

## Toward a Feminist Critic of Science

Archana Barua

### *Abstract*

It is undeniable that aspects of postmodernist thought are also useful to the feminist goal of unseating the hegemonic dominance of traditional male authority. The threat of moral relativism hangs over the Postmodernist head, and this stance is strongly criticized within feminist circles: As Carol Gilligan has said, "Life can't just be continually reconstructed; ...There is a complex reality, yes, but there is something called reality, and there is something called a you." A postmodern feminism can cope with the collapsed notions of foundationalist premises, such as that of the stable and unified self-concept. This article makes an attempt at re-visiting feminist critic of science in light of phenomenological and hermeneutical attempts at bridging the gap between science and life either in the Husserlian project of restoring the structures of the Life World, or in the Heideggerian quest for liberating the 'Being' from the prison house of language. Do they share similar concerns for overcoming the limitations of binary structures of understanding? The article makes an attempt at understanding the one from the perspective of the other and vice versa.

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### *Introduction*

My reason for juxtaposing feminism and postmodernism together is to highlight some common concerns that are shared by both. Accordingly, this article is an attempt at re-visiting the feminist & the post-modernist critics of science in light of both positivistic and hermeneutic understandings of science. Finally, it is an attempt at understanding the nature and significance of the meaningful dialogue between postmodernism and feminism in their common quest for a wider scope of the hermeneutical philosophy of science. The first part of the article is a clarification of the terms: science, feminism and postmodernism taking note of the fact that there are different shades of meaning that add to the

complex character of this question:” what is science?”

*What is Science?*

Most people tend to respect science because of its successful applications in practically every field of human activity. The computer may appear to be a “black box” to most of us, but it can do fascinating things. The generally successful space program holds us in awe. The ability to obtain images of the brain and other parts of the body without cutting them open defies credibility. And the list goes on and on. Scientific knowledge also became the trademark of universally correct standard of knowledge that is free from subjective bias and prejudice. Positivistic interpretations of science could be characterized as extreme late forms of Modern rationalistic interpretations which, in certain respects, saw the phenomenon of science as a kind of logical and propositional enterprise focused upon theory and its subsequent verifications--or falsifications--and clearly framed in terms of modernist epistemologies. It is this modernist framework, which now falls into question.

*Modernism, Post-modernism & the Feminist Critique of Science*

Feminists’ main concern is the emancipation of woman from social wrongs and injustice and this initially is an acknowledgement of the fact that there is binary opposition between the one who wrongs and the one who is wronged. The feminists claim that the so called objective knowledge of science has a Eurocentric, ‘masculinist’ bias that needs to be rooted out. While the post modernist critic finds fault with the modernist against the ambitious epistemology projects and for charge of “essentializing women” and thereby eradicating the voices of women of color, the modernist -feminist criticizes the postmodernist-feminist position for relativizing woman’s issues and for undermining the importance of gender within that framework.” Nancy Hartsock, Christine Di Stefano, and others claim that an important strength of feminist theory and politics is to be found in modernist insistence on the importance of gender. Christine Di Stefano argues against the location of feminism fully in the terrain of the postmodernism. She writes: Contemporary Western feminism is firmly, if ambivalently, located in modernist position, which made possible the feminist identification and critique of gender. <sup>1</sup>

Similarly, other feminist theories argue that the postmodernists must be wary of the anti-Enlightenment criticisms.” They state, or imply,

that feminists are making a big mistake in adopting postmodernist postures. Luce Irigaray (1985) asks if post modernism is the “last ruse” of patriarchy. She provides a succinct summary of key aspects of the feminist case against postmodernism: First, postmodernism expresses the claims and needs of a constituency (white, privileged men of the industrialized West) that has already had Enlightenment for itself and that is now ready and willing to subject that legacy to critical scrutiny. Secondly, the objects of postmodernist’s various critical deconstructive efforts have been the creations of a similarly specific and partial constituency (beginning with Plato). Third... mainstream postmodernist theory (Derrida, Lyotard, Rorty, Foucault) has been remarkably blind and insensitive to questions of gender in its own purportedly politicized reading of history, politics and culture. And finally, the postmodernist project, if seriously adopted by feminists would make any semblance of a feminist politics impossible. To the extent that feminist politics is bound up with a specific constituency or “subject”, namely, women, the postmodernist prohibition against subject-centered inquiry and theory undermines the legitimacy of a broad based organized movement dedicated to articulating and implementing the goals of such a constituency.<sup>2</sup>

