

# BOOKS

## Marx's Ecological Value Analysis

by John Bellamy Foster

Paul Burkett, *Marx and Nature: A Red and Green Perspective* (New York: St. Martin's Press, 1999), 312 pp., \$45, hardcover.

If there is a single charge that has served to unify all criticism of Marx in recent decades, it is the charge of "Prometheanism." Although Marx's admiration for Aeschylus' *Prometheus Bound* and his attraction to Prometheus as a revolutionary figure of Greek mythology has long been known, the accusation that Marx's work contained at its heart a "Promethean motif," and that this constituted the principal weakness of his entire analysis, seems to have derived its contemporary influence mainly from Leszek Kolakowski's *Main Currents of Marxism*. The first volume of this work was drafted in Polish in 1968 and appeared in English in 1978. For Kolakowski:

A typical feature of Marx's Prometheanism is his lack of interest in the natural (as opposed to economic) conditions of human existence, the absence of corporal human existence in his vision of the world. Man is wholly defined in purely social terms; the physical limits of his being are scarcely noticed. Marxism takes little or no account of the fact that people are born and die, that they are men or women, young or old, healthy or sick; that they are genetically unequal, and that all these circumstances affect social development irrespective of the class division, and set bounds to human plans for perfecting the world. . . . Marx can scarcely admit that man is limited either by his body or by geographical conditions. As his argument with Malthus showed, he refused to believe in the possibility of absolute overpopulation, as determined by the earth's area and natural resources. . . . Demography was not an independent force but an element in

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the social structure, to be evaluated accordingly. Marx's ignoring of the body and physical death, sex and aggression, geography and human fertility—all of which he turns into purely social realities—is one of the most characteristic yet most neglected features of his Utopia.<sup>1</sup>

It is not surprising, given the nature of this charge, that Kolakowski's condemnation of Marx for his Prometheanism would be embraced by commentators on Marx and ecology. It was soon echoed by Anthony Giddens in *A Contemporary Critique of Historical Materialism* (1981), in which he complained of Marx's "Promethean attitude," which supposedly explained why "Marx's concern with transforming the exploitative human social relations expressed in class systems does not extend to the exploitation of nature." Since then it has been a steady drumbeat, with left ecological thinkers as various as Ted Benton, Reiner Grundmann, John Clark, and Michael Löwy adding their own complaints of Marx's Promethean disregard for nature.<sup>2</sup>

What is most remarkable about this criticism (derived by imposing on Marx a motif supposedly taken from Greek mythology—which Kolakowski tries to link more firmly to Marx by way of Lucretius, Bruno, and Goethe) is that it effectively substitutes a mythological symbol (one not analyzed in itself) for genuine critique.<sup>3</sup> The claim that Marx failed to take into account natural limits is entirely without foundation. Even Marx's critique of Malthus, where Kolakowski would appear to have made his strongest point, demonstrates this. Marx and Engels did not deny demographic factors or the absolute limits to human expansion on the earth. Ironically, it was Malthus, and not Marx, who steered clear of the term "overpopulation"—because in his strictly equilibrium model of population and food supply, this was unthinkable and because he made a point of insisting that his argument was *not* about overpopulation as determined by the carrying capacity of the earth as whole, but that the pressure of population on food supply was inherent in the human condition from the very beginning.<sup>4</sup>

As for the contention that Marx simply disregarded issues of life, death, and sexuality, one need only think of the detailed discussion of the effects of absolute exploitation on the health

of workers and their families in Marx's treatment of the struggle over the working day in volume one of *Capital* or his focus on parental and spousal abuse, abortion, and the exploitation of women (not to mention life and death) in "Peuchet on Suicide."<sup>5</sup>

Significantly, it is in the ecological realm, where Kolakowski's charge that Marx fell prey to a simple-minded Prometheanism has been most frequently alluded to, that we also find the most decisive refutations. Here Paul Burkett's masterful work, *Marx and Nature: A Red and Green Perspective*, stands out. It focuses on the area where Marx's alleged Prometheanism would seem to have its firmest grounding—his mature critique of political economy.

