

## **ECOLOGICAL RIFT AND HUMAN ALIENATION FROM NATURE: A MATERIALISTIC UNDERSTANDING**

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### **Abstract**

*A deep chasm is felt in the relation between nature and human due to excessive depletion of nature with the aid of modern technological advances that coincide with the capitalist growth process. The chasm is described by John Bellamy Foster as 'ecological rift'. With the growing awareness about the ecological rift, the environmentalists try to address the issue in various ways –ranging from the advocacy of moralistic use of nature by humans to the minimal/austere use of nature, from gazing back on the conceptions and use of natural resources by the pre-modern and indigenous communities to the suggestions about transplanting them in the present epoch, and from the advocacy of preservation of natural resources to the consideration of nature as a separate entity that needs the positive intervention of humans to restore its pristine growth. However, what is lacking in such future-oriented prescriptive endeavours is the lack of scientific and materialistic understanding of the complex web of nature-human-society relationship. Hence natural history needs to be studied along with the social history, in spite of the fact that there is an active change within the nature itself. This paper attempts to propose that the ecological rift cannot be addressed through moralistic compass nor techno-capitalism, without addressing the contradictions that exist in the nature-human relationship in the capitalist mode of production and its social praxis.*

**Keywords:** *Nature, Human, Society, Ecology, Capitalism*

### **Introduction**

There is an increasing awareness about the environmental issues due to the massive depletion of nature with the aid of modern technological advances that coincide with the capitalist economic production. With such an awareness, the search for the proper theoretical understanding of the relationship between nature and human and the sustainable use of nature have become the focus of environmentalists, scientists, scholars of various disciplines and rulers and administrators. The relationship between nature and human is defined by environmentalists, economists

and scientists variously that ranges from the advocacy of moralistic use of nature by humans to the minimal/austere use of nature, from gazing back on the conceptions of nature and use of natural resources by the pre-modern societies and indigenous communities to the suggestions about transplanting them in the present epoch, and from the advocacy of preservation of natural resources to the consideration of nature as a separate entity that needs the positive intervention of humans to restore its pristine growth. Even the notion of sustainability also differs widely ranging from optimal use of natural resources to the moral responsibility towards preservation of natural resources for future generations, from 'green capitalism' to ecological modernisation and from regeneration of nature to eco-conscious techno-optimism to transcend the ecological crisis.

However, what is lacking in such futuristic and heuristic endeavours is the lack of scientific and materialistic understanding of the complex web of nature-human-society relationship. These endeavours to address the ecological concerns lapse into either epistemological materialism, or moralising the materialist concerns, or techno-optimist economic determinism, or eco-centrism, or anthropocentrism. A holistic understanding of nature and human relationship is missing in all these endeavours due to their non-dialectical approach to environmental issues.

This paper is an attempt at how different theories lack a proper theoretical understanding of the dialectical relationship between various elements of reality and what could offer us a better vantage point to look into the complex web of relationship between the nature and the human so that a possible theoretical solution to the environmental crisis and ecological rift can be found out. In this attempt at dealing with the theoretical questions related to the relationship of nature, human and environment, I rely mainly upon the works of John Bellamy Foster.

### **Environmental Theories and Fallacies**

Though many philosophers have engaged in understanding the nature, its aspects and its relation to human and society from the ancient period, it is the German's Darwinian scientist, Ernst Haeckel, coined the term *ecology* in his book *Generelle Morphologie der Organismen* in 1866. During the early part of the 20<sup>th</sup> century, the scientists took greater interest in organism's relation with its environment. Further, the first Earth Day, celebrated in 1970, brought the discussions about environmental issues and concerns of pollution to the fore and helped for their popular wide reach. This led to commercial interest in marketing the environmentally healthy products for eco-conscious consumers. Social scientists began to show their attention towards the ecological issues. The social scientists still consider the nature as an ideal form separated from the human society, as a passive source 'out there' on which human

existence depends for its survival or as a passive source that makes possible the industrial production. Not much effort was directed towards “understanding natural processes and patterns: how they operate on their own, how historical social systems interact with nature, how nature influences social conditions and how natural processes are transformed by social interactions”(Foster, Clark & York, 2011, 250 – 251)

With such lacunae, however, certain theoretical attempts are made to address the ecological questions that try to address the ecological imbalances from various fronts including economically, technologically, morally and politically. Without a proper understanding of the complex web of material and dialectical relationship between nature and human in a particular historical context, such attempts seem to be partial. In the following paragraphs, we shall try to analyse the problems in such theoretical attempts.

