

the cultural and communal baby out with the Western Marxist bathwater. Our contemporary understanding and broadening of Marx's "general communal conditions of production" are a key mediation of capital's relation to nature and labor and the relation of the capitalist countryside to the capitalist city.

Not only do general communal conditions of production mediate the relation between the capitalist countryside and the capitalist city but the state, in its multiple and manifold layers of irrationally rationalized bureaucracies, and partial openings to social movements and democratic participation, must be a moment in the analyses of ecological Marxists. Seeing ecological Marxism as necessarily flush with communal conditions and political institutions suggests that ecological Marxology must be more complex than found in Foster's account. Such a reading must search out not only Marx's concern with soils, soil chemistry, evolution, biology, agronomy and unhealthy urban living and working conditions but also the moments in Marx's work where the communal and political mediations of capital's contradictory relations with labor and nature are noted.

This sort of alternative Marxology might not only respond more intelligibly to Marx's environmental critics, but would also begin to construct a generative ground for new developments in Marxist theorization of nature-society relations themselves, particularly given the rather different material conditions "we" live with as a result of the history of capitalism, class struggle, state regulation, natural activity, and a million other things since Marx.

Nature, Dialectics and Emancipatory Politics*

By Costas Panayotakis

John Bellamy Foster begins *Marx's Ecology* with an overview of his "path to ecological materialism." In this overview the reader is informed that

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the theoretical legacy of Lukács and Gramsci, which I had internalized, denied the possibility of the application of dialectical modes of thinking to nature, essentially ceding that entire domain to positivism. At the time, I was scarcely aware of an alternative, more dialectical tradition within the contemporary life sciences, associated in our time with the work of such important thinkers as Richard Lewontin, Richard Levins, and Stephen Jay Gould (vii).

In this intervention I argue that this contrast between Lukács and the dialectical tradition in the life sciences is misleading and accounts for Foster's inability to recognize the complications and new challenges that the ecological crisis poses for emancipatory politics. I will also suggest that a constructive confrontation between Lukács, on the one hand, and Levins and Lewontin, on the other, can provide the synthesis of dialectical perspectives on nature and society that the reconceptualization of the emancipatory project requires.

In a recently discovered and published response to the critics of *History and Class Consciousness* written in the mid-1920s, Lukács explicitly rejects the claim that *HCC* denied the existence of a dialectic in nature.¹ More importantly, Foster's curt dismissal of Lukács is surprising given the fact that one of the central goals of *Marx's Ecology* is to expound the dialectical Marxist alternative to mechanistic versions of materialism (2, 230). Refusing to consider Lukács's contribution to the project of a dialectical Marxism, Foster chooses instead to place more emphasis on Marx's debt to the subject of his doctoral dissertation, the ancient Greek philosopher Epicurus:

By the time Marx finished his doctoral thesis he had arrived at a position that was materialist in orientation, though distinguished from that of the French materialists of the eighteenth century by its non-mechanist, non-determinist character....Nevertheless, his viewpoint was still "tinged"...by the philosophy of German idealism....Inspired by Epicurus and Bacon, he had embraced an anti-teleological view as the core of materialism (63).

Foster justifies his emphasis on Epicurus by arguing that in the ancient Greek philosopher's thought were already contained such key

¹G. Lukács, *A Defence of History and Class Consciousness: Tailism and the Dialectic*, trans. E. Leslie (London and New York: Verso, 2000).

elements of a dialectical materialist approach as “the transitory character for all of life and existence;” the interdependence of all of material existence; and the rejection not only of final causes and teleology (5-6) but also of a complete determinism incompatible to human freedom and the recognition of contingency (34-35, 56).

This emphasis on Epicurus is in line with the primary focus of Foster’s book, which is to establish the inseparability of historical materialism and a materialist conception of nature. Foster does also discuss, of course, the ecological destructiveness of capitalist society. Focusing on the question of capitalist agriculture, Foster raises a number of important issues. He discusses, for example, James Anderson’s critique of the conception of “absolute” soil fertility. By allowing for the possibility of soil improvement through human activity, Anderson’s conception of a historical fertility helped to demonstrate the untenability of the Malthusian naturalization of scarcity (145-46). Moreover, Foster’s references to the proletarianization of the population at the origin of capitalism (74) and the “antagonistic division between town and country” (137) highlight the fact that human alienation from nature has been both a precondition for and a consequence of capitalist society. The political conclusions that Foster draws from this analysis, however, are hardly innovative. Instead of exploring the ways in which the struggle against capitalism’s ecological destructiveness intersects with the struggles of movements against social oppression in all its forms, Foster is content to subsume ecological struggles under the traditional Marxist struggle for “the society of associated producers” (170, 256).

