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## The Climate Moment: Environmental Sociology, Climate Change, and the Left

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*Marx and Nature: A Red and Green Perspective*, by **Paul Burkett**. Chicago: Haymarket, 2014. 318 pp. \$20.00 paper. ISBN: 9781608463695.

*This Changes Everything: Capitalism vs. the Climate*, by **Naomi Klein**. New York: Simon and Schuster, 2014. 566 pp. \$30.00 cloth. ISBN: 9781451697384.

*The Capitalism Papers: Fatal Flaws of an Obsolete System*, by **Jerry Mander**. Berkeley, CA: Counterpoint, 2012. 257 pp. \$26.00 cloth. ISBN: 9781582437170.

*The Collapse of Western Civilization: A View from the Future*, by **Naomi Oreskes** and **Erik M. Conway**. New York: Columbia University Press, 2014. 91 pp. \$9.95 paper. ISBN: 9780231169547.

*The Wrath of Capital: Neoliberalism and Climate Change Politics*, by **Adrian Parr**. New York: Columbia University Press, 2013. 216 pp. \$29.50 cloth. ISBN: 9780231158282.

On September 21, 2014, the largest climate march in U.S. history took place in New York City, as more than 300,000 protestors signaled to UN delegates arriving for climate talks that more desperate measures were needed to protect humanity and other species. The massive demonstration, though representing a wide array of social and political viewpoints, had its origins on the Left. The radical intellectual thrust of the movement was apparent the day prior to the march, when a vast "People's Summit/Teach-In" was led by two organizations—Global Climate Convergence and System

Change Not Climate Change—that have arisen out of the left, particularly from the ecosocialist movement, and have been influenced to a considerable extent by U.S. environmental sociology.

Naomi Klein was the keynote speaker at the People's Summit, where she presented the views developed in her newly released book: *This Changes Everything: Capitalism vs. the Climate*. Klein's remarkable treatise represents a shift in the discourse on climate change and the environment to focus on the conflict between capitalism and the climate. She cites a host of sociologists in her book, including John Berger, Patrick Bond, Robert Bullard, Robert Brulle, Brett Clark, Riley Dunlap, John Bellamy Foster, Bruno Latour, Andreas Malm, Aaron McCright, Kari Marie Norgaard, Raj Patel, Eugene A. Rosa, Juliet B. Schor, and Theda Skocpol—as well as closely related environmental social scientists and commentators such as Joan Martinez Alier, Tom Athanasiou, Paul Baer, Jeremy Brecher, Herman Daly, Sam Gindin, Alf Hornborg, Wes Jackson, Michael Klare, Martin Khor, Larry Lohmann, Tadzio Mueller, Richard B. Norgaard, Christian Parenti, Arundhati Roy, and James Gustave Speth. The majority of these environmental scholars are associated with what has come to be known as the ecosocialist movement, or the closely related, also left-inspired, "degrowth" movement. It is hardly surprising, therefore, that Klein quotes from Marx's ([1863–1865] 1981:949) formulation of ecological crisis, in which he referred to capitalism's tendency to "provoke an irreparable rift in the interdependent process of social metabolism, a metabolism prescribed by the natural laws of life itself" (p. 177).

Understanding how ecosocialism gained such a powerful role in today's climate movement is important and requires an examination of the evolution of U.S. environmental sociology. From its first appearance in the 1970s and early 1980s, environmental sociology in the United States has emphasized two primary ideas: (1) that capital accumulation or "the treadmill of production" is the central factor in global environmental degradation (though not excluding other factors such as technology and population growth) (Anderson 1976; Schnaiberg 1980), and (2) that sociology and social

science generally in the post-1945 period have adopted a naïve human-exemptionalist rather than truly ecological (co-evolutionary) paradigm in their approach to the nature-society relation (Catton and Dunlap 1978; Dunlap and Catton 1979). These two primary emphases gave U.S. environmental sociology its radical edge and critical realism, connecting it to grassroots environmental activism and to fast-moving developments in ecological science. This outlook distinguished U.S. environmental sociology from its European counterpart, which, under the influence of the various Green parties, stressed ecological modernization (not just as a practice but as an overall conceptual framework). The European approach resulted in the greater incorporation of environmental issues into state policy in countries such as Germany and the Netherlands (Mol 2001). Environmental sociology in Continental Europe thus found itself in conflict not only with that strand of the classical sociological tradition coming out of Marx, which linked environmental questions with those of class and crisis, but also with the classical view of Weber, which was at odds with crude notions of inevitable linear progress and evolutionary modernization with respect to the society-nature nexus (Foster and Holleman 2012).

