configurations and labor process transformations, opens up new vistas for social researchers to explore the "political ecology" of long-run social change at multiple scales and the complex relations between them.

Rejoinders

I.

Marx's Ecology received our attention because it raises important issues, to discuss, to criticize, and to develop. Analyzing Foster's book has been enormously worthwhile. It has helped us become more precise in our understanding of the "determination" of humans and nature in our social-political analysis. The book is worthy of praise, but it also bears criticism. It is the critique that moved our thinking forward and we can thank Foster for stimulating this undertaking.

We insist that the materials used in, and scale of, capitalist production today have changed markedly compared with the 19th century. So, therefore, have ecological relations. The fact that Marx furnished the basis for a materialist approach to ecological analysis is not doubted here. Our critique challenged Foster to engage the vast philosophical differences among the scholars pinned unjustifiably under the generic label of "green theory." Along similar lines, previous other scholarship (e.g., Carolyn Merchant's), in addition to Foster's work, has contributed to what Burkett deems a "serious historical-intellectual analysis of the role of ecological concerns in the development of the materialist approach to human society." This scholarship should be rather engaged than ignored.

This symposium brings forth a number of other issues for further discussion and elaboration. Costas Panayotakis reminds us of "immanent critique," a critique from within (e.g., if Marx — or anyone — develops a method, that method should be usable to critique Marx). Joel Kovel insists that our analysis must go beyond the green; environment is only one aspect (one facet) of our understanding of the social, ecological, historical, scientific, spiritual components contributing to our understanding of how and why the world works. Alan Rudy draws our attention to the multiplicity of analytical routes that may lead to the same end. Specifically, Rudy points to Foster's use of "metabolic rift" (oversimplifying, the *appearance* of a separation of humans from nature over time) and O'Connor's "second contradiction

thesis" (oversimplifying again, if the conflict between capital and labor is the first contradiction, the conflict between humans and nature is the second contradiction). In addition, Rudy rehearses the wide range of agreement among all contributors to the symposium. Rudy also restates his contention (one shared by those of us commenting on Foster's work) that Marx has more than one "shortfall."

Asserting the value or its absence of one or the other side of a discussion does not move us forward. Rather the reader must decide the validity of the various positions on these issues for herself or himself. Our position is more or less clearly stated in the symposium and Paul Burkett disagrees with it. It is time to move on. In this comment, therefore, we choose to amplify a methodological consideration underlying our position.

Marx concretely and specifically observes the events of his time. Historically, his analysis of 19th century capitalism is useful for more than its historical value; it enables us to see him apply a methodology for understanding his time and perhaps it enables us to adopt or to adapt that methodology as a tool for understanding our time. One of the clearest methodological statements in Marx appears in the *Grundrisse*:

It seems to be correct to begin with the real and the concrete, with the real precondition, thus to begin, in economics, with e.g. the population, which is the foundation and the subject of the entire social act of production. However, on closer examination this proves false. The population is an abstraction if I leave out, for example, the classes of which it is composed. These classes in turn are an empty phrase if I am not familiar with the elements on which they rest, e.g. wage labour, capital, etc. These latter in turn presuppose exchange, division of labour, prices, etc. For example, capital is nothing without wage labour, without value, money, price etc. Thus, if I were to begin with the population, this would be a chaotic conception [Vorstellung] of the whole, and I would then, by means of further determination, move analytically towards ever more simple concepts [Begriff], from the imagined concrete towards ever thinner abstractions until I had arrived at the simplest determinations. From there the journey would have to be retraced until I had finally arrived at the population again, but this time not as the chaotic conception of a

whole, but as a rich totality of many determinations and relations.¹

Any "precondition" is incompletely understood without familiarity "with the elements on which" it rests. Thus when Burkett says, "although capitalism was still young in Marx's time it was capitalism," he does not acknowledge that the capitalism of the 1850s and that of the 2000s rest on different "elements." These differences are the starting point of our analysis. Modern capitalism is substantively different from 19th century capitalism.