Foster’s failure to shed new light on the challenges facing emancipatory and ecological politics stems from his inability to achieve an adequate integration between Marxism’s dialectical conception of social and natural reality, on the one hand, and capitalist ecological destruction, on the other. As a result, Foster’s insistence that “a theory of ecology as a process of change involving contingency and coevolution is necessary if we are not only to understand the world but to change it in conformity with the needs of human freedom and ecological sustainability” (254) emerges by the end of the book as an unfulfilled promise. What Foster does deliver is an overview of the evolutionary tradition in biology and a convincing demonstration of the fact that if developed appropriately this tradition can provide the basis for a dialectical conception of nature. Foster recognizes that this claim is not new and indeed praises the “complex, non-teleological, coevolutionary perspective” of the “general attempt to outline a new dialectical

materialism...in Levins and Lewontin's now classic work, *The Dialectical Biologist*' (252).

Ironically, Levins and Lewontin's exploration of the concept of coevolution in an essay entitled "The Organism as the Subject and Object of Evolution" is reminiscent of Lukács's identification of the proletariat as the subject-object of history. According to Levins and Lewontin:

there is coevolution of the organism-environment pair....there is no longer a neat separation between cause (the environment) and effect (the organism).... the organism, as it develops, constructs an environment that is a condition of its survival and reproduction, setting the conditions of natural selection. So the organism influences its own evolution, by being both the object of natural selection and the creator of the conditions of that selection.... Darwinism cannot be carried to completion unless the organism is reintegrated with the inner and outer forces, of which it is both the subject and the object.²

The parallel, that goes unnoticed in Foster's account, between Levins and Lewontin's reference to a subject-object of evolution and Lukács's subject-object of history is not accidental. On the contrary, many of Levins and Lewontin's claims concerning science and dialectics are already present in *History and Class Consciousness* and other works by Lukács. In the same way that Levins and Lewontin³ challenge Cartesian reductionism's rigid separation between subject and object, as well as between cause and effect (269-70), Lukács responds to the "orthodox" Marxist critics of *History and Class Consciousness* by pointing out that

the significance of the subjective moment is only banished from the world by Kantians who inflexibly and undialectically separate out subject and object, by making the subject's appearance, the possibility of its effectiveness, rest on objective causes.⁴

Moreover, Levins and Lewontin's grounding of Cartesian dualisms in social conditions bears an unmistakable resemblance to Lukács's

²R. Levins and R. Lewontin. *The Dialectical Biologist* (Cambridge, MA: Harvard University Press, 1985), pp. 105-06.

³*Ibid.*

⁴Lukács, 2000, *op. cit.*, p. 52.

attribution of the “antinomies of bourgeois thought” to the reification engendered by capitalist society.⁵ Indeed after outlining the principles underlying the Cartesian framework of modern science, Levins and Lewontin continue:

We characterize the world described by these principles as the *alienated* world, the world in which parts are separated from wholes and reified as things in themselves, causes separated from effects, subjects separated from objects. It is a physical world that mirrors the structure of the alienated social world in which it was conceived.⁶

As Lukács also pointed out in *History and Class Consciousness*, the transcendence of the socially generated reified experience of the world is only possible from the standpoint of a dialectically conceived totality.

The agreement between Levins and Lewontin, on the one hand, and Lukács, on the other, extends even to their conception of the political implications of the reified outlook. Lukács had pointed out that capitalist reification gives rise to a “contemplative attitude” that reduces human action to an adaptation to and use of social laws that are not challenged but rather treated as given facts.⁷ Levins and Lewontin declare:

The separation between cause and effect, subject and object in the alienated world has a direct political consequence, summed up in the expression, “You can’t fight city hall.” The external world sets the conditions to which we must adapt ourselves socially, just as environment forces the species to adapt biologically.⁸

Since the affinities between Levins and Lewontin, on the one hand, and Lukács, on the other, that Foster glosses over have important political implications, it is not surprising that his analysis fails to make a contribution to, or even acknowledge the necessity of, rethinking emancipatory politics.

