Hermeneutics as a Synthesis of Scientific Methods: Rational vs. Empirical

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Ever since the corpus of knowledge is split up into two realms—the *Naturwissenschaften* and *Geisteswissenschaften*, one question that has kept the philosophers preoccupied with is whether the human sciences own a distinctive character and hold as respectable a position as enjoyed by the natural sciences. The demand for the methodological demarcation does not carry much significance for those who show allegiance to the scientific methods of inquiry and believe in the 'unity of methods'. A large number of the social sciences hold that the intricacies and complexities of human-historical phenomena can be objectively and quantitatively measured and the 'historical laws' can be obtained. However, the question of demarcation of the two sciences has been taken up very seriously by the philosophers who argue quite forcefully and innovatively that while our knowledge about 'meaningless' natural phenomena is sought to be acquired by virtue of causal explanation, we must adopt the method or approach of 'understanding' if we are to gain proper knowledge of meaningful human phenomena.

The need for a separate 'rational' method of inquiry motivated the human-sciences to acquire a methodological self-sufficiency. And this is done under the aegis of 'hermeneutics' (originally a discipline dealing with ways to read texts, mainly theological and legal) towards which the German philosophical tradition has shown tremendous confidence. Wilhelm Dilthey and his down the line philosophers strongly believe that hermeneutics or hermeneutic philosophy is capable of providing the ontological groundings to the human-historical sciences and can fetch them the desired methodological autonomy. It is for this reason that hermeneutics has been exploited as a proper methodology for the entire domain of the human sciences. However, the efforts to distinguish the human sciences methodologically are fraught with the aspirations to attain

science like objectivity in the human discourse too. As a result, the real essence of hermeneutics to emphasise upon the distinctive character of the human sciences gets overshadowed and once again these sciences succumb to the strong positivistic grip.

This paper examines the methodological controversy in the light of the role 'hermeneutics' plays both as a methodological tool and, more significantly, as providing the philosophical foundation to the *Geisteswissenschaften*. Besides, the nature of scientific inquiry has also been examined to arrive at a proper understanding of the antagonism between the two realms. The controversy takes a new turn when certain affinities are noticed in the pragmatic concerns of the two discourses of knowledge which rather situate them onto the same platform, despite their epistemological-methodological differences. This shared platform is provided to them by the idea of 'hermeneutics of existence' which is ingrained in the fabric of the two domains. Although this idea is constitutive of the nature of the human sciences, one still finds such hermeneutic tones in the nature of the natural sciences too.

The paper is divided into three parts. In the first part, I argue that while employing hermeneutics as a methodological tool, the human sciences harbour inconsistent ideas and the very purpose for which it is exploited gets defeated. Here, I rely heavily on Ricoeur's theory of understanding to highlight the philosophical appreciation of the methodology of hermeneutics. The second section examines the nature of scientific practice, which is utterly necessary; for, our common perception of science as a privileged discourse is largely responsible for the wide chasm between the scientific and human domains of knowledge. In this regard, I mainly discuss Thomas Kuhn and Karl Popper's understanding of scientific inquiry as they trace the history of science. Their philosophical accounts not only dispel many of our traditional beliefs about science but also work in the direction of narrowing down the gap between the two episteme. As the gap between the two discourses minimises, the methodological debate seems to lose its intensity. At the same time, one experiences that the two discourses cut across a common idea—the idea of 'hermeneutics of existence'—depicted in their pragmatic orientations. In the third chapter, I argue that the question of the human-historical existence draws significant amount of attention from both quarters. The two sciences are committed to this idea, however, distinctively. And it is this focal idea that transgresses the bounds of the methodological debate and shifts our attention to explore a possible and plausible idea of synthesis.

I

It has been argued that human phenomena are to be understood or made sense of because the socially constructed world is the collective expression of the human mind. Thus, what we identify as the social reality is meaning impregnated, and grasping its meaning depends upon an understanding of the 'intentional repertoire'—consisting of the agents' beliefs, desires, intentions, emotions and other attitudes which underlie it and animate that reality into a historically circumscribed human reality. Understanding phenomena as an expression of mind is not like explaining them as the effects of causes, and the human world is not to be understood as a deterministic causal order of necessary uniformities such as natural sciences have constructed to describe and explain the physical world. Rather, the workings of the mind are purposive (unlike those of blind causality), free (at least within limits) of trammels of necessity, and hence genuinely creative.