For some critics, it appears that there is some ambivalence in the feminist position here, that the feminist discourses re-instate those very discourses in the act of challenging them. That itself seems to be a trend toward valorization of irrationality that can only appear so if those dichotomies remain in place. However, the prime objective of the feminist is aimed at eradicating and destabilizing the dualisms of nature/culture, rational/irrational, subject/object, and masculine/feminine and so on, the feminist position keeps room for diverse positions within its frame that seek to resolve differences in a dialogical manner. Mostly, it is done in the manner of accommodating differences in a harmonious manner instead of rejecting the one for the sake of the other. For the feminist what is important is not that differences do exist and have become a part of our post modern phase of existing. But what is objectionable is the politicization of this difference in a biased manner. Sandra Harding draws attention to two the fact that this is a difference as diversity and variety of understanding differences between women as richness and opportunity for cultural enhancement and understanding than as a threat to the self of the speaker. Difference is simply a cultural variation.

On the other hand there is the existence of difference due to structures of domination. Feminist epistemology must recognize these differences, along with substantive feminist theories, motivate, and enable women

to work against exploitive relations between women. Feminists have developed feminist strategies that value feminist perspectives as resources for organizing to end male domination. Feminist sciences and epistemologies should help to bring to consciousness- less mystified understandings of women's and men's situation so that these understandings can energize and direct women and men to struggle on behalf of eliminating the subordination of women and men to struggle on behalf of eliminating the subordination of women in all of its race, class and cultural forms. Feminist politics is bound up with a specific constituency or "subject", namely, women who is often the 'cultural other' in a male-female, reason-passion dichotomous way of understanding which the feminist seeks to overcome. The operative premise of Bordo's, Lloyd's and Hekman's and some other feminists' analyses is that the dichotomy of rationality and irrationality help to constitute the dualism of masculine/feminine and vice-versa.

The question that should be vital for a feminist philosopher is: 'is science beneficial'? If the feminist wants to raise this question she needs a theory of knowledge that enables her to do so. The positivist's commitment to 'maleness of reason' keeps no provision for a woman scientist who has a feminist agenda of correcting woman's position, her health and her subjugation, in a rational and enlightened manner, the way a scientist should proceed in this direction that differs the way of an uniformed layman. What is objectionable here is her feminine way of relating science to value thereby defiling the dispassionate scientific quest by subjective aspirations. Science is supposed to explain facts in a matter of fact way. Value questions are unscientific and 'non-sensical'. While science as scientism insists on dispassionate value-neutral 'view from nowhere', it fails to accommodate woman's 'womanly concerns' into its fold. Is hermeneutics of science a better option here? Science is now hermeneutical in its approach that keeps room for the human interpreter into the very act of understanding and interpreting reality. For the feminist, the vital question here is: 'does it enable her to safeguard the distinctive feminist-concerns that she so genuinely seeks to correct and resolve in a scientific manner?'

Perhaps she has to look for other options if postmodernism and hermeneutics opts for 'Interpretationism' as an 'interpretation of the interpreter', only. This way 'interpretationism' also discounts feminist knowledge-claims in scientific and everyday contexts. If a feminist is totally committed to post modernism she will have to reconcile her fate by accepting the 'status quo.' Foucault, Rorty and others critics have

pointed out epistemologies that end up rationalizing the legitimacy of the beliefs of the powerful. In that case epistemology would be only an honorific used to designate the winners in such struggles. The feminist wants to assert the voice of the powerless and to prove that knowledge is not always a power –game only, else there is no point in making futile effort at struggling against stronger and more powerful knowledge claim made by the more powerful man. The feminist critic of science needs an abandonment of the narrow conception of scientism and also a critic of the complete abandonment of scientific endeavor. Is there a middle position for her?

That the feminist could continue to develop theories of knowledge although male domination continued to take new forms and, in significant forms, that itself makes position ambivalent. With her insistence on the role of the woman interpreter to be taken seriously in all matters of knowledge-producing, she is a critic of the dispassionate male-scientist, by not rationalizing the beliefs of the powerful, she is not fully post-modern. This itself is one of the ambivalent situations that a woman is confronted with, apart from many other ambivalent situations of this sort that needs her dual commitments and half-hearted loyalties to many options than a fanatic obsession for any one. .When confronted with uncertainties and disillusionments at every step of her life ,an woman becomes tolerant to differences and sensitive to a harmonious and a participatory mode of understanding .When a post modern feminist fails to understand why there is need for feminist - epistemology at all ,it is simply because for this type of post-modern modernist, just because there are differences and there are other voices, it does not amount to saying ,‘therefore there is no difference between an authentic claim and an inauthentic one, between a genuine claim and a false claim’.

