogue constitutive universals to 'produce grammatically well formed' sentences. These universals

are intersubjective, a priori elements which enable the speaker in producing speech act and to produce the general structures of the speech situation.

CRITIQUE OF HABERMAS' STANCE

This conceptual position of Habermas, which could be called a critical paradigm for science (and Knowledge), has been criticized mainly for the lack of realist objectivity or the deliberate absence of an objective criterion for the current discussions in the philosophy of science. Mary Hesse, in one of such critical discussions of Habermas' theory of science, begins her assessment of Habermas with the comment that Habermas' response to the discussions on philosophy of science in the analytical tradition, particularly in the post Kuhnian and post Feysabend debates on truth and meaning, instrumentalism, realism and relativism that are primarily associated with Davidson, Kripke and Putnam, by all means is inadequate (Hesse M., 1982). Habermas, says Hesse, after the initial discussion of Knowledge and Human Interests makes a shift to a post 'Interests' phase and to a new paradigm of the distinction between 'Discourse' and 'Action'. Hesse points out that the 'action – discourse' distinction implies a pragmatic theory of meaning and a consensus theory of truth, which emphatically states that 'the empirical meaning of a sentence is not determined, as in verifiability theories of meaning, by the conditions under which the sentences would be said to be true, but rather by the conditions under which utterances are acceptably produced in the language community, including the conditions of learning to use the language to refer to that in the surrounding reality which is categorized as particular kinds of objects and events for technical purposes (Ibid p.99). Habermas's stance of non realism – non relativism here, which functions on a pragmatist theory of

meaning to discuss the concept of 'theory-ladenness' and 'meaning variance', ultimately rests on the insight that ultimately theoretical science is part of reflective and intersubjective self-understanding. As Hesse herself summarizes Habermas says, "Theoretical science is part of the human goal of reflective and intersubjective self-understanding which embraces the hermeneutic and critical sciences as well as the empirical, and involves norms and value judgments as well as empirically constituted facts. Theories are indeed a reflection of contemplative interest, not in the sense of old fashioned realism, but in the sense of Durkheim's symbolic representations, which unify humanity's understanding of itself and its interaction in relation to both its natural and social environment (Ibid p.105).

This position of Habermas is called 'transformed transcendentalism' (quasi-transcendental), which, according to Hesse, is evasive and uncertain. It is so, primarily because Habermas fails to explain 'why the human species can only reproduce itself through the medium of truth'. Secondly, Hesse criticizes, Habermas's distinction between the empirical and reconstructive sciences rests in part upon the thesis that the data of empirical sciences are always open to reinterpretation by theory, whereas the data of science depend upon ordinary language are not. Here Hesse complains that there is a prejudice in Habermas in calling reconstructive sciences pure and ideology free than the empirical theories.

Habermas's response to the criticism of Hesse was once again an endorsement of his position of transforming epistemology into social theory through a mutual overcoming of positivism with hermeneutics and hermeneutics with a theory of intersubjectivity and communication (Habermas J.). The paper makes the moderate observation here that Habermas's

communicative ethics makes the uncertainties or incompleteness of Habermas's theory (consensus) of truth and the concept of reflective-reconstructive science significant through the substantiating idea that knowledge involves a formal commitment of communication or communicative necessity as social dialogue.

IMPARTING KNOWLEDGE AND PEDAGOGY – TEACHING SCIENCE

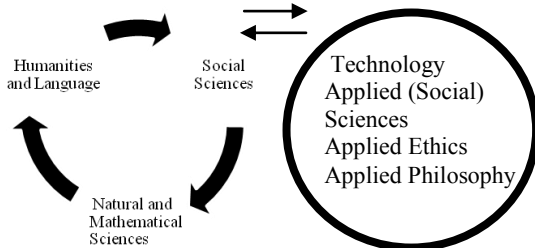
If knowledge is justifiably intersubjective, education/pedagogies should register it as dialogically and communicatively poised. Critical engagements which problematize the mainstream or popular idea of knowledge caution us that empirical science or similar positivist-scientist knowledge claims fall into 'disciplinary delimitation' and 'disciplinary narcissism'. Disciplinary delimitation constructs and proliferates knowledge as 'dis-communicative' (non-communicating and structurally refusing to communicate) system of disengaged methods when the function of education is reduced to a mere commodity due to various dynamics of power plays

