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The View of Nature in Eco-feminism and Chinese Philosophy

by **Eva Kit Wah Man**

Hong Kong Baptist University
Kowloon, Hong Kong, China

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Background

- ¶1. Since the early 70's theorists working in the area of *Feminist Science* have questioned the historical and sociological relationships between gender and science. They point to the fact that our notions of progress are drawn from science, technology and medicine, all of which are characterized as "rational" as distinct from that which is "emotional". Their critique is part of a more general questioning of science and technology which casts doubt as to whether they alone hold the solutions to the world's problems such as environmental degradation, unemployment and war.[\[1\]](#)

- ¶2. Along with the feminist critique are other critical perspectives such as the racial critique, in particular African and Indian, of white European science and the Marxist critique of Bourgeois science. All of these point out that the idea of a transcendental mind resulting in a pure knowledge which stands above history is simply an epistemological conceit. Drawing upon the work of thinkers such as Michel Foucault, they adopt a genealogical approach which sees science in terms of knowledge/power constructs operating within historical frameworks.[\[2\]](#) What is reflected within science is the particular moment of struggle between social classes, races, and genders found in actual lived world.[\[3\]](#)

- ¶3. A feminist critique has shown the way in which gender-based dominance relations have been programmed into the production, scope and structure of knowledge, distorting its content, uses, and meaning. For example, feminist critiques of psychiatry and the treatment of women's depression as pathological expose the sexist biases in medical constructions of mental health and illness. This view of medical science recognizes it as a repository of patriarchal values.[\[4\]](#) Thus a growing number of feminists are re-examining the scientific revolutions of the 16th and 17th centuries arguing that science and philosophy are based on the masculine constructs of Reason and Objectivity.[\[5\]](#)
- ¶4. Caroline Merchant's study of the relationship between the scientific revolution's quest to dominate nature and the quest to dominate women is one of these examples. *In The Death of Nature* she draws our attention to the repeated metaphors of male domination, rape, and despoliation that characterize the writings of the fathers of the scientific revolution.[\[6\]](#) Similar researches also reflect the way in which the predominance of men in the sciences has led to a bias in the choice and definition of problems. In all of these we find a glorification of Western rationality, along with the related paradigms of science and freedom, all of which are based on the subordination of nature to the male will, and the disenchantment of all the nature's forces.[\[7\]](#) That these male dominated constructs of science and technology have real world impacts can also be seen in the way in which technologies are linked to those capitalist modes of production as well as modes of the production of meaning. There are at least three layers of meaning of technology: as a form of scientific knowledge; the know-how to use things, repair them, design them and make them; and related to it is a hardware definition which refers to physical objects. These different meanings of technology embody a culture or set of social relations made up of certain sorts of knowledge, beliefs, desires and practices.[\[8\]](#) Feminist theorists aim to deconstruct these relations especially in terms of the gender dimensions, carrying the seeds of an alternative ontology, epistemology, and ethics.[\[9\]](#) The possibility of a different science is discussed, a science undistorted by masculinist bias.

The Critique of Modern Science

- ¶5. Francis Bacon, the father of modern science, exemplifies the use of sexual metaphors to express his idea that Nature is female, and the task of science is the exercise of domination--male domination--over her. In his words, "Let us establish a chaste and lawful marriage between Mind and Nature...leading to you Nature with all her children to bind her to your service and make her your slave."[\[10\]](#) He counsels that we need not merely "exert a gentle guidance over nature's course; we have the power to conquer and subdue her, to shake her to her foundations".[\[11\]](#)