**Economism:** Brett Clark and Richard York, in *The Ecological Rift: Capitalism’s War on the Earth*, argue that the economists are of the view that the persisting barriers between human and environment can be solved through technological innovations. With their interests on accumulation of profit, nature is considered as a reservoir of resources that needs to be manipulated, transformed into marketable products and commodified. The environmental economists, by means of prioritising the market, are of the opinion that market oriented economic development will find its own levellers against the environmental degradation, if markets are allowed to function freely without interference. Theorists of “ecological modernisation”, partly drawing upon the environmental economists, do not accept the view that environmental degradation is due to the capitalist process of development; they believe that pushing the thresholds of modernisation will lead to ‘ecological/green rationality’ which would pave the way for “dematerialisation of society and the decoupling of the economy from energy and material consumption”, on the one hand and for the proper knowledge about the manipulation of nature, on the other hand, which would further lead to the transcendence of environmental issues. In this regard, one may cite how General Electric Company proposed to invest in “greener technologies” with a thrust on “ecomagination”; in such a venture, environmental problems become a source of market expansion and accumulation of profit through “ecologisation of economy” and “economisation of ecology”. Without considering the social conflict inherent in the ecological rift, they advocate for the maintenance of the existing unequal social order, by giving importance to ecological modernisation oriented market reforms (Foster, Clark & York, 2011, 251 – 255).

**Green Capitalism:** According to Brett Clark and Richard York, the proponents of green capitalism, such as Paul Hawken, capitalist economy should be reformulated as

per the demands of environmental sustainability. Green capitalists propose that nature needs to be invested with the 'rational price structure' and hence, according to the contribution of commodified elements of environment, market value needs to be assigned to them; thorough commodification of nature by assigning market value to its elements would allow the market economy to take care of the sustainability of environment. It is "a matter of balancing account books and changing ethics" of the corporations and it is possible to dematerialise the economy "through innovative technological developments and appropriate reformist government policy... reducing the throughput of raw materials and energy that the system requires." Nature and its aspects seem to be mere inputs which could be sustained with technological ingenuity, according to Green Capitalists. Such a conception of environmental sustainability through commodification of elements of nature according to market has serious repercussions: 1) Exchange value of a product gains more important than its use value, following the tenets of capitalist economy; 2) Labour time becomes a commodity along with the commodification of nature; 3) the sustainability of environment is determined according to market, but the reproduction of nature has its own rules outside the diktats of market; 4) as the nature is organised according to the demands and values of market, it further reifies the capitalist economic system, rather than finding a way out of it; and 5) with the commodification of environment, the accumulation of profit is preferred to the relative independence of environment. With such an economic deterministic approach to nature, "the market is the measure of all things" and nature is reduced and subsumed under forces of market (Foster, Clark & York, 2011, 256 – 258).

**Deep Ecology and Shallow Ecology:** Deep ecology infuses moralistic impulses into the nature-human relationship. Its opinion ranges from the consideration of humans as destroyers of ecological balance to the rectification of ecological imbalance with moralistic approach to nature. Deep ecologists consider the industrial civilisation as the main cause of ecological crisis and hence they advocate for the replacement of industrial civilisation with the idealisation of pre-modern traditional and indigenous communities. "Ideal nature is assumed to be a place of harmony. The real world is measured against this ideal world" by them, according to Brett Clark and Richard York (Foster, Clark & York, 2011, 259). Apart from accepting the position of 'shallow ecology' with regard to pollution and environmental depletion, deep ecologists go ahead to propound the ecocentrism advocating human simplicity and equality of all species to transcend the environmental decadence. James Lovelock's Gaia hypothesis considers earth as an organism with a pre-determined functional harmony through the invocation of the principles of teleology; thereby it lapses into a kind of spiritual religiosity, without offering place for scientific enquiry into the nature-human relationship. Further, the presumption that there is a pre-ordained harmony in nature

conveniently forbids the critical theoretical understanding of nature in the course of history. In such a conception, change is conceived as a development of eco-ethics and an adjustment to it, rather than structural changes (Foster, Clark & York, 2011, 258 – 261).