And here comes the danger for a feminist who wants some assurance from others that her deteriorated situation and her subjugated position is not just a ‘phobia’ on her part. That it is so is well-grounded on facts and evidences as well. Otherwise, “when women appeal to “the facts’ to justify their claims in ways parallel to those routinely used by men, impressions of impartiality, disinterest, value-neutrality, do not arise (especially not for men). When women appeal to their interpretations of evidence, instead of this appeal having the meaning” this is a good (or plausible, justifiable, reasonable) interpretation” it asserts only that “this is just my interpretation.” Instead of certifying the evidence, the strategy has the effect of discounting it.” <sup>3</sup>point out that a woman’s claim that “It is my opinion”, means that it is just her opinion; a man’s identical sentence

means he's got a right to his opinion. While feminists certainly have right to their interpretation of who contributed what to the dawn of human history, or why rape occurs, or the causal role of family forms in historical change, that is just their opinion. Since there is no knowledge claim made here, those who are not convinced of feminist opinions have all rights to differ from them.

The tragedy is that, whether a woman likes it or not, this post modern ambivalence is now forced to be a part of her identity. A woman is judged to be biased when she seeks to proceed scientifically, she is often claimed to be inferior to man because she is unscientific and indecisive, at a time when it is also acknowledged that the scientist is profoundly affected by the societies within which scientific work is done. Scientists have also learnt to appreciate many kinds of occasions on which scientific decisions are made some of which are extra scientific factors as the amount of fund that comes for a project and so on. We are now tolerant of uncertainties and inexactness of our ideal of truth. The revolutionary breaks with our familiar way of understanding science equals only to a post modern deconstruction that prepares us for continuous shock at the strangeness of the familiar.-

If it is accepted that lived life is always more complex than any explication of meaning can reveal, that knowledge both keeps room for authentic claims against an inauthentic one, provided what this authenticity in knowledge is also depended on how and in what manner an interpreter interprets a social phenomena (social) . There is danger if the interpreter, the male or the female, is completely removed from the scene in one's crave for 'view from nowhere.' There is equal danger if knowledge is just an interpretation of the interpreter. In order to understand the diverse positions of the interpreter in the act of interpretation, let me revisit the brief history of hermeneutics and its various interpretations.

*Epistemology or Ontology? Hermeneutics and its kinds:*

Modernist epistemologies, in this Euro-American context the primary alternative is one which seeks to find the relevance of hermeneutics for the sciences. But, interestingly, within the context of this search, there has emerged a strong tension concerning how hermeneutics itself is to be understood. Schleiermacher, a theologian, begins this second development by adapting hermeneutics as a distinctive humanistic and historical discipline which, in effect, becomes a philosophical

anthropology and a distinctive ‘psychology.’ But it is Dilthey who gives hermeneutics its ‘canonical’ modernist direction. Hermeneutics is generalized as the “human science” which applies to the various disciplines which deal with Geisteswissenschaft, the sciences of “understanding.” Dilthey contrasts such sciences from the natural sciences, Naturwissenschaften, which are distinguished as sciences of “explanation.” It is this distinction which becomes canonical and which remains operational within the still modernist hermeneutic traditionalists.

Modern hermeneutics thus becomes a ‘humanities’ methodology, broader than exegesis, but not a truly ‘general’ method, and it remains distinct from the natural sciences. The twentieth century, particularly the mid-twentieth century, sees philosophical hermeneutics enriched by yet another development: phenomenology. Here we arrive at the three European giants of the hermeneutic tradition: Martin Heidegger, Hans Georg Gadamer, and Paul Ricoeur. Enriched by Husserlian phenomenology, hermeneutics in these three thinkers becomes ontological. And, insofar as there can be a hermeneutic ontology there can be a methodological generalization which reaches beyond any merely historical or humanistic trajectory. Ontology precedes epistemology and this, itself, is already to overturn the claims of modernist epistemology. Hermeneutics thus becomes the foundation of all human sciences. There remain, however, epistemological implications of a hermeneutic ontology: Disappearance of a strong understanding/explanation distinction in the operative theory of these three hermeneutists. Phenomenologically enriched epistemologies of late modern hermeneutics shows how, in principle, scientific knowledge as well as cultural knowledge must be derived from (human) ontology. In Husserl this was already argued for insofar as the constitution of any special science must refer back to the Lifeworld. In Heidegger this becomes the derivation of the objects of science (Zuhanden) from the paraxial knowledge of pragmata or tools (Vorhanden). In effect this was to argue that scientific knowledge was derivative from practical knowledge. In Gadamer and Ricoeur, both somewhat more indirect in ontological claims than the former philosophers, it remains the blurring of the understanding/explanation distinction. The one view, supported most strongly by Karl Otto Apel, but also seconded by Dagfinn Føllesdal and others, holds that there can be a hermeneutics of science as a cultural and historical phenomenon, but there cannot be a hermeneutics of the objects or products of science.