- ¶6. According to the feminist reinterpretation of the tradition, the seeds of Bacon's notion of knowledge and power is already there with the Greeks. For the Greeks, knowledge already transcended matter. The Pythagoreans understood the world as principles which were related to determinate form, which was good, or indeterminate form, which was bad. These principles were set up as a series of dualisms: limited/unlimited, odd/even, one/many, right/left, male/female, rest/motion, straight/curved, light/dark, good/bad, square/oblong.[\[12\]](#) Truth or knowledge was in the principles. In the same way Plato held that true knowledge was of the forms upon which one should contemplate. As we move forward to Bacon we find that the gap between form and matter is completely closed. Contemplation of forms is no longer adequate. He said he who would know Nature must turn away from mere ideas and abstractions and painstakingly attend to natural phenomena. But for Bacon the aim of science is not only knowledge. For Bacon knowledge is power. The ends of knowledge are to "renew and enlarge the power and empire of mankind in general over the universe". The new science as proclaimed by Bacon and prefigured in the new astrology and magic of the Renaissance magi seeks to shift the primary focus of scientific attention away from contemplatively perceived truth to the goal of mastery over nature: that man is both the 'minister' and 'interpreter' of Nature, knowledge is identified as power and the idea is later developed into Reason and progress.[\[13\]](#)
- ¶7. Throughout this history the feminists claim that a male bias manifests in the fact that active, determinate form is considered to be male while femaleness is passive, indeterminate matter. Throughout the parallel dualisms such as culture vs. nature, mind vs. body, reason vs. emotion, objectivity vs. subjectivity, and the public realm vs. the private realm there is a dominant and subdominant term. In each dichotomy the former must dominate the latter and the latter in each case seems to be systematically associated with the feminine.[\[14\]](#) The feminist critique of oppressive dichotomies extends to biological thinking of male/female, nature/culture, androgen/oestrogen, cognitive/affective, left brain/right brain. These hierarchical dualisms reveal one of the depths of the ways in which gender has affected the development of science.[\[15\]](#) It is because of the deep and systematic penetration of these themes of dominance that feminism calls for a total rejection of the hierarchical epistemology of modern Western science.

¶8. To look further, what does a man being a subject mean? In explication, feminists look into the notion of the Cartesian cogito which is said to express the most individual experience and the most "objective" truth. They hold that the Cartesian subject is inherently phallographic, yet is a partially autonomous constituting role and agency. As Irigaray said, "We can assume that any theory of the subject has always been appropriated by the 'masculine'".^[16] She goes beyond this to claim that all dichotomies are both hierarchical and gendered, thus she rejects the epistemology that produces them. The gendered character of contemporary science is summarized by other feminists as follows:^[17]

1) women cannot be subjects but objects, they can only be the ego-less objects of scientific study;

2) the active, knowing subject that is essential to science has been defined as exclusively masculine.

¶9. The net result is the entrenchment of an objectivist "male" ideology and a correlative devaluation of "female" subjectivity.^[18] The scientific, intellectual interest in prediction is already seeking control and this is seen as the highest characteristic of Man and an expression and fulfillment of a distinctively human potential. It is this which raises humankind above animals and man above woman. This same ideology of objectivity which asserts an opposition between "male" objectivity and "female" subjectivity denies the possibility of mediation between the two. The feminists reconceptualize objectivity as a dialectical process.^[19] They claim for a *Feminist Science* which is de-centered, pluralistic, non-hierarchical, hermeneutic and is analogous to women's unique association with Nature. While the *Masculine Science* is operated as competitive, related to absoluteness and abstraction, the *Feminist Science* should emphasize on relativity and interrelatedness.^[20]

Summary: Characteristics of Feminist Theories of Science

¶10. The adoption of a 'feminist' scientific method would not lead to differences in scientific practice without a thoroughgoing change in the relations of power within the institutions of science.^[21] To summarize the main themes of the suggested feminist theories of science, some of the main features would be as follows:

1) A *Feminist Science* would fuse subjective and objective ways of knowing the world, enabling humanity to live in harmony with nature. The epistemological assumptions of a *Feminist Science* are ones in which no rigid boundary separates the subject of knowledge and the natural knowledge of that knowledge. The scientist is not seen as an impersonal authority standing outside and above nature and human concerns, but a person whose thoughts and feelings, logical capacities, and intuitions are all relevant and involved in the process of discovery.^[22]

2) Nature itself is conceptualized as active rather than passive, a dynamic and complex totality requiring human co-operation and understanding rather than a dead mechanism, requiring only manipulation and control. Feminist scientists aim at co-operating with Nature rather than conquering it. The claim is that we would learn more by conversing or conducting a dialogue with Nature.^[23]

3) A feminist epistemology transcends rigid dichotomies, unites cognitive and affective domains, emphasizes holism, harmony, and complexity rather than reductionism, domination, and linearity. It builds on traditions submerged within the dominant culture, joins hand with the critique of science as now practiced. It still claims reason, but simultaneously gives new meaning to the category of reason itself.^[24]