**Environmental Sociology:** Environmental sociologists seem to address the environmental crisis through the invocation of notions such as social system with all of its structural and functional criteria. A schism is visible among environmental sociologists. Realists among environmental sociologists assign an ontological independence to the conception of nature. Though they emphasise human limitations with respect to nature, still they are of the view that the natural limits can be altered to a point with the knowledge of laws of nature and its proper employment. On the other hand, constructionists among the environmental sociologists give importance to epistemological limits of knowing the nature. They are sceptical about positivistic understanding of nature as much as nature is constructed through human intervention. While realism within environmental sociology abhors any mental and cultural influences in understanding nature, constructionism finds science as a construction out of a mental and cultural milieu. Without completely negating both the schisms within environmental sociology and by slightly revising Marx's materialist conception history, John Bellamy Foster advocates 'philosophy of praxis' by combining the elements within the division among environmental sociologists. He says, "human beings make their own history, not entirely under conditions of their choosing but rather on the basis of natural-environmental and social conditions inherited from the past" (Foster, Clark & York, 2011, 289 – 296).

**Double Transference:** Above all the theoretical explications of environmental issues, as mentioned in the above paragraphs, certain theories of environment commit the fallacy of double transference. Double transference is a concept derived from the writings of Marx and Engels which means the uncritical, often metaphorical, superimposition/extrapolation of socially derived ideas on the aspects and processes of nature that is once again applied back on the social, to effect the reification of social ideas and the "erroneous naturalisation of social relations". Such a double transference amounts to "the overnaturalising of society" and/or "the oversocialising/overanthropomorphising of nature", according to Foster. Further quoting from the writings of Marx and Engels, Foster says that Marx and Engels found such a moment of double transference within social Darwinist thinking, though they were appreciative of the Darwin's theory of biological evolution. Marx (Marx & Engels, 1975b, 106) was of the opinion that "It is remarkable how Darwin recognises among beasts and plants his English society with its division of labour, competition, opening up of new markets,

'inventions', and the Malthusian 'struggle for existence.' It is Hobbes' *bellum omnium contra omnes*." (as cited in Foster, Clark & York, 2011, 309). Continuing the same vein, Engels (Marx, Engels, 1975a, 584) wrote that "The whole Darwinian theory of the struggle for existence is simply the transference from society to organic nature of Hobbes's theory of *bellum omnium contra omnes* and of the economic theory of competition, as well as the Malthusian theory of population. When once this feat has been accomplished (the unconditional justification for which, especially as regards Malthusian theory, is still very questionable), it is very easy to transfer these theories back again from natural history to the history of society, and altogether too naïve to maintain that thereby these assertions have been proved as eternal natural laws of society" (as cited in Foster, Clark & York, 2011, 309). Such a double transference is identified, by Foster, in Richard Dawkins' notion of "the selfish gene", Frederic Clements' notion of "superorganism" (nature-vegetation as having its own life history) and Jan Christian Smuts' notion of "holism" to legitimise segregation and apartheid in South Africa where he worked as minister and prime minister (Foster, Clark & York, 2011, 308 – 324).

### **Coevolutionary Relationship between Nature and Human**

Analysing the problems in the prominent theories of ecology, Foster tries to locate the proper theoretical understanding of ecology in the works of Marx. Normally, a charge is brought against Marxism as economic determinism. If economical determinism itself is accepted as the defining element of Marx's understanding of ecology, it might lead to similar criticisms of him, like the proposals of economists and green capitalists about sustainability of nature. Hence, there needs a clarification whether Marx was an economic determinist as the critiques would say.