The myriad elements of 21st century capitalism are what make a comprehensive analysis and the struggle for change so difficult. An examination of developing ideas over time helps, but it is not sufficient for moving into the future. This requires new thinking about how to overcome formidable obstacles. It requires innovation. We all need to contribute to the analysis of the "many determinations and relations" of 21st century capitalism. In anticipation, we cannot predict how change will occur. But we cannot immobilize ourselves by the lack of a comprehensive theory of social change. And we cannot wait for, or rely on, the arrival of one correct analysis. There will be many paths to both determining and achieving our goals (e.g., how will we define socialism? Or more modestly how will we achieve affordable, accessible housing for all? Even more modestly how will we restore and revitalize the Bronx River?). Our daily practice will continue to be based on less than perfect information. Discussion — considering the alternatives helps. And if symposia such as this one offer any guidance to our daily practice, so much the better. — Maarten de Kadt and Salvatore Engel-Di Mauro

II.

Paul Burkett's commentary on the symposium accuses us of many things. He claims that we collectively 1) embrace anachronistic and partial readings of classical Marxism, 2) can't separate materialism from Jim O'Connor's second contradiction thesis, and 3) indiscriminately graft incommensurable theories into unnecessary new grand theories. He accuses me in particular of 1) arbitrarily delimiting the metabolic rift to town-country relations, 2) of misunderstanding the link between metabolic rift, capitalist contradictions and capitalist crisis tendencies,

¹Karl Marx, Grundrisse: Foundations of the Critique of Political Economy (Harmondsworth, England and Baltimore, MD: Penguin Books, 1973), p. 100.

and 3) of not understanding that the alienation of labor from the land lies at the heart of Marx's work, as well as that of Foster.

To say this is a misreading is to be overly kind. Burkett is so caught up in savaging my critique of the metabolic rift that he regularly conflates my critique of Foster with a critique of Marx. I made two primary points which, perhaps, I could have made more clearly. The first pertained to the silence, in Foster's analysis of the metabolic rift, with respect to modes of cooperation and forms of general communal conditions of production. While these concerns are certainly related to O'Connor's work and the second contradiction thesis, they are fundamentally grounded in the work of Marx. Further, Marx's analysis of these conditions is as connected to the capitalist alienation of labor from the land and the rural-urban division of labor under capitalism as is the metabolic rift. As such, and following lessons learned from Bertell Ollman (Foster's regularly cited favorite dialectician), my suggestion was that an analysis of the metabolic rift that brackets cooperation and general communal conditions misses key elements in the generation and mediations of the purported rift. I am not critical of Marx for "underdeveloping" this analysis because that would be anachronistic. I am critical of Foster for doing so and I claimed that doing so was necessary for him to assert that there is such a thing as Marx's ecology, as opposed to periodic analyses of ecological degradation and of their roles in economic crises. I asserted that, had Marx been more ecologically concerned, his materialist dialectical methods would have engendered an analysis of ecological conditions that included explicit mention of the role of cooperation and communal conditions.

In fact, Marx tended to implicitly deemphasize the forms of cooperation (in politics and production) and general communal conditions (both cultural and infrastructural) that undergird a large portion of the Western Marxist responses to determinist orthodoxy. The key here is that deemphasis is different than ignorance and failure. Marx innovatively theorized these things, though they often were not at the core of his analysis. But Foster tosses Western Marxism to the wayside in his book — though he embraced a more delicate position in an exchange about *Marx's Ecology* on the American Sociological Society's Environment, Technology and Society Section listserv. I claimed that a more nuanced approach to Western Marxism than Foster takes in his book would have generated a different understanding of the strengths and weaknesses of generalizing from the metabolic rift argument.

While the first point is largely of theoretical nature, the second point I made was that there are empirical problems with the metabolic rift argument, as developed by Foster. It was not I who limited the analysis of the metabolic rift to the tension between the country and city, it was Foster. Of course, that tension and the possibility of a capitalist-specific metabolic rift is derivative of the alienation of labor from the land. However, none of this resolves the issue of Foster's failure to further develop the rift thesis by taking the "various factors" that Burkett claims could be taken "into account," even speculatively, in his book. Had he done so, as I show in the example of New England, its soils and soil science, the metabolic rift analysis doesn't hold. And it doesn't hold independently of whether or not Marx's interpretation was based on the best data available at the time. It is *not* anachronistic to critically assess positions Marx reasonably took, and in fact not to do so is to be untrue to Marx methods, epistemological and ontological.