4) Feminists such as Sandra Harding stress that the very notion of objectivity should be abandoned. Objectivity is tied to a theory of representation and a concept of the self that insists on a rigid barrier between the subject and object of knowledge-- between self and other. It is this dichotomy which is at the heart of androcentrism and Eurocentrism.^[25] Feminist objectivity rejects this hierarchical structure which manifests as what Derrida calls the "white mythology" which engages the claims of transcendence to explain how any social system works historically - that is technically, socially and psychically.^[26]

5) Feminist critics of Western science are working closely with environmentalists who understand the same patterns of domination as they relate to the exploitation of the natural world. They warn us of the irreversible consequences of continuing environmental exploitation and are developing an ecological ethic emphasizing the interconnectedness between humanity and nature. This juxtaposition of the goals of the feminist and environmental

movements suggests new values.[\[27\]](#)

The Case of Ecofeminism

¶11. It is out of this fusion of feminism, environmentalism and other liberation movements that new possibilities arise. Analysts such as Carolyn Merchant, see Ecofeminism as "a new term for an ancient wisdom" which embodies an integration of the liberation movements. It will be useful to give brief attention to some of its main characteristics:

1) Ecofeminism understands that the liberation of women cannot be achieved in isolation from the larger struggle for the preservation of life on this planet. Their call is to abandon rigid dichotomies and in so doing rediscover the interdependence and connectedness of everything. This is also a revitalization to the spiritual dimension of life. Some call it the female principle which they claim inhabits and permeates all things. It is not apart from or above the material world, but the life-force in everything and in every human being. As Mies and Shiva observe, it is related to women's sensuality. This sensual or sexual spirituality, rather than 'other-worldly' is centered in the real lived world. There is no opposition between spirit and matter, transcendence and immanence. This is the magic which is contained within everything. The ecological relevance of this spirituality lies in the rediscovery of the sacredness of life.[\[28\]](#)

2) The ecological model and its associated ethics make possible a fresh and critical interpretation of the rise of modern science in which the cosmos can once again be perceived as an organism instead of as a machine.

3) The vision of ecofeminism has been to restore the balance of nature emphasizing notions of progress must be balanced against the costs of progress and the limits that need to live within the cycles of nature.

4) Ecofeminism has also exposed the costs for women and for nature of competition in the marketplace, the loss of meaningful productive economic roles for women in early capitalist society, and the view of both women and nature as psychological and recreational resources for the harried entrepreneur (as businessman or husband).[\[29\]](#)

- ¶12. As Cat Cox has noted, it is not by chance that this new spirituality should blend with environmentalism, as both share a holistic vision, a reverence for life and a commitment to a new form of community. Spirituality of Eco-feminism unites feminism and ecology to provide a framework of action and understanding which would address the balance between masculine and feminine principles in seeking an equitable, healthy and sustainable world. Such a holistic vision of the Earth has been present in many communities, cultures and civilizations throughout history, and has often been allied with the belief in the Earth Mother, where the Earth is seen as a sacred, nurturing being. We can say Ecofeminism is an earth-based spirituality.[\[30\]](#)

The Case of the *I-Ching*

- ¶13. Feminist scholars point out that the Chinese *I-Ching* (*the Book of Changes*) provides a powerful example of a philosophy of life which described the duality of existence based upon the masculine and feminine principles. The Chinese sought harmony through the balance of these complementary aspects. In fact, threads of this philosophy have run through all cultures, finding expression in the religious and philosophical thoughts of the early Near Eastern civilizations and influencing Western mystical traditions. It is suggested that we may begin to discover values associated with the premodern world that may be worthy of transformation and reintegration into today's and tomorrow's society.[\[31\]](#)
- ¶14. What Joseph Needham says about Chinese Science may also support the reading. His idea is Chinese thought is profoundly non-Cartesian and refuses to make any sharp dichotomy between spirit and matter, mind and body, energy flows and physical sensations. It remains highly successful at an empirical level while resisting all efforts to be defined within the categories of physiological reductionism. He also claims that Chinese physics remains impervious to mechanical materialism and atomism. It remains faithfully to their prototypic wave theory of the *Yin* and the *Yang* and the Five Elements (translated as Five powers in the *I-Ching*), in favor of nonexclusive relationships of forces. In short, in Chinese Science, Man is in intimate and harmonious relationship to nature rather than domination. As Needham said explicitly:

For the Chinese, the natural world was not something hostile or evil, which had to be perpetually subdued by will-power and brute force, but something much more like the greatest of all living organisms, the governing principles of which had to be understood so that life could be lived in harmony with it.