A close reading of the works of Marx and Engels proves this criticism to be wrong. Engels in his letter to Joseph Bloch, written in 1890, states that "According to the materialist conception of history, the ultimately determining element in history is the production and reproduction of real life. More than this neither Marx nor I has ever asserted. Hence if somebody twists this into saying that the economic element is the only determining one, he transforms that proposition into a meaningless, abstract, senseless phrase" (Feuer, 1989, 397 – 398). Further he continues that "Marx and I are ourselves partly to blame for the fact that the younger people sometimes lay more stress on the economic side than is due to it. We had to emphasize the main principle *vis-a-vis* our adversaries, who denied it, and we had not always the time, the place, or the opportunity to give their due to the other elements involved in the interaction. But when it came to presenting a section of history, that is, to making a practical application, it was a different matter and there no error was permissible. Unfortunately, however, it

happens only too often that people think they have fully understood a new theory and can apply it without more ado from the moment they have assimilated its main principles, and even those not always correctly” (Feuer, 1989, 399 – 400). What Engels points out here in his letter goes directly against the charge of the critics who try to reduce Marxism to economic determinism.

The importance given to socioeconomic relations of production in the thoughts of Marx and Engels has been neatly summarised by Engels in 1894, in response to the questions put forward by Heinz Starkenburg, thus: “Political, juridical, philosophical, religious, literary, artistic, etc., development is based on economic development. But all these react upon one another and also upon the economic basis. It is not that the economic situation is cause, solely active, while everything else is only passive effect. There is, rather, interaction on the basis of economic necessity, which ultimately asserts itself” (Feuer, 1989, 410 – 411). What is meant by the materialist conception of history by Marx and Engels is that the economic relations of production conditions (not determines) other factors of a particular social reality and that there is always a dialectical interaction among various moments of reality.

To illustrate this point of interaction of various moments of reality based on the socioeconomic conditions, one may consider the writing of Marx in *Rheinische Zeitung* on the “Proceedings of the Rhenish Parliament on Thefts of Wood”. In this article, he states the relation between the law and the economic relations and interests; later on he wrote about this piece of writing as having “caused me in the first instance to turn my attention to economic questions” (Marx, 1984, 20). In the Rhineland, it was customary that the gathering of wood by the people was unrestricted. However, due to the scarcity of wood in the context of agricultural crisis and the growing need for firewood for the unhindered operation of industries in the 1820s, a law was enacted in the Rhenish parliament; it proposed the law that the owner of the woods shall be sole arbiter to assess the value of wood within his woods (McLellan, 2000, 26 – 28; McLellan, 1992, 11 – 12). While the socioeconomic conditions necessitates the enactment of such a law, the law in turn abolishes the existing customary practice and reified the economic relations and interests of the owners of the woods and the common masses. What this instance suggests is that there is a mutual interaction, not economic determinism, between the customary practices, enactment of law, interests of the owners of the woods, and property relations within the socioeconomic conditions; the enactment of law asserts the economic reality and vice versa.

There are such numerous instances to exhibit that Marxism is not economical determinist in its approach to the problems of reality in general, and on the questions of ecology in particular. However, it is quite astonishing that such a charge is being

repeatedly brought against Marx by the critiques of Marxism as well as by Marxist orthodoxy, in spite of the clarification offered by Engels, one of the founding member of Marxism. Against such solipsistic understanding of Marxism, the materialist conception of history gives importance to the co-(r)evolutionary material interrelations and metabolic relations between human beings and nature.

Having clarified the misconceptions regarding the materialist conception of history, which is popularly known as historical materialism today, Foster says that the critics of Marxism hold certain arguments to deny the ecological concerns of Marxism. Critics are of the opinion that there is no systemic relation of ecological concern in the work of Marx, that the critique of alienation is less evident in his later works, that there is pro-technological (hence anti-capitalist) tenor in his works, and that the ‘speciesist’ explication gives preference or predominant position to human beings (hence anthropocentric!) than the non-humans aspects of reality. Such misconceptions about the ecological concerns of Marx and Engels are due to certain developments within Marxism after Marx. For example, within the Marxist traditions, Western Marxism focused on the historical-cultural materialism, following Georg Lukacs’ analysis, giving importance to human praxis leaving aside the non-human nature within the historical materialism (Foster, Clark & York, 2011, 215 – 25). Repudiating such arguments, Foster says that “Marx’s notion of the alienation of human labour was connected to an understanding of the alienation of human beings from nature. It was this twofold alienation which, above all, needed to be explained historically” (Foster, 2000, 9 – 10).