Hence, the need for a separate methodology is felt to make sense of the human historical reality. Hermeneutics, which is originally an art of textual interpretation, has been extended to incorporate the entire domain of human phenomena. For, the meaningful action and text are seen on the same footing. That is, an action is supposed to be understood exactly in the same manner in which the text is understood. As a matter of fact, the whole of human history is viewed as a grand 'cultural narrative' which can be made sense of only through the hermeneutic reading.

It was Wilhelm Dilthey who first posited hermeneutics as a well-established method for the human sciences vis-a-vis the natural scientific methodology of *erklaren*. His chief contention was that the human sciences deserve to claim a respectable measure of autonomy by virtue of their possession of the distinctive method of *verstehen*. However, although the philosophical characterisation of the human sciences through the epistemology of interpretative understanding is the significant contribution of Dilthey, he has been criticised for harbouring the mistaken belief that the method of understanding can attain objective certainty in the human matters. This belief in the possibility of objective knowledge betrays his own appreciation that understanding of human-social reality is essentially historical. For, historicity so delimits and saturates both the interpreter and the interpreted situation as to frustrate the expectation of

epistemic transparency. Gadamer, who is a follower and a staunch critic of Dilthey, argues that the historico-hermeneutic conditioning of understanding is all pervasive and is such that it resists total methodisation. That is, all knowledge is essentially historical and therefore never completely segregated from the vagaries or contingencies of historical situations. So, Dilthey begins with the aim of placing the human sciences in lived-experiences and historical consciousness, he fails, on the other hand, to detach himself from the desire to achieve certainty and objectivity in the human sciences through the methodology of hermeneutics. In such a pursuit, the basic idea of hermeneutics as providing the ontological groundings to the human-historical sciences gets sidelined.

At this juncture, I draw attention to Paul Ricoeur's observation that hermeneutics, is only a 'mode of knowing', an effort to achieve epistemic certainty, unless it is associated with the ontological claims. He writes, 'hermeneutics is not a reflection on the human sciences, but an explication of the ontological ground upon which these sciences can be construed....hermeneutics thus construed contains the root of what can be called "hermeneutics" only in the derivative sense; the methodology of the human sciences'.[1] What Ricoeur wants to point out is that hermeneutics essentially constitutes an ontological basis to the human sciences and only derivatively it is an epistemic attribute.

The foundation of this Ricoeurian idea is laid down by Heidegger who holds that what is primary is the interpretation of authentically historical beings as regards their historicity and not the concept formation of hermeneutics.[2] Ricoeur endorses this point and stresses that the distinctive character of the human sciences can be argued for only if they address to the issue of the historicity of human existence and not when they solely explicate the 'objectifications of mind' with a view to objectively understand the meaning of human phenomena as Dilthey thinks.[3]

This point is strongly contended by Ricoeur in his two dimensional theory of understanding. Following the Fregian distinction between the sense (the ideal object - the proposition intended) and reference (the truth-value) of the proposition, Ricoeur claims that a textual interpretation also embodies both the sense and reference. The sense or meaning is conveyed through the syntactical structure or ordering of the text which is textured in parts and whole relationship. But, besides sense, a text also has a referential or existential dimension. Ricoeur emphasises that a text emanates various semantic possibilities

having existential bearings in and through the interactive hermeneutic understanding. The projective life-worlds' that a reader confronts with enhance his 'horizon of expectation' though he is circumscribed by his own contextuality. This broadening of one's horizon may lead to ego-transformation or giving up one's narcissistic ego. Ricoeur extends this sense and reference structure to the action also. He writes: 'Human action, no less than literary texts, displays a sense as well as a reference; it possesses an internal structure as well as projecting a possible world, a potential mode of human existence which can be unfolded through the process of interpretation'.[4]