*Marx and Nature* is divided into three parts. Part One, entitled "Nature and Historical Materialism," addresses the natural bases of labor and production in Marx. Part Two, entitled "Nature and Capitalism," offers a systematic account of Marx's ecological value analysis. Part Three, entitled "Nature and Communism," provides a developed critique of the "Promethean interpretation" of Marx based on these foundations, while revealing the ecological aspects of Marx's vision of communism.

In Part One of his book, Burkett begins by establishing that, for Marx, nature is one of the sources—along with labor or labor power—in the creation of wealth. Genuine wealth consists of use values, which are produced only with the help of nature. Not only do all material use values that go into the making of a commodity have a basis in natural resources, but also there are natural use values, according to Marx, which are completely independent of production but without which production would be impossible. Indeed, the "universal metabolic process" of nature transcends the realm of production. Human production depends principally on the organization of labor power but the labor itself is, in its essence, nothing but the metabolic process between human beings and nature. Labor can only work as nature does (as a vital natural force or as transformed energy), by changing the form of matter. Far from ignoring natural conditions and limits, as some critics have claimed (alleging that Marx was simply Promethean in this respect), Burkett demonstrates that he built such natural conditions into his analysis of human production,

and even into his conception of nature transcending human production, in myriad ways.

But if Marx insists on the natural basis of human production and its dependence on natural conditions, he nevertheless avoids what Burkett calls a “crudely naturist” approach, insisting at every point that human production is socially mediated production and occurs within a coevolutionary context. Thus, human production partially (but only partially) transcends its natural bases; and indeed it is the alienation of social and natural conditions that must be at the center of our attention. “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,” Marx writes, “which requires explanation or is the result of a 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.”<sup>6</sup> It is this general conception, as Burkett argues, that prevents Marx from being either a one-sided “naturist” or a one-sided “social constructionist.” Rather, his treatment throughout is concerned with the dialectical interaction between nature and human society (which remains a part of nature). Human freedom and self-creation is a reality, but it is circumscribed in that it does not exist independently and in defiance of natural conditions and natural laws. Not only does this realistic outlook govern Marx’s critique of capitalist society, Burkett argues, it also helps to explain Marx’s understanding of the future society of associated producers.

Nevertheless, for all of its insights, Part One of Burkett’s book is difficult reading. This is not simply a product of the complexity of the discussion at this point, but also of the high level of abstraction. Here, Burkett is writing (following Marx’s method) at the level of production in general, divorced from its historically specific forms and hence divorced from Marx’s critique of capital itself. Thus, Burkett proceeds in Part Two to the consideration of nature *and capitalism*, and to an exposition of Marx’s ecological value analysis. It is here that the heart of Burkett’s book, his real breakthroughs in the interpretation of Marx, are

to be found—leading into his formidable discussion of Marx's vision of communism in Part Three. Here, too, the argument of the book becomes easier to follow, since it now takes on a more historically specific focus, directly connected to Marx's value analysis and to his critique of capital as a social relation.

Part Two opens with a consideration of the conditions that make capitalism (particularly industrial capitalism) possible, with the separation of the workers from the natural conditions of production, i.e., from the land. Primitive accumulation thus represents the growth not only of alienated labor, but also of alienated nature—as Marx recognized as early as 1844. Burkett then takes on what is in many ways the central issue in the criticism of Marx's political ecology, that is, the question of the "free appropriation" of nature under capitalism—i.e., the fact that nature is seen by capital as lacking in value, since no labor time is utilized in its production. Numerous thinkers have criticized Marx and the labor theory of value for being blind to nature's intrinsic value and to the real social costs associated with the degradation of nature. Yet Marx's ecological value analysis is superior to all others in this respect, because it shows not only that nature's production is viewed by the system as a "free gift of nature" to capital but also demonstrates, through its treatment of use value, that nature is an essential part of the creation of wealth and, indeed, the ultimate source of all wealth. Hence capitalism (in denying value to nature, which is given a money value based on monopolistic rents, if at all), systematically downgrades nature's contribution to wealth, generating bigger and bigger ecological problems.