⁵G. Lukács, *History and Class Consciousness: Studies in Marxist Dialectics* (Cambridge, MA: MIT Press, 1971).

⁶Levins and Lewontin, *op. cit.*, pp. 267-70.

⁷Lukács, 1971, *op. cit.*

⁸Levins and Lewontin, *op. cit.*, p. 274.

A constructive confrontation between Levins and Lewontin, on the one hand, and Lukács, on the other, has to begin with the recognition that the common starting-point of these thinkers is the analysis of reality as a dialectical totality. The next step is to ask how to articulate Levins and Lewontin's conception of nature as a totality with Lukács's and Western Marxism's attempt to escape the mechanistic materialism of economistic Marxism through the analysis of society as a totality. Foster fails to pose this question because he proves more sensitive to Levins and Lewontin's contribution to the concept of totality than to the contribution of Lukács and Western Marxism. Indeed, in *Marx's Ecology*, Foster recognizes that the principle of coevolution stressed by the former substitutes the concept of totality for the rigid distinction between system and environment: "An ecological community and its environment must therefore be seen as a dialectical whole" (16). By contrast, the contribution of "Western, critical Marxism" is denied, as this tradition is held to have led to "a reified conception of the famous base-superstructure metaphor, which Marxist theorists sought in vain to dispense with" (8). Foster is right to point out that many Marxist theorists have had difficulty dispensing with the base-superstructure metaphor. He is off the mark, however, when he uses this difficulty against precisely the tradition that has, through its emphasis on the standpoint of totality, created an opening for this metaphor's transcendence. In fact, Lukács's *History and Class Consciousness* was criticized by the intellectual representatives of the Soviet Marxist orthodoxy for deviating from the base-superstructure model.⁹ Foster's exclusive preoccupation with Levins and Lewontin's conception of nature as a totality does not provide an adequate alternative to the base-superstructure model but simply allows him to aphoristically dismiss the whole issue and thus to dispense with the need to develop a more dialectical Marxist theory.

Lukács and Gramsci, the other Western Marxist that Foster repeatedly dismisses, were among the first Marxists to analyze social reality not through the use of a simple, mechanical concept of causality but through an exploration of the complex mediations between the different spheres of social life. There is no question that their analysis of society as a totality had its limitations. In the case of Lukács, in particular, the concept of totality is still contaminated by the teleological assumptions of traditional Marxism's philosophy of history. In Martin Jay's terms, Lukács's concept of totality is not only latitudinal

⁹Lukács, 2000, *op. cit.*, p. 141.

but also longitudinal.¹⁰ Lukács uses the concept of totality not only to explore the complex interrelations between the different parts of a given society, he also applies this term to human history as a whole. Human history is therefore seen as a unified process driven towards the telos of proletarian class consciousness and socialist revolution.

To their credit, Levins and Lewontin explicitly reject a teleological conception of history as a unified process:

In bourgeois thought change is often seen as the regular unfolding of what is already there...; it is described by listing the sequence of *results* of change, the necessary stages of social or individual development. This shift from process to product also contaminates socialist thought when the dynamic view of history as a history of class struggle is replaced by the grand march of stages, from primitive communism through slavery, feudalism, capitalism, socialism, and on into the glorious sunset....In the alienated world there are constants and variables, those things that are fixed and those that change as a consequence of fixed laws operating with fixed parameter values....In the dialectical world, since all elements (being both subject and object) are changing, constants and variables are not distinct classes of values.¹¹

This passage contains a remarkable slip however. The fact that “the alienated world” is contrasted to “the dialectical world” seems to indicate that this distinction is a purely epistemological one. Were this to be the case the meaning of this contrast would be that although bourgeois thought makes the world appear alienated, this world is really dialectical. We have already seen however that this contrast cannot be purely epistemological since Levins and Lewontin also point out that the bourgeois conception of an alienated world actually “mirrors the structure of the social world in which it was conceived.” If this is the case, “the alienated world’s” denial of change, its appeal to trans-historical laws and teleological schemes of developmental stages must mirror the reality of alienated society! This is a paradoxical conclusion and presents us with an awkward dilemma: either we have to disengage reified conceptions from social alienation or to keep this link at the cost

¹⁰Martin Jay, *Marxism and Totality: The Adventures of a Concept from Lukács to Habermas* (Berkeley: University of California Press, 1984).