What has significantly emerged from the 'sense and reference' model is that the construal of the symbolically constituted reality of mankind is essentially linked to the issue of human existence. The point that Ricoeur drives home is that hermeneutics remains only an epistemological-methodological tool if it does not relate to the semantic t dimension—the ontological question of the meaning of being, although he believes that there is no royal road to the ontology of being and one must take a long and ardous route' of interpreting the semantically constituted historical reality. In the same vein, he also points out that in aspiring to acquire scientific character, the human sciences have become detached inquiries but their real essence lies in focusing onto the question of the hermeneutic foundation of human existence. Thus, we notice that Ricoeur rightly emphasises that the methodological role of understanding acquires its significance only when it excavates the onto-existential foundation of the historical existence.

II

This section undertakes the task of examining the nature of scientific inquiry in the light of Kuhn and Popper's philosophy. Needless to say, both of them have severely challenged the manner in which the history of science has so far been looked at. The discussion of their thoughts reveal many unexamined beliefs and, also interestingly, pave a way to pick up some loosely structured hermeneutic threads in the fabric of the natural science which facilitate the bridge between the two sciences.

It is commonly held that science is practiced under strict conditioned environment. A scientist is bereaved of preoccupied beliefs and being a detached onlooker he succeeds in attaining the objective results. Kuhn strongly reacts to this commonplace

assumption. He argues that science is a practice which is essentially historical and prejudiced (in the positive sense of the term). A scientist always works within a historical context, a paradigm, that he finds himself situated in. He is constantly guided, by the existing corpus of knowledge at every stage of his research, whether it is the concept formation of hypothesis, experimentation, corroboration of hypothesis with facts or arriving at the law. Kuhn writes: 'Scientists never learn concepts, laws and theories in the abstract by themselves. Instead, these intellectual tools are from the start encountered in a historically and pedagogically prior unit that displays them with and through their application'.[5] So, a scientific inquiry is never a-tradition, a-contextual exploration into nature. This paradigmatic character, Kuhn insists, is never missing—be it a normal course of events (where a scientist generally extends his predecessor's work, mainly correcting the theoretical and technical flaws in the system) or an abnormal course—a breakthrough which compels the shift only to enter into another paradigm. And given a new paradigm, a scientist interprets the world differently.

Kuhn's concept of 'paradigm' focuses on the institutional character of science. The scientific research, being paradigm-centric, is a highly directed activity. Even the law or the general principle, which converts a scientific endeavour into a theory requires to be endorsed by the scientific community. So, what 'is' the case—a truth-claim made by the theory, we may say, is what is 'understood' to the case by the scientific community. This institutional character alludes to the hermeneutic feature of 'as-understanding' or 'as-charcterisation', which means that all understanding or all cognition employs a point of view. If science is governed by a certain paradigm, it involves an interpretative stance. It is because of this intrinsic interpretative character that Priestley and Lavoisier interpreted their observation of oxygen differently. Similarly, Aristotle and Galileo differed in their interpretations of pendulum. Thus, the semantic incommensurability is as much a feature of science as of any other discourse.

Kuhn's unprecedented thoughts that science is paradigmatic and it progresses either as a puzzle-solving activity or by discovering the existing anomalies within the system enables us to say that a scientific inquiry is coloured by the very perception of the scientific community. The contextual embeddedness of scientific practice enforces the belief that such an inquiry is governed by certain preconceived standards and beliefs and hence it cannot be objective. On the contrary, the historical rootedness is strongly suggestive of

the presence of the hermeneutic element or 'as-characterisation' in the nature of scientific inquiry.

Like Kuhn, Popper also presents an unconventional account of science. His falsification principle—that a scientific law is conclusively falsifiable although it is not conclusively verifiable—offers a novel solution to the problem of induction which is the foundation of science (though it is also true that the principle faces the charge of circularity). Popper holds that scientific laws are testable but not provable, that is, they cannot be conclusively proved but certainly their validity can be tested by constantly refuting them on rigorous parameters. What is significant about the falsification principle is that it allows science to progress, devoid of which it would have been stagnant.