Knowledge as disengaged containers of different disciplines, refuses to initiate a socio-cultural understanding and contextual auditing of the knowledge claims as the claims of education, which is essential for communicating knowledge. In other words, when it comes to communication among established subjects/academic disciplines at the level of higher education/University level education, both conventional and contemporary, they become disciplines with delimited horizons. Disciplinary narcissism is disciplinary fundamentalism. It is like religious fundamentalism or ideological fundamentalism. Fundamentalism is reificatory universalization of a particular period/phase/epoch of religio-cultural or socio-political ideals or ideologies. The major fault of any fundamental-

ism is that it is anti democratic, anti dialogic and by virtue of being so denies any form of reflective self-understanding and communication. Disciplinary fundamentalism and its spin-offs such as disciplinary solipsism and dehumanized technologization are instrumental in creating a scenario of practically nonexistent public sphere, civil and knowledge societies and effective democracy.

THE INTER-TRANSDISCIPLINARY NATURE OF KNOWLEDGE

Ideally, communication is in the telos of language as an intersubjective institution. The critical engagement is to reflectively map it and to make it part of the communicative and dialogical willingness. Similarly, the history of knowledge shows us that knowledge as its different branches interacts and interpenetrates to move from paradigm to paradigm. Therefore, it goes without saying that the true nature of knowledge is interdisciplinary, crossdisciplinary or multidisciplinary. As it is shown below it's a continuous process in the history of knowledge.



Knowledge as the product of disciplinary interaction keeps on generating new disciplinary modules. Contemporary examples are numerous and some of them are: Biochemistry, Biotechnology, Bioinformatics, Econometrics, Environmental Economics, and Ecosophy, to name a popular few. As the above diagram shows the interdisciplinary response to discipli-

nary knowledge offers us innumerable research and learning modules which challenge disciplinary decadence and narcissism. However, as it has been highlighted, the current status of disciplinary knowledge does not easily allow them to be part of our higher education due to the built-in disciplinary narcissism. In other words and from the angle of the broad concept of knowledge, the point that I would like to raise here is that all these seemingly Interdisciplinary or Crossdisciplinary new disciplinary modules fall into the same delimiting disciplinary boundaries unless there is a corresponding Transdisciplinary dimension created in correspondence with every new disciplinary construction.

I would like, therefore, to approach such an inter-trans disciplinary nature of knowledge as interactively burgeoning of language as intersubjective engagement of making meaning and truth. The process can be understood as happening through the following stages, such as, Natural-ordinary language which is being abstracted to subject-discipline specific symbolic languages in order to be advanced to a meta-language in the form of inter-trans disciplinary language which will be forced to be amenable to a further translation to the Natural-ordinary language and to the life-world. This can be called the movement of knowledge from within.

The growth of knowledge, as we have seen, is in harmony with 'inter', 'cross' and 'multi', 'trans' disciplinary modes from within and without. The major question that we face now is how we can make use of it to challenge the disciplinary narcissism which is more of an academic, discipline-wise malady and what would be the reflective engagement to respond to it with a new competence of interpreting it. Let us try to take our discussion forward by initiating certain counterfactual definitions.

INTER/TRANSDISCIPLINARITY AND THE INTER/TRANSDISCIPLINARY COMPETENCE

A normative and pragmatic communicative willingness which is constructed to border cross, both the structural and functional, self-imposed boundaries of the above discussed disciplines-related delimitation, I call 'Transdisciplinarity'. By doing so 'Inter/Transdisciplinarity' aims at critical contextualization of the mainstream knowledge, dialogical undoing of the distance between the educator and the educated and locating the power structure between the teacher and the taught and the learned.

Inter/transdisciplinarity impregnates 'inter/transdisciplinary competence' which can be understood after the concepts of 'linguistic competence' and 'communicative competence'. 'Linguistic competence' according to Noam Chomsky 'is the system of linguistic knowledge possessed by native speakers of a language and the 'ideal' language system that makes it possible for speakers to produce and understand an infinite number of sentences in their language (Noam C.,1965). 'Communicative competence' is the competence of a speaker to possess pragmatic or dialogue constitutive universals to 'produce grammatically well formed' sentences which are intersubjective (that which acts as *a priori* elements which enable the speaker in producing speech act and to produce the general structures of the speech situation) (Habermas J. 1979). Hence, I frame Inter/Transdisciplinary competence as basically the competence to approach knowledge critically, dialogically and contextually.