In the oft-quoted fourth footnote to Chapter XV of *Capital*, Volume – I, Marx states that “Technology discloses man’s mode of dealing with nature, the process of production by which he sustains his life, and thereby also lays bare the mode of formation of his social relations, and of the mental conceptions that flow from them” (Marx, 2014, 352). While discussing the critical history of technology in *Capital*, Marx identifies the dialectical linkages, inter-relations and metabolic exchanges among various moments of a reality. The relationship among various aspects/moments of reality is at the same time both dialectical and inter-related. While understanding nature’s technology as a product of empirical reality in the fashion of Darwin, Marx tries to comprehend the modern technology, along with its different moments, in the fashion of historical materialism. In this way, he predicts the identifiable linkages among at least six elements in a particular historical epoch, *viz*, technology, relation to nature, process/mode of production, production/reproduction of daily life, social relations and mental conceptions. These six elements are dialectically linked to one another as well as they are inter-related.

Hence, Marx was not in favour of technological determinism or economical determinism, but he posits the way how one aspect helps in revealing or disclosing or conditioning (not determining) the possibility of the other aspect dialectically and historically. All these six identifiable elements constitute the totality; they internalise the aspect of the other element through mutual interactions among them. These six elements hang together with their internal dynamics, their intense inter-relations and with contingencies limited by their interplay. Hence there is no mechanical relationship among them as they are socio-historically conditioned. “No one moment prevails over others, even as there exists within each moment the possibility of autonomous development (nature independently mutates, evolves, as do ideas, social relations, forms of daily life, etc.). All these elements co-evolve and are subject to perpetual renewal and transformation as dynamic moments within the totality. But it is not a Hegelian totality in which each moment tightly internalizes all the others. It is more like an ecological totality, what Lefebvre refers to as an “ensemble” or Deleuze as an “assemblage”, of moments co-evolving in an open, dialectical manner” (Harvey, 2010, 196).

Foster argues that Marx’s materialism is rooted in Epicurean materialism and Marx elaborated the role of senses and sensuous activity as part of relation between nature and humans. The nature-human relationship rooted in the senses “expresses an active and therefore changing relation to nature – and indeed of nature itself.” By quoting Marx’s statement, “In hearing, nature hears itself, in smelling it smells itself, in seeing it sees itself”, Foster brings out the dialectical relation between nature and human through the sensual operation (JBF, BC & RY 2011: 227).

This may be further understood in relation to the Marx’s first thesis of *Theses on Feuerbach*, where he differentiates the old materialism from new materialism, by invoking human sensuous activity as part of the materialist conception of history. Whereas the old materialism before Marx speculated and thought about the matter as if having no subjective sensual activities involved in the perception, the new materialism of Marx combined the elements of both materialism and idealism to understand matter as a praxis involving human sensuous activity. Andrew Feenberg (1981, 218) says that Marx’s materialism is a “meta-theoretical reconstruction of sense knowledge as a historically evolving dimension of human beings. Marx argues that the object of sensation contains a wealth of meaning available only to the trained and socially developed sense organ” (as cited in Foster, Clark & York, 2011, 230). Very interestingly one can find that Marx’s materialism includes the ontological materialism and epistemological materialism too, in the sense that nature, sense, labour, historical

development, social production and epistemology are intricately and dialectically connected as a totality of relation among many different aspects of reality.

Further, the tools that humans operate in order to transform nature are identified as “inorganic body of man” by Marx – “the social technology that extends the “natural technology” of the human organs and capacities. Labour and production constituted the active human transformation of nature, but also of human nature, the human relation to nature and human beings themselves... Human labour, according to Marx in *Capital*, was a metabolic exchange between nature and society without which human beings could not exist” (Foster, Clark & York, 2011, 228). Human beings are part of the nature and the society acts as the environment of nature; thus, the dialectical and coevolutionary relationship of nature, human and society is explained succinctly by Marx.