Here we can make a negative yet strong influence of Kantianism. Kant’s a historical approach led him to give us the foundation and

justification of the natural sciences and mathematics in 'pure reason. 'Dilthey's 'Critique of Historical Reason,' offers both a critique and a supplement of that reason; it provides the epistemological foundations of the sciences of man and his culture, spirit, history and society. In this project one feels the impact of both Nietzsche and Droysen. (Roy :1993).<sup>4</sup>Gadamer aptly delineates how Nietzsche's 'Will to power' changes the idea of interpretation. It is more an interpretation of the interpreter, than of the text, the text opens to endless interpretations. For Heidegger hermeneutics is not merely the methodology of understanding but an explication of the ontological ground upon which all these sciences are grounded. Interpretation is never prejudiceless. The basis of Heidegger's hermeneutics lies not in subjectivity but in the facticity of world and historicity of understanding. Finally, even in Heidegger, it is language that tells us about the nature of a thing, language remains the master of man. Slowly and steadily Heidegger turns from phenomenology to the 'linguisticity of Being'. Rorty is critical of Derrida that he too fell into similar trap with Heidegger. Derrida occasionally considers language as if it is a 'quasi-agent.' In place of such 'linguisticism', Rorty aims to present pragmatic hermeneutics. Rorty finds merit in Hermeneutics attempt to explode the myth that knowledge mirrors the essence of its subject matter (Roy :1993).

For Habermas, the concept of interest is knowledge constitutive. Hermeneutics draws our attention to the fact that knowledge is bound to a tradition. In these diverse trends for interpreting hermeneutics, we find modernist trend in Dilthey while Gadamer , Rorty and Derrida seek to delineate hermeneutic in the post modernist direction. Krishna Roy comments:” Here I think, if anti epistemological and anti-representational attitude characterize post modernism, Gadamer can be a post modernist. But Gadamer's view, unlike that of Derrida, Rorty and others, is not merely relativistic. With Gadamer hermeneutics goes beyond objectivism and relativism, it becomes truly philosophical. Following Gadamer and Heidegger one can say that understanding and interpretation are not something we have or not have, but what we live or experience. They are one with our existence.”<sup>5</sup>

*Beyond Modernism and Post-Modernism: 'Phenomenology of Hermeneutics'?*

For the feminist what is most important is this meaningful interplay between both understanding and interpretations. She can not wipe away her real existential issues that are so crucial and decisive in constituting

her selfhood, nor can she opt for a complete relativist standpoint. Woman's problems need to be seriously addressed both personally and politically, and in this age of advancement of science and technology it will be a stupidity on her part if she fails to enrich her vision in an enlightened and informed manner. Science can be one of her strong aids provided her scientific approach keeps room for she being a humanist and a pragmatist. In order to do that the feminist philosopher must address this question: 'is science beneficial?' This can not be rejected as 'meaningless' or a naïve philosopher who makes a category mistake not differentiating facts from fictions, knowledge from personal opinions, or worst at it, who seeks to differentiate truth from falsehood when in reality there is nothing called truth.