Among other things, and this I didn't raise in the symposium, it is completely unclear whether or not English or New Englandish agriculture should be, or have been, characterized as capitalist. Foster uncritically claims that these productive forms were capitalistic despite the failure of the then-predominant forms of agricultural production to fit Marx's description of capitalist agriculture in Volume III of *Capital*. This is why I raised the issue of the modes of production debate.

Lastly, Burkett repeatedly falls back on implicit, subtextual appeals to his distaste for the second contradiction thesis when none of the authors in the symposium raised it once. My claims that Marx underdeveloped his analysis of the role of ecological crisis in crises of capitalism derived directly from Foster's book, not from my work with O'Connor and the second contradiction, though he has argued the same thing as Foster. As such, my criticisms of Foster's book never conflated materialism with the second contradiction thesis nor represented an overarching commitment to situating all theoretical endeavors in the context of new crisis theories, as Burkett claims. I was simply following Foster's lead, which I'd have thought Burkett would have appreciated had he read my comments with an even half-open mind. — Alan P. Rudy

III.

It is a common occurrence in the history of spirited intra-Marxist debates for participants to attack the other side through the indiscriminate use of colorful, jargon-laden epithets. Thus, to be an object of this practice is less disconcerting to me than are the specific

content of the charges in question. Specifically, Jason Moore's response informs me that I am an academic sectarian. Such a claim is all the more incredible as the main thrust of my original article was not to sow division within the ranks of Marxist academics but, on the contrary, to challenge Foster's unnecessary and counter-productive dichotomy between a prominent representative of Western Marxism, Lukacs, and two prominent representatives of the "dialectical tradition within the life sciences" (Foster, vii), Richard Levins and Richard Lewontin.

Unlike Moore's aphoristic dismissal of the original contributions to the symposium, Burkett's criticisms are more substantive and less prone to name-calling. According to Burkett, these contributions illustrate "the predominant practice of contemporary ecosocialism" insofar as they, among other things, graft "together theories and concepts into new grand schemas of nature-society relations...without the immanent critique needed to achieve a transcendent unity-in-difference of theory and practice" (p. 1).

Two points need to be made here. Concerning my claim that the concept of a socio-ecological totality would allow us to explore the contradictory articulation between social systems and the nature these systems appropriate and depend on, I can only plead guilty to agreeing with Burkett's own appeal to a "conception of nature-society relations as a contradictory unity of material and social, objective and subjective, exploiting and exploited elements" (*Marx and Nature*, p. 21). Secondly, I would like to assure Burkett that I share his passion for immanent critique. In fact, because of my appreciation of the indispensability of immanent critique as a method of analysis I feel compelled to apply this method to Burkett's comments on my article.

Burkett does give an accurate summary of my argument when he writes that, "[b]y dismissing Lukacs, Foster misses an opportunity to construct a more adequate conception of totality as a basis for a 'reconceptualization of the emancipatory project'" (p. 6). Surprisingly enough, however, Burkett thinks that such a "research proposal is tangential to Marx's Ecology." Such a dismissal of the political significance of confronting Marxism with the question of ecology does not, however, do justice to Foster, who rightly points out 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" (Marx's Ecology, p. 254). By criticizing Foster for his failure to deliver on the goal that he himself identifies as the raison d' etre of his analysis, my original intervention sought to contribute to the immanent critique of Marx's Ecology. On the other

hand, by reminding Burkett of his own recognition, in *Marx and Nature* (p. 10), that "Marx's overriding concern with human emancipation" shaped his approach to nature, this counter-response forms part of my immanent critique of Burkett's response to my article.

Burkett's critique of my use of Lukacs is also surprising given his appeals to immanent critique. My reference to Lukacs's failure to fully break with teleological conceptions, which strikes Burkett as a contradiction in my argument, was itself an instance of such a critique. Although the fault may have been partly mine for not expressing myself clearly enough, my point was that Lukacs's inability to break with teleological assumptions stemmed from his failure to take the insights in his own conception of totality and dialectics to their logical conclusion.