This principle reveals another important point that our knowledge does not rest on secure foundations. It is essentially provisional. To prove the truth of a theory is simply a logical impossibility. If a theory is considered, true it is only because it is preferred over other theories. A law or theory is always open to revision, thus loses its credibility as soon as the other theory stakes its claim. Popper thus condemns the popular belief that science is a body of established laws. He, instead, argues that science is changing all the time and only in its having a critical fervour (that of progressing through refuting existing laws) can it be called a rational inquiry. Popper makes an important distinction between 'truth' and 'certainty'. He admits that scientific knowledge is the most important kind of knowledge, yet he maintains that knowledge is the search for truth and not for certainty. By truth he means "what is accepted; or what is put forward by society; or by the majority; or by my interest group; or perhaps by television".[6] So, he opines that since we cannot be certain about anything it is worth searching for truth and not for certainty.

Another crucial point in Pepper's theory is that he is critical about the view that science is pure observation, devoid of any theoretical conceptions. Science, he claims, always proceeds from theory to observation and all observation is intrinsically interpretative. Observation is never pure, a-historical and objective. Every observation is selective; it chooses an object, a definite task, an interest, a point of view, a problem. In his words, 'observations and even more so observation-statements and statements of experimental results, are always *interpretations* of the facts observed; that they are *interpretations in the light of theories*'.[7] Now since observations

are theory-dependent which are the products of mind, there is never a trans-historical 'pure' capturing of factual reality.

If we now concentrate on the three points that have emerged from Popper's account of science, namely, the falsification principle, the denial of science being a body of established laws and that science interprets facts, we embark upon an important claim that science evades finality. There is a constant slippage in reaching secure foundations; for science is a constant critical investigation into the book of nature. In such a situation, when scientific laws are denied of the status of 'truths', the terms like 'universality', 'objectivity' and 'certainty' which define science lose their credibility. And science, bereft of these features, is a disqualifier for any privileged, non-ideological position over the other epistemic discourses.

The above discussion on Kuhn's idea of paradigm and Popper's theory of rationality paves a way to question the privileged position enjoyed by the *Naturwissenschaften*. Science, when evaluated from these two standpoints, does not look drastically different from any other non-scientific discourse. Instead, as has been brought to notice by Kuhn and Popper, science embodies features like contextuality, subjectivity, openendedness etc., which are definitive of the human-historical sciences and which happen to make them deplorable. Now that the privileged status of the natural sciences is under threat, there is a need to liberate the human sciences from the strong positivistic grips. The aspirations of the human sciences to be paralleled with the natural sciences appear meaningless in the wake of the facts that the natural sciences share certain characteristic features with them. And, by virtue of the same, there does not remain any unbridgeable gap between the two sciences. The gap between the two further narrows down when we explore their pragmatic or practical dimensions. I insist, along the Ricoeurian line, that the real distinctness of the human sciences lies in attending to the issues of human existence and not in attaining the methodological independence. It is only in this respect that their practical value is exhibited. And, as a matter of fact, the question of life or the concern for the human existence is the fundamental issue addressed to by the natural sciences through their technological counterpart. In essence, both the discourses of knowledge show affinity to each other by having the common concern. In the following section, I explore a position that encompasses both the discourses and situate them onto the same footing.

III

Having argued that the human-historical sciences' aspiration to attain scientific certitude through the interpretative *verstehende* method is unwarranted and the natural sciences' claim to give objective and certain knowledge is subject to doubt, I theorise a position which the two discourses share and which bring them closer, despite their characteristic and methodological differences. The point of intersection between the two epistemological fields is the idea of 'praxis', the practical side of a conjectural, theoretical discourse. It is evident, that science is in a strong position so far as the question of practical utility or application is concerned. For, technology or technological advancement is the pragmatic extension of the scientific discourse which establishes an intimate relation with human existence. Complemented with technology, science comes down from its thematic standards to the operative function at all levels.