¹¹Levins and Lewontin, *op. cit.*, p. 276.

of reaffirming teleological schemes of developmental stages obeying fixed trans-historical laws.

This theoretical conundrum, latent in their conception of dialectics, stems from Levins and Lewontin's failure to heed their own warning:

the dialectical approach is no less contingent historically and socially than the viewpoints we criticize....the dialectic must itself be analyzed dialectically.¹²

Lukács specifies the historicity of the dialectic more explicitly but he too fails to draw the full implications of his insight. Indeed, in his response to the critics of *History and Class Consciousness* Lukács identifies "the decisive parts of the dialectical logic of Hegel" with "the logic of essence" and argues that

the real laws of movement, the real social being of bourgeois society mirror themselves conceptually in the "logic of essence." If Marx, in overturning Hegel's philosophy, has at the same time rescued its real core, then he precisely rescued most from the logic of essence-demythologised, of course.¹³

Lukács's reference to Hegel's *Science of Logic* is at the same time an allusion to Marx's claim that the Hegelian dialectic "must be inverted, in order to discover the rational kernel within the mystical shell."¹⁴ Lukács is implicitly admitting here that the form the dialectic assumes in the hands of Hegel and Marx is tailored to the specific logic of capitalist society.

Once the historicity of the dialectic is recognized, its association to incessant change no longer appears self-evident. According to Levins and Lewontin:

The dialectical viewpoint sees dynamical stability as a rather special situation that must be accounted for. Systems of any complexity...are more likely to be dynamically unstable.¹⁵

¹²*Ibid.*, p. 286.

¹³Lukács, 2000, *op. cit.*, p. 137.

¹⁴K. Marx, *Capital: A Critique of Political Economy*, Vol. I (Harmondsworth: Penguin Books, 1990), p. 103.

¹⁵Levins and Lewontin, *op. cit.*, p. 283.

When we consider the history of human societies, however, we realize that it is not “dynamical stability” that appears exceptional but rather capitalism’s unprecedented and compulsive dynamism. This observation does not invalidate the dialectic but it does require its reconceptualization. To achieve such a reconceptualization we have to bring together the insights of both Levins and Lewontin, on the one hand, and Lukács and Western Marxism, on the other.

Levins and Lewontin not only stress the dialectic between organisms and their environment but also recognize that “[i]n human evolution the usual relationship between organism and environment has become virtually reversed in adaptation. Cultural invention has replaced genetic change as the effective source of variation.”¹⁶ This means that the dialectical relation of human beings to nature is irreducibly social and takes the form of a socio-ecological totality that articulates a determinate social system with the natural environment on whose appropriation this social system depends.¹⁷ The contribution of Lukács and Western Marxism consists in the move from the mechanical causal conception between base and superstructure to a conception of society as a totality based on the complex interrelation of the various spheres of social life. A final component of the reconceptualized dialectical social totality emerges in Marx and Engels’s sketch of historical materialism in *The German Ideology*. In this work’s brief overview of human history, changes from one form of society to the next are sometimes attributed not to a conflict between the forces and relations of production but to population pressures. This suggests that, as ecofeminists have pointed out,¹⁸ family and the social relations of reproduction have to be recognized as crucial constitutive elements of the social totality.

We have therefore arrived at an expanded conception of totality. In this conception any given socio-ecological totality would be analyzed as the complex and dialectical articulation of the economy and the realm of

¹⁶*Ibid.*, p. 69.

¹⁷For two formulations that point towards the reconceptualization of the society-nature relation as a socio-ecological totality see Ted Benton, “Marxism and Natural Limits: An Ecological Critique and Reconstruction,” in Ted Benton, ed., *The Greening of Marxism* (New York: Guilford Press, 1996) and James O’Connor’s “second contradiction” thesis, in *ibid.*

¹⁸See, for example, Mary Mellor, “Ecofeminism and Ecosocialism: Dilemmas of Essentialism and Materialism,” in *ibid.*; and Ariel Salleh, “Nature, Woman, Labor, Capital: Living the Deepest Contradiction,” in Martin O’Connor, ed., *Is Capitalism Sustainable? Political Economy and the Politics of Ecology* (New York: Guilford Press, 1994).

production, family and the realm of reproduction, politics, culture and this society's mode of appropriating nature. Such a view is dialectical without turning dialectics into a metaphysical, transhistorical guarantee of the inherent dynamism of reality. The degree of stability, the contradictions, and the dynamic tendencies of a society cannot be determined a priori but only emerge from a concrete analysis of this society's dialectical structure.