[\[32\]](#)

¶15. Is Chinese Science or *I-Ching* an ideal and relevant model for a feminist cosmology and science? Let us start with the *Chinese model of causality* implied in it in which three characterizing principles are found, based on the metaphysical and ontological considerations suggested by the Confucianists and Taoists.[\[33\]](#)

1) *The Principle of Holistic Unity* : that all things are one under the Tao or Heaven. Thus they all share the same nature, quality of reality and are interrelated just as in a family. The oneness they share both sustains and gives rise to the multitude of things. This implies that any individual thing must be understood in the whole context which forms its background, source, and network of inter-relations.

2) *The Principle of Internal Life-Movement*: this asserts that all things in the world have an intrinsic life force which moves them and which is infinite and inexhaustible. This energy for movement is intrinsic, as in an organism, different from being extrinsic as a machine. Thus all things are interrelated to form a network of interchange of processes. As Wang Chung in the 1st century A.D. concludes, "Things move because of their belonging to the natural kinds, not because of striving and purpose."[\[34\]](#)

3) *The Principle of Organic Balance*: all things and processes in the world are related in processes which proceed toward a balance and a harmony, be there all the changes and transformation. The Yin-Yang polarities, and the mutual generative and destructive modes of the Five Powers in *I-Ching* with their contrary and complementary qualities are illustrations. This leads one to evaluate things and happenings by considering the negative and positive directions of change so they may seem to fit into a reality of balanced relationship.

¶16. In the above holistic consideration, Chinese causality is subsumed under the so-called "correlative thinking", as formulated by Joseph Needham.[\[35\]](#) Both the philosophy of change and its symbolic system based on the *I-Ching* and the theory of Five Powers provide a number of co-ordinate categories capable of correlating all processes in the world, including the natural, social and historical events. This explains the famous "Principle of the Correspondence of Heaven and Man" by which the objective and the subjective are not absolutely demarcated but intimately related, that man the subject is assumed to be able to participate in the Way of nature. Moreover, we can say the general principles governing changes are basically dialectical.

- ¶17. This model of causality in Chinese Philosophy is exactly contrary and converse to the mechanical-atomistic model of the 18th to 19th Century European Science. The *Chinese model of causality* is basically reflective of the concrete experience of life, history and time, whereas the Western scientific model reflects abstract thinking and quantitative calculation. [\[36\]](#)
- ¶18. In order to understand this better it will be useful to take a closer look at the problem related to the *Yin* and the *Yang* in the *I-Ching*, as it pertains to the issue of gender. [\[37\]](#)
In the *I-Ching*, it says:

"One *Yin* and one *Yang* is called Tao (the way). What we inherit from (the Tao) is good. What forms things in nature (hsing)... Being full of being is the great deed; Being fresh and novel everyday is called luxiant virtue. To produce life is called change. To form forms (hsiang) is called chien (the creative principle). To follow up [the chien] is called kun (the receptive principle). To exhaust numbers in order to know the future is called derivation. To comprehend change is called conducting an affair. The unpredictability of the changes (due to the interchange of *Yin* and *Yang*) is called the divine. ...Thus *I* has the great ultimate, which generates the two norms. Two norms generate four forms. Four forms generate eight trigrams." [\[38\]](#)

1) In the *I-Ching*, there are always two opposite but complementary forces or momenta in the process of change, they are the *Yin* which is also referred to as the female principle-force-aspect, representing the receptive and the potential; and the *Yang*, which is the male principle-force-aspect, representing the creative and the actual. Difference and differentiation of things are manifestations of the interaction of the *Yin* and the *Yang*. These general polarities are also exemplified by cold and hot, hard and soft, rest and movement, high and low; but they do not exhibit any genuine opposition or antagonism, they are only opposite as far as they are complementary. It is said that they exist to make reality interesting, meaningful and complementary. There is no tension or hostility in between.