CONCLUSION

The significance of the intersubjective philosophical challenge of scientism in the con-

temporary scenario of pragmatically constituted disciplinary activities and knowledge society is that it constitutes knowledge as multi-dimensional, multi-vocal and as the pattern of acknowledging the relationship between the Self and the Other. The intersubjective philosophical critique of the scientist concept of knowledge aims at bridging the gap between the generalized and those that are left out as singularities by the systemic claims of the empirical/natural, mathematical and social sciences. In other words, the philosophy of intersubjective knowledge offers a transdisciplinary dimension to contextualize knowledge. Such a stance attempts to universalize the non-universalizability of all kinds of knowledge assertions.

Therefore, the inter/transdisciplinary competence recognizes and aims to attain self transcending, self critical, liberative dimension of knowledge. It intends to overcome and border-cross the disciplinary delimitations by translating knowledge into contextual and intercultural moulds of the disciplines to situate it within the life-world. Inter/Transdisciplinary competence creates a space beyond the borders of disciplines on context to context basis through consensual and dissenting dialogue to nurture continuity to it by frequently searching for the moral-ethical implications it has on the various knowledge claims.

REFERENCE

- Benton T. and Ian Craib, (2001), Introduction to the Philosophy of Social Science, London, Routledge. P.33.
- Habermas J., *Verstudien Und Ergänzungen zur Theorie des kommunikativen Handelns*, Frankfurt am Main: Suhrkamp Verlag, 1984. p.160. Quoted in Jane Braaten, *Habermas's Critical Theory of Society*, New York, State University New York Press, 1994. p.22.

- Habermas J., *Communication and the Evolution of the Society*, Trans. Thomas McCarthy, Boston Beacon, 1979. p. 1.
- Habermas, Juergen, (1971), *Knowledge and Human Interest*. p.308.
- Habermas J., “A reply to My Critics”, in *Critical debates*, op cit, pp. 274- 275.
- Habermas J., *Knowledge and Human Interest*, Trans. Jeremy Shapiro, Boston, Beacon, 1971.p.67.
- Habermas J., “A reply to My Critics”, in *Critical debates*, op cit, pp. 274- 275.
- Habermas, Juergen, (1979), *Communication and the Evolution of the Society*, Trans. Thomas McCarthy, Boston Beacon Press. p.1.
- Hesse M., “ Science and Objectivity”, in *Critical debates*, Ed. Johnson B.Thompson & David Held, London, MacMillan,1982. pp.98 – 115.
- Ibid. p.67.
- Ibid. p. 68.
- Ibid. p. 99.
- Ibid. p.105.
- McCarthy T., *The critical Theory of Juergen Habermas*, Cambridge, Polity, 1978. p. 40.
- Noam C., (1965), *Aspects of the Theory of Syntax*, Cambridge, MA: MIT Press.
- Strawson, Habermas argues that what is the truth predicate’s function in the language communication is that of a special non predicative communicative function.
- Richard Stewart’s analysis of the manifestation of science from a sociological and ethical point of view dealing Philosophy and Sociology of Science, London, Basil Blackwell, 1983 with science as scientism, science influenced by evolutionary and ecological ethics and socio-ethically regulated science is a good example for such discussions (*Philosophy and Sociology of Science*, London, Basil Blackwell, 1983).
- The questioning of the Newtonian paradigm in physics by the theory of Relativity theory and quantum mechanics, developments in molecular biology, genetic engineering and the post empirical critical theories of Thomas Kuhn, Imre Lakatos and Paul Feyrabend in *Philosophy of Science* are relevant examples.
- The well- known, second generation Frankfurt School, critical theorist, Juergen Habermas’s discussion of philosophy of science was mainly centered around his early works like ‘Knowledge and Human Interests’, ‘*Wahrheitstheorien*’, and his contributing articles to the ‘The Positivist Dispute in German Sociology’.