As Jean-Paul Deleage¹⁹ and Elmar Altvater²⁰ point out, the peculiar dynamism and ecological destructiveness of capitalism stem from this system's subordination of use-value to exchange-value. Capitalist dynamism has contradictory implications. On the one hand, it raises the specter of a radically different society that would use the immense productive and technological resources created by capitalism to conquer scarcity, abolish all forms of social oppression and enrich every individual's life. Indeed, capitalism's universalistic character consists in its creation of the universal interest in a free society that can provide the material basis for an alliance between all oppressed groups.

After a certain point, however, capitalist expansionism may prove counter-productive. Indeed, if the original effect of capitalist dynamism was to turn scarcity from a natural to a social fact, the ecologically destructive consequences of this dynamism threaten by now to restore to scarcity its originally natural character. Were this to happen the implications would be grievous indeed. The renaturalization of scarcity might turn the free, non-alienated society of associated producers (that Foster appeals to) into an impossibility, thus removing the commonality of interest between movements struggling against different forms of social oppression and freezing these forms of oppression into place.²¹

Foster does not even consider this possibility because he does not heed his own warning concerning the need to be sensitive to "the existence of irrevocable change (the arrow of time)" (17). It is the bleak implications of a capitalist renaturalization of scarcity both for nature and for all oppressed groups that provide the material basis for the alliance of "labor, feminist, urban, environmental and other social movements ...into a single powerful, democratic force" that, as James

¹⁹Jean Paul Deleage, "Eco-Marxist Critique of Political Economy," in *ibid.*

²⁰Elmar Altvater, "Ecological and Economic Modalities of Time and Space," in *ibid.*

²¹For two other formulations of the implications for emancipatory politics that capitalism's "renaturalization" of scarcity might have, see H.M. Enzensberger, "A Critique of Political Ecology," in Benton, *op. cit.*; and G. Skirbekk, "Marxism and Ecology," in *ibid.*

O'Connor points out,²² represents the sine qua non of effective resistance against contemporary global capitalism.

The articulation of the traditional Marxist project with new social movements is, by contrast, conspicuous by its absence in Foster's account. The challenge facing Foster was to draw the political implications of Levins and Lewontin's dialectical conception of nature. By recognizing that, in the case of human beings, evolution is mediated through culture, these two thinkers implicitly pointed to the need of understanding the dialectical relation of human beings to nature through the concept of a socio-ecological totality. Thus in simply dismissing Lukács's and Western Marxism's contribution to the conceptualization of society as a dialectical totality, Foster missed the opportunity not only to further develop the theoretical project implicit in Levins and Lewontin's work but also to draw its full political implications.

A Materialism Worthy of Nature

By Joel Kovel

The ecological crisis cannot be properly approached unless the relations between humanity and nature are properly understood. In his important new work, *Marx's Ecology*, John Bellamy Foster argues that this must take place through an appropriation of *materialism*, specifically, the materialism of Karl Marx, who was, along with Darwin, one of "the two greatest materialists of the nineteenth century" (1). Foster's ambition is to extend the recognition of Marx's *historical* materialism, grounded in the primacy of production in human existence, into the domain of nature. Because Marx had as profound a grasp of natural science as of history, Foster argues that this expanded materialism is as authoritative a guide to ecological struggles as it has been to the struggles of labor.

As Marx got it right, there are those who got it wrong, that is, have placed ecology in a non-materialist framework. These Foster broadly categorizes as "greens." It is the purpose of *Marx's Ecology* to displace what Foster views as the currently influential green theories with a revived Marxist ecology incorporating natural as well as historical materialism. Thus:

²²James O'Connor, "Is Sustainable Capitalism Possible?" in Martin O'Connor, *op. cit.*