The feminist epistemology projects, and their critics, are both attempts at escaping the damaging limitations of the dominant social relations and their conceptual schemes. Her theory of knowledge should keep room for accommodating this ambivalent, 'post-modern- modernist's position that she now seeks to undertake. That alone can safeguard her from making a choice out of limited options: 'Is she an epistemologist or an ontologist', a 'modernist or a post-modernist'? Sandra Harding wonders if this difference is at all to be resolved in any other way save learning to accommodating the otherness of the other in a more tolerant manner. She writes: "In contrast, I think that the rationale for feminist ambivalence here should refer not primarily to feminist error, or even exclusively to intellectual and political inadequacies in the mainstream debate. More important in generating this ambivalence are tensions and contradictions in the worlds in which feminists move. From this perspective, at least some of the tensions between the scientific and postmodernist agendas are desirable; they reflect different, sometimes conflicting, legitimate political and theoretical needs of women today."<sup>6</sup>

This trend is toward post modernism but it is not postmodernism neither modernism nor postmodernism that can do justice to the feminist position. Science is not practiced in idealized situations, insulated from social influences, but neither can scientific knowledge be cast in purely relativistic terms Harding looks for an alternate way for safeguarding woman and her real problems that should not be given a mystical color. This she can do only by transcending the limitations of both objectivism and interpretations, of modernism and postmodernism, of positivism and hermeneutics, of epistemology and ontology that alone can keep room for meaningful dialogue between the two. For that, she needs to take a position and others should see validity of her claim in the process

of assigning some truth value to what she intends to say.: It needs a phenomenological dialogue between lived reality of her life situation and an interpreter's interpretation that is also conditioned by his or her distinctive contexts, interests, prejudices and so on. But woman's situation is not just 'no one's story' so that any one can make it his or her own story. An woman is a daughter for a father, a mother for a child, an wife for a husband and so on. But over and above all these, she is the one who is in continuous dialogue with her own self as it is she who is re-born in the- continuous process of learning and re-learning by trial and error, it is she who seeks to resurrect herself out of her own ruins so that she lives and let others live.

For Edmund Husserl, the founder of phenomenology, 'human 'intuitions' of reality are constituted, not given. ' Phenomenology needs to be redefined as analyzing people's relationships with the world. For that is what classical phenomenologist actually did. Husserl, Heidegger, and Merleau-Ponty did not describe the world but our relationship with it, be it in terms of 'consciousness', 'being-in-the-world', or 'perception'. Our world is interpreted reality' and our existence is 'situated subjectivity', but it is an interpretation that needs both the interpreter and the relation between the knower and the known. What the world 'is' and what subjects 'are', arises from the interplay between humans and reality. Re-interpreting Hermeneutics phenomenologically, Van Manen holds the two approaches - hermeneutics and phenomenology - in a dialectical relationship, wanting to 'let things speak for themselves' while recognizing that (social) phenomena need to be interpreted (through language) in order to be communicated to others. Van Manen puts special emphasis on the hermeneutic-phenomenologist participating in the research in the interests of acting out a set of pedagogical values: "When we raise questions, gather data, describe a phenomenon, and construct textual interpretations, we do so as researchers who stand in the world in a pedagogic way...pedagogy requires a phenomenological sensitivity to lived experience...a hermeneutic ability to make interpretive sense of the phenomena of the life world....(and)...play with language in order to allow the research process of textual reflection to contribute to one's pedagogical thoughtfulness and tact. " <sup>7</sup>

Can this be an alternate approach from a feminist philosopher of science who has all the ingredients in her for combing successfully both these roles, a woman and a scientist, an woman of reason, and an woman who cares and loves. Sandra Harding looks for a wider horizon that can accommodate both enlightenment needs and post modern concerns in

the interest of acting out a set of pedagogical values as well. She writes: These projects are incomplete –we have not yet figured out how to escape such limitations. Most likely, we are not yet in an historical era when such vision should be possible. At this moment in history, our feminism need both Enlightenment and postmodern agendas-but we don't needs the same ones for the same purposes or in the same forms as do white, bourgeois, andocentric westerners.<sup>8</sup>

### *Notes*

1 Dadachanji, Dinshaw K.. 1998.The Cultural Challenge to Scientific Knowledge. *The World & I*, Vol. 13: 172.

2 Harding, Sandra. 1986. *The science question in feminism*. Ithaca: Cornell University Press.

3 Belenky, M.F., Clinchy, B.M., Goldberger, N.R., and Tarule, J.M. (1986) *Women's Ways of Knowing*. New York: Basic Books.

4 Roy, Krishna. 1993.*Hermeneutics East and west*. Calcutta. Allied Publishers LTD.

5 Ibid.

6 Harding, Sandra. 1986. *The science question in feminism*. Ithaca: Cornell University Press.

7 Van Manen, M. 1990. *Researching lived experience: Human science for an action sensitive pedagogy*. London, Ontario: SUNY Press, pp.1-2)

8 Harding, Sandra. 1986. *The science question in feminism*. Ithaca: Cornell University Press.