Marx explains that “The fact that man is an *embodied*, living, real, sentient, objective being with natural powers means that he has *real, sensuous objects* as the objects of his being... Hunger is a natural *need*; it requires, therefore, a *nature* outside itself, an *object* outside itself, in order to be satisfied and stilled... A being which does not have its nature outside itself is not a *natural* being and does not share in the being of nature” (Marx, 1964, 217). Marx sees the relationship between human, nature and social production as interrelated. Though nature has independent existence away from human interventions, humans are dependent on nature for their subsistence and survival. It is through the mastery of nature that humans intervene in the natural processes to safeguard and sustain themselves. On the other hand, the obsessive dominance over nature through the massive capitalist technological means, in order to accumulate private property, that nature has been depleted beyond its redemptive utilisation by humans.

Hence, Foster says, “At every point in his analysis, therefore, Marx insisted on the complex material relation between human beings and nature. The relation was a dialectical one in that it was an internal relation within a single totality. Rather than positing a dualistic relation between human beings and nature, he suggested that the two opposing poles existed radically separated from one another only insofar as alienation in the realm of appearance separated human beings from their essential human capacities as both natural and social beings – beings actively constituting nature’s relation to itself through natural and social praxis” (Foster, Clark & York, 2011, 229).

According to Marx, natural history needs to be studied along with the social history, in spite of the fact that there is an active change within the nature itself.

However, with the development of technology and the capitalist mode of production that thrives on the accumulation of private property, the organic relation between nature, human and society gets disturbed; the ecological rift becomes inevitable. In *Grundrisse*, Marx says, “it is not the *unity* of living and active humanity with the natural, inorganic conditions of their metabolic exchange with nature, and hence their appropriation of nature, which requires explanation or is the result of historic process, but rather the *separation* between these inorganic conditions of human existence and this active existence, a separation which is completely posited only in the relation of wage labour and capital” (1973, 489). This alienation between human and nature through the capitalist mode of production has its ecological consequences, which Marx calls as “irreparable rift” (Foster, Clark & York, 2011, 241). Such an ecological rift cannot be addressed through moralistic compass, without addressing the contradictions existing in the nature-human relationship in the capitalist mode of production and its social praxis. Hence, Foster says that this is “a possibility not open to capitalist society” (Foster, Clark & York, 2011, 240).

### **Conclusion**

Marx provides a solution to this ecological rift through a structural change in the mode of production, in his *1844 Manuscripts*, thus: “Communism is the positive abolition of private property and thus of human self-alienation and therefore the real reappropriation of the human essence by and for man. This is communism as the complete and conscious return of man conserving all the riches of previous development for man himself as a social, *i.e.*, human being. Communism as completed naturalism is humanism and as completed humanism is naturalism. It is the genuine solution of the antagonism between man and nature and between man and man. It is the true solution of the struggle between existence and essence, between objectification and self-affirmation, between freedom and necessity, between individual and species. It is the solution to the riddle of history and knows itself to be this solution” (as cited in McLellan, 1992,244).

Marx’s answer to the question of alienation between humans and nature is the abolition of private property and the coming of communistic mode of production. Marx never deviated from this point in his later writings, as against the critiques who opine that Marx abandoned the problem of alienation in his later writings. Starting from 1840s when he began to engage with the relations between the economic relations to the mode of existence, till the end of his life, he elaborated his point of human alienation from nature in the context of capitalist mode of production. He elaborated four different aspects of alienation in the capitalist mode of production in his *1844 Manuscripts*, that is, 1) alienation from the product of his own labour, 2) workers alienation from the

productive activity, 3) alienation from species-beings and 4) alienation from nature; but he continued his search for the reasons of alienation in the socioeconomic sphere till his end of life. And he was convinced that the human alienation cannot be solved through make-shift solutions offered by the techno-capitalism, but by the overthrow of capitalist mode of production.

Further, when one talks about human alienation from nature and its consequent massive depletion of nature for accumulation of private property, this cannot be solved through a moralistic compass as suggested by deep ecologists or anyone of that sort. The human alienation from nature is a question of class conflict also, apart from the other intervening factors, like, gender which is addressed by ecofeminism. Without addressing the social/class conflicts within the society that result in human alienation from nature, peripheral changes within individual psyche would not be able to solve the structural issues involved in the ecological rift. Trying to address the ecological rift without addressing the social conflicts (like gender, class, caste, regions, tribes, etc.) existing within a particular society, it is highly questionable that such efforts might yield to holistic solution to the ecological issues.

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