Concerning, finally, Burkett's misrepresentation of my discussion of Levins and Lewontin, I would like to note that far from criticizing them for being undialectical, I pointed out that they themselves provide the tools for addressing the weaknesses of their conception of dialectics. What was my claim that "this theoretical conundrum, latent in their conception of dialectics, stems from Levins and Lewontin's failure to heed their own warning" but an instance of immanent critique? Burkett comes close to realizing this when he expresses surprise about the fact that I seem to attribute a non-dialectical approach to a book entitled *The Dialectical Ecologist* (p. 8). What is paradoxical here, of course, is not the healthy skepticism *vis-à-vis* an author's claims that represents the *sine qua non* of immanent critique as an analytical method but rather the apparent assumption, on the part of a self-avowed practitioner of immanent critique such as Burkett, that an author's claims should be taken at face value. — **Costas Panayotakis**

IV.

Here we go, off to the academic wars. Paul Burkett, snorting with theoretical indignation and hurling accusations, charges into the arena, with Jason Moore at his side noting our "emergent research perspective" and its "academic sectarianism." The only justification for such battles is in respect to the greater cause over which they are fought. And so I will spare us all a tedious litany of the "he said-I said" variety, except to state that I stand by what I wrote about *Marx's Ecology*. Whatever the intellectual merits of my essay, it was based on a careful reading of John Foster's text; and to it I only need add the following: that the acerbic tone of my article was not because I found no virtues in the book, which was quite informative and interesting in many respects,

nor because I dismiss its thesis that Marx is a thinker with an ecological world-view. It arose, rather, in reaction to Foster's dogmatism, which I see as nullifying the virtues of his work and harming the greater cause in which we should all be engaged, that of ecological socialism.

What goes for Foster goes as well for his partner Burkett. If the reader were to closely study *Marx's Ecology*, and to back it up with an equivalent reading of Burkett's companion volume, *Marx and Nature*— along, needless to say, with Burkett's present piece— he or she would come up with the remarkable finding, that in all these hundreds of pages, representing untold hours of hard work, there is not a single remark critical of Karl Marx, even to be supportive. What we find instead is a relentlessly insisted claim that, as Burkett puts it here in his clammy way, "the specificity of historical materialism as ontology and method" must be the touchstone for ecological socialism; and that, further, as implied by this, those who would carry out "non-holistic readings of classical Marxism" and uncritically impose "modern, ecological criteria on historical materialism," or, worse, develop "new grand schemas of nature-society relations," are damned to perdition.

Why the theological imagery? Because — and the irony should not be lost on those who have read through Foster's vulgar attacks on religion — to treat Marx this way is simply a deification. No merely human figure could be so perfect and infallible, nor offer such messianic hopes. And of course, one gets the whole package. If Burkett-Foster's Pure Marx is such a touchstone, then He can only be touched by the initiate: those expert enough in historical materialism to weed out deviant interpretations, in short, a mandarinate of orthodox Marxists, their eyes firmly focussed on the great texts of the 19th century.

This is the sort of Marxism old Karl had in mind when he refused to identify himself with the species. It is the Marx of Schoolmen, looking for a purified essence as a source of authority. It has always been a disaster for Marxism to be used this way; and in the case of ecological socialism, the disaster will be compounded by simple ineffectiveness. A living Marxism arises from struggle. The lifeblood of original Marxism arose from the struggles of workers against the extraction of surplus value from their living labor. This pulse still flows; but it is not the primary form taken by ecological activists, whose practice is configured by the defense of ecosystemic integrity under threat by capital, whether this be located in weather patterns, the invasions of bioengineered genes, species-loss, old-forest destruction, the bodily disorders of organochlorine destabilization, the break-up of urban life-worlds, or, indeed, disintegrating personal relationships. If

there is to be an ecosocialism, it can only be on a ground from which one can speak socialism to these new forms of struggle, and the movements arising from them. It cannot speak down to these, but must meet their own discourse, recognize their patterns as perturbations in the conditions of production, and connect them with wider forms of anti-capitalist activity. That, after all, is what building ecosystemic integrity is about. Burkett-Foster's dogmatic Marxism, by contrast, is deaf to such reasoning and closed to other voices. How is it going to speak to anti-globalization agitators or farmers in India? Where is its invigoration from below?

It is a pitiable spectacle to see a great idea brought down by those who would defend its purity. My Marx is the firebrand who would ruthlessly criticize everything existing, including himself — and in respect to whom I would close off this communication, before it gets too high-handed. — **Joel Kovel**