The strength of Burkett's approach is that he recognizes that Marx was not only a proponent of the labor theory of value of classical economics but that he was also an opponent, not in the sense that he chose to formulate some other theory of the law of value under capitalism, but because he sought to overcome capital's law of value itself, along with capitalist society. Marx is able therefore to pinpoint the narrow criteria by which the law of value operates, while perceiving that this is not due to some failure of analysis but, rather, represents a central contradiction

of capitalism itself.

Capitalism's ecological crises, Burkett explains in his exposition of Marx, take two forms: "(1) crises of capital accumulation, based on imbalances between capital's material requirements and the natural conditions of raw materials production; and (2) a more general crisis in the *quality* of human-social development, stemming from the disturbances in the circulation of matter and life forces that are generated by capitalism's industrial division of town and country" (107). The first of these crises arises from capital's tendency to increase the flow of commodities and hence the throughput of materials and energy, with little concern for natural limits, while economizing much more stringently on labor inputs. "Rising productivity means that each hour of abstract labor is now borne in a larger and larger quantity of use values and their material prerequisites" (110). This results in periodic problems in the availability of materials and energy needed as inputs into the production process. Yet, although this raises the issue of conservation for capitalism, the system's laws of motion are antithetical to any truly ecological approach to conservation.

More important, because even more central, to Marx's analysis is the ecological critique arising from his understanding (and that of Engels) of the ecological contradictions arising from the division between town and country under industrial capitalism. It is here that Marx presents his analysis of the rift in the metabolism between human society and nature that arises from the break in the soil nutrient cycle—evident in the despoliation of the soil and the pollution of the cities. Burkett emphasizes the dialectical character of Marx's understanding of ecological crises here in order to refute those who contend that Marx addressed ecological problems only in relation to agriculture (the country) and did not consider them also in relation to industry (the city).<sup>7</sup> It is Marx's recognition of environmental crises stemming from these causes that provides the basis for Burkett's contention that the "environmental critique of capitalist production is a recurring theme in the writings of Marx and Engels" (126).

In Part Three, on "Nature and Communism," Burkett provides a direct refutation of what he calls the "Promethean interpreta-

tion” of Marx’s ecological analysis. According to the Promethean interpretation, Burkett tells us, capitalism solves the problems of history and the human relation of nature through sheer productivity and abundance—that is, quantitatively. For example, Alec Nove argued that, since capitalism ushered in a world of affluence in Marx’s view, “the problem of production has been ‘solved’” and the future society of associated producers “would not have to take seriously the problem of the allocation of scarce resources.” Therefore the issue of an ecologically conscious socialism simply does not arise in Marx, Nove tells us.<sup>8</sup> Yet, it is worth remembering that not only did Marx deny that capitalism had solved the *quantitative problem* of production (for example, he insisted that capitalism was unable to solve the problems of agricultural production) but he also laid even more emphasis on the *qualitative problem* of capitalist society—a society rooted in the alienation not only of human labor but also of nature, that is, a rift in the human metabolism with nature (164). Indeed, “the fundamental contradiction of capitalism,” Burkett reminds us, consists of such twofold alienation of human community and of the human relation to nature—and the development of production and wealth-creation in a narrow, exploitative form.

By focusing on the ecological dimensions of Marx’s thought (and particularly on what has been referred to here as Marx’s ecological value analysis), Burkett is able to provide the beginnings of a truly profound interpretation of Marx’s vision of communism—one of the very few analyses to do justice to its wide-ranging nature. Earlier interpretations of Marx’s vision of communism have generally fallen prey to excessive concern with purely quantitative issues. Burkett, however, is able to describe the qualitative revolution in the entire social and ecological metabolism that such a transformation necessarily involves. Here he notes that many thinkers have been misled by the undeniable fact that Marx, who saw socialist revolution as imminent, placed little direct emphasis on ecological contradictions in causing/motivating such a transformation. It was thus assumed that environmental considerations were not fundamental to the construction of the society of associated producers (129; 199). Yet,

in Marx's concrete discussions of socialist construction, as distinct from the revolution against capitalism, he always highlighted ecological factors, and the need for a rational regulation of the human relation to nature in accordance both with the needs of human freedom and community and principles of sustainability. Hence, the construction of communism for Marx was a "struggle," as Burkett says, "for a real socialization of nature"—divorced from the distorted form that it assumed under the regime of private property (214).