The bridging work that technology does between science and human existence is performed by the hermeneutic process in the case of the human-historical sciences. A hermeneutic experience is more than a procedural activity. It is an appreciation, an awareness of something which is new and adds to our knowledge or cognition and hence primordial. Gadamer describes experience as constitutive of three elements—'understanding', 'interpretation' and 'application'. What is crucial here is the idea of 'application' which is structured upon the Aristotelian notion of 'phronesis' or 'practical moral reasoning'. Aristotle emhasises that a moral decision is a practical reasoning or judgement in view of the particular situations and not an action in accordance with certain established standards. The significant point here is that moral reasoning requires interpretation of moral laws in the light of the real situations. In this sense, Aristotle distinguishes phronesis from 'techne'; for, techne is an application of some skill or expertise with the aim to attain some desired goal. But the practical reasoning is not a goal directed activity; rather, it is an appraisal of the circumstance and hence it is interpretative. Application, along this line of argument is an integral dimension of all understanding. Thus, all understanding owns a practical dimension.

The idea of 'application' which is dealt with at length both by Gadamer and Ricoeur is considered integrally attached to the hermeneutic experience as 'assimilating or appropriating other's views' and thereby enhancing one's own horizon of meaning. This

semantic-existential orientation of a hermeneutic experience is argued as having the pragmatic value. It reflects the practical aspect of a hermeneutic-historical inquiry; for, it is directly linked with the issue of meaning of life. Broadly speaking, the human historical sciences owe their pragmatic worth to this dimension of referentiality. In unraveling the intricacies of human behaviour manifested in varied symbolic forms of socio-cultural existence, these sciences display the projective character of understanding. The projective element of hermeneutic appreciation enhances the 'horizon of our expectations' through unfolding the existential possibilities. So, although the success of the human-historical sciences cannot be estimated in terms of tangible results, their significance, in terms of practical applicability, lies in deepening our understanding into the nature and conditions of historical existence.

The concern for the socio-historical existence is commonly shared by both the sciences. Highlighting this intimate relationship between the sciences and the human life, Karl Popper, in his book *Poverty of Historicism* writes: 'Since scientific research in social problems must itself influence social life, it is impossible for the social scientist who is aware of this influence to retain the proper scientific attitude of disinterested objectivity. But there is nothing peculiar to social science in this situation. A physicist or a physical engineer is in the same position. Without being a social scientist he can realise that the invention of a new aircraft or rocket may have a tremendous influence on society'.[8]

The historical rootedness of the two sciences makes the question of the social life or human existence inevitable for them. It not only removes the stark opposition between them but also reconciles them onto the onto-existential plane, though not on the methodological plane. Considering the centrality of this issue, it can be rightly argued (that the major thrust of the two sciences lies in manifesting and shaping reality which encompasses both the linguistically fabricated socio-cultural reality and the exterior cosmo-physical reality. And in manifesting the reality, human existence is exhibited in its three-dimensional structure—that of man's relation with himself, with others and with the world. However, it is true that the two sciences lay their focus on different aspects of this triadic pattern.

NOTES AND REFERENCES

1. Ricoeur, Paul (1981), *Hermeneutics and the Human Sciences*, edited and translated by John B. Thompson, Cambridge University Press, p. 55

2. Heidegger addresses to the deeper issue of the ontological foundation rather than the epistemological grounding of the human sciences. For him, hermeneutics is not a reflection on the human sciences, but an explication of the ontological ground upon which these sciences can be constructed. Hermeneutics is a methodology of the human sciences only in the derivative sense.
3. By the 'objectifications of the mind', Dilthey means certain expressions which reflect the inter-subjective or participative nature of mankind which establish a link between the individual psyche and socially acceptable behaviour. The objectifications of mind include individual gestures, words and actions as well as social institutions, customs, languages, states, churches, legal systems, tools, books, works of art and so on.
4. Ricoeur, Paul (1981), *Hermeneutics and the Human Sciences*, ed. & trans, by John B. Thompson, Cambridge University Press, p. 16.
5. Kuhn, Thomas S. (1970), *The Structure of Scientific Revolutions*, University of Chicago Press, p. 46.
6. Popper, Karl (1994), *In Search of a Better World*, Routledge, p. 5.
7. Popper, Karl (1959), *The Logic of Scientific Discovery*, Hutchinson, p. 107.
8. Popper, Karl (1957), *The Poverty of Historicism*, Routldege, p. 144.