2) According to the *I-Ching*, the world is a process of change and development. Despite the appearance of variation, difference, divergence, tension, opposition and antagonism, the overall tendency of the cosmic and social processes and individual life moves toward unity and a state of holistic harmonization of things. All forms of polarities are just symbolic of harmony, in a dynamic sense.

3) The process of change is conceived as a generative unity of polarities, which exists in opposition as well as in complementation. That appearance of discrepancy, imperfection, conflict, contradiction or struggle are regarded as

misconceived and incomplete subprocesses of interaction of polarities. Moreover, conflict is a matter of human's inability or weakness to conform to reality and to appreciate intricacies of change. Conflict can be avoided if one strives to conform with nature by cultivating one's understanding and adjusting one's action in a proper way. This adjustment can also be called a process of harmonization.

- ¶19. To conclude, according to the metaphysics of harmony and conflict in the *I-Ching*, presence of antagonism demands a moral and practical transformation of humans.[\[39\]](#)

Some Comparative Considerations

- ¶20. What feminists are striving for as a result of the critique of the Western scientific tradition is a women's spirituality that unites feminism and ecology. From this integration emerges a framework of action, understanding and meaning for a progressive ecofeminist vision. That vision aims to redress the balance between masculine and feminine principles in seeking an equitable, healthy and sustainable world.[\[40\]](#) In this respect, the Chinese *I-Ching*, which has much in common with the new vision, can provide us with a cross-cultural resource and reference. However, some feminists are very cautious about this kind of suggestion, i.e., a naive return to a pre-modern, pre-capitalistic and Eastern scientific model or cosmology. Their warnings and criticisms are as follows:

1) That the idea of 'nature' is itself culturally constructed. It is true that African, aboriginal and Chinese have concepts of nature quite different from dominant European ones. Their world-views posit a more harmonious relationship between mankind and the living universe of nature, which strikingly parallels what is claimed to be a distinctively feminine world-view. However, it is difficult to claim that a holistic approach which refers to culture as a whole is gender specific.[\[41\]](#)

2) Because in the West the spiritual aspects of life have been eroded, it is understandable that people would turn to the 'East' with its pre-industrial traditions in the search of what has been destroyed in their own culture. But as long as the interest in oriental spiritualism fails to integrate this search for wholeness into a critique of the existing exploitative world system, it can easily be co-opted and neutralized. Examples are the New Age and esoteric movements which have created a new market for meditation, yoga and alternative health practices as a new form of commodity in the world market.
[\[42\]](#)

3) The other criticism is the objection to view science as pure social product, dissolving it into ideology and objectivity. As a result, any emancipatory function of modern science is negated, and the arbitration of truth recedes into the political domain. It is against this background that feminists return to a purely 'female' subjectivity, dismiss rationality and objectivity as products of a purely male consciousness. However, feminist relativism is just the kind of radical move that transforms the political spectrum into a circle, exacerbating the very problem it wishes to solve.[\[43\]](#)

4) Post-modernism calls for a redefinition of knowledge that displaces the relative/absolute dichotomy and identifies all knowledge as hermeneutic. It rejects the metanarrative of the rationalist conception of science while resisting the temptation to formulate another one.[\[44\]](#) Therefore, as Sandra Harding has pointed out, if the new feminist epistemology is to act as a successor science project, which claims to provide a better, truer picture of reality, there is the possibility that Chinese, and feminist values will become one more metanarrative.[\[45\]](#)

5) It is said that in fact, 20th century science has shown a marked tendency to abandon the certainty implicit in Enlightenment conceptions such as Newtonian physics, that feminists' should also acknowledge the significance of this.[\[46\]](#)

6) The least but not the last, *I-Ching* involves a religious belief in the metaphysical realm which is genuine before it can be regarded as a reference or a tool.

¶21. In spite of these criticism and limitations, feminist theories do provide us with a perspective on conventional conceptions of science, that may carry a liberating potential for science which is worthy of further investigation and discussion.[\[47\]](#)

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IIFB - Fairfield University - Fairfield, CT - 06430
Tel: (203) 254-4000 Ext. 2857, 2851 Fax: (203) 254-4074
likong@iifb.org -- cnaser@iifb.org -- mailto:cnaser@iifb.org

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