Marx argued in the *Grundrisse* that nature (or the soil) originally appears as "the direct wellspring of production." Capitalism breaks this original unity by making society into the necessary mediator (though in alienated form) between nature and production. Hence, in order for humankind to develop its own rich possibilities for free development and to realize its essential unity with nature at a higher level, it is necessary that there be a genuine socialization of production: the development of a "real social community."<sup>9</sup> In Burkett's closing words:

If people want to develop as natural beings, they must develop further as social beings, and achieve an explicit socialization of the natural conditions of production. We cannot overcome natural necessity—we cannot conquer nature; but neither can we ignore the conscious, social, and cumulative character of human production by taking refuge in an idealized, unmediated nature that no longer exists. The development of human production is no longer predetermined by nature as such. So if we want to live with nature, we must master our social organization (257).

The importance of Marx's ecological value analysis, for Burkett, lies precisely in the fact that it traces capitalism's fundamental contradiction to the alienation of nature and the alienation of human production, as two sides of a single contradiction—one that can only be overcome by a revolutionary transformation of society itself. Any analysis of Marx's work that fails to understand this dialectic of nature and society is one-sided and incomplete—vulnerable to the mechanistic Prometheism that characterizes not so much Marxism as the hegemonic vision of political economy inherited from bourgeois civilization.

## NOTES

1. Leszek Kolakowski, *Main Currents of Marxism* (New York: Oxford University Press, 1978), pp. 412-414.
2. Anthony Giddens, *A Contemporary Critique of Historical Materialism* (Berkeley: University of California Press, 1981), pp. 59-60; Ted Benton, "Marxism and Natural Limits," *New Left Review*, no. 178 (November-December 1989), p. 82; Reiner Grundmann, *Marxism and Ecology* (New York: Oxford University Press, 1991), p. 52; Michael Löwy, "For a Critical Marxism," *Against the Current*, vol. 12, no. 5 (November-December 1997), pp. 33-34.
3. The myth of Prometheus as it was understood in the Romantic period, and by Marx, had more to do with Enlightenment and the critique of religion (that is, with the development of a general revolutionary consciousness) than with an emphasis on technology. See Walt Sheasby, "Anti-Prometheus, Post-Marx: The Real and the Myth in Green Theory," *Organization & Environment*, vol. 12, no. 1 (March 1999), pp. 5-44.
4. See John Bellamy Foster, "Malthus' *Essay on Population* at Age 200," *Monthly Review*, vol. 50, no. 7 (December 1998), pp. 1-18 and *Marx's Ecology: Materialism and Nature* (New York: Monthly Review Press, 2000), chapter 3.
5. Karl Marx, *Capital*, vol. 1 (New York: Vintage, 1976), pp. 389-411, and "Peuchet on Suicide," in Eric A. Plaut and Kevin Anderson, eds., *Marx on Suicide* (Evanston, IL: Northwestern University Press, 1999), pp. 45, 53-54, 57-58. See also the excellent introductory essay by Kevin Anderson.
6. Karl Marx, *Grundrisse* (New York: Vintage, 1973), p. 489.
7. See John Bellamy Foster, "Marx's Theory of Metabolic Rift: Classical Foundations for Environmental Sociology," *American Journal of Sociology*, vol. 105, no. 2 (September 1999), pp. 366-405, and *Marx's Ecology*, chapter 5.
8. Alec Nove, "Socialism," in John Eatwell, Murray Milgate, and Peter Newman, eds., *The New Palgrave Dictionary of Economics*, vol. 4 (New York: Stockton, 1987), p. 399.
9. Marx, *Grundrisse*, p. 276.