By the early 1990s, these radical tendencies of U.S. environmental sociology were deepened by the creation of two peer-reviewed academic journals: (1) *Capitalism Nature Socialism*, launched by James O'Connor and a number of graduate students at the University of California-Santa Cruz, and (2) *Organization & Environment*, which in its first decade and a half had a strong critical-left, environmental sociology emphasis. O'Connor's (1994) notion of the environment as constituting a "second contradiction of capitalism" opened up a whole new area of discussion on the left about the interrelation of economic and environmental crises. New infusions from Marxian political economy entered into environmental sociology, along with the incorporation of environmental justice and ecofeminist perspectives (Bullard 1993; Salleh 1997).

In 1999, the recovery of Marx's ecological analysis engendered a major theoretical departure (Burkett 1999; Foster 1999, 2000).

While previously environmental sociology and ecological economics were concerned almost exclusively with scale—i.e., economic growth and carrying capacity—this new perspective had as its starting point a dialectical systems theory, geared to the contradictory relation between capitalist production and the earth system. The immediate effect was to build a bridge between environmental sociology and world-systems theory, giving added impetus to both. York, Rosa, and Dietz (2003) soon brought the ecological footprint, metabolic rift, and world-systems perspectives together in a pioneering inquiry into “Footprints in the Earth.”

Within a few years there was an explosion of work by a broad array of ecosocialist and ecological Marxists and other critical-left thinkers (for example, Dickens 2004; Burkett 2006; Foster, Clark, and York, 2010; Schneider and McMichael 2010; Williams 2010; Magdoff and Foster, 2011; Urry 2011; Carolan 2012; Moore 2011; Jorgenson and Clark 2012a). Their contributions derived principally from Marx’s classical work but also drew on the legacy of critical theory, generating an incipient synthesis that York and Mancus (2009) dubbed “critical human ecology” or CHE. This time period saw a mushrooming of environmental-sociological investigations into topics as varied as climate change, soil degradation, deforestation, ocean pollution, freshwater usage, the urban environment, and factory farms (Clausen and Clark 2005; Clement 2006; Mancus 2007; Gundarson 2011; Dobrovolski 2012; Longo 2012; Wishart 2012). A key contribution was Clark and York’s (2005) influential research into capitalism and the carbon metabolism. Others delved into questions of unequal ecological exchange (Jorgenson and Clark 2012a; Foster and Holleman 2014). Norgaard (2011) cast an investigative eye on climate denialism. As is invariably the case in times of revitalization on the left, this work was only secondarily academic and had its main manifestations in wider intellectual forums and movements worldwide, such as the struggle against the global dumping of environmental toxins (Pellow 2007), the rise of La Via Campesina (Wittman 2009), and the debate on environmental degradation in China (Wang, He, and Fan 2014).

The publication, after fifteen years, of a second, expanded edition of Burkett’s influential *Marx and Nature* provides us with a unique perspective on these developments. By examining the theoretical breakthrough associated with Burkett’s book, we can better situate recent work on society and climate change such as Mander’s *The Capitalism Papers*, Parr’s *The Wrath of Capital*, Klein’s *This Changes Everything*, and Oreskes and Conway’s *The Collapse of Western Civilization*. All of these works rely (implicitly or explicitly) on a sophisticated notion of capitalism as a system of socio-economic metabolism that exists in alienated relation to the earth system.

Burkett’s book is reprinted unchanged in the new edition, except for the addition of a foreword by Foster and a long, theoretical “Introduction to the Haymarket Edition” by the author. The original text consists of a systematic exploration of the deep ecological dimensions of Marx’s political economy. Burkett demonstrates how Marx wove society-nature relations into every element of his theory of production, consumption, exchange, distribution, and reproduction. A central focus is placed on Marx’s theory of socio-ecological metabolism. Following Marx, Burkett insists that environmental crises under capitalism cannot be subsumed under economic crises; rather, they exist somewhat separately, reflecting the fact that environmental costs are not fully valorized under capitalism, with the environmental depredations of production externalized on nature and society as a whole. Nevertheless, the root causes of environmental disruptions, like economic crises, can ultimately be traced to the overriding role of class-based capital accumulation and the social-systemic conditions it brings about.

Burkett knocks down common criticisms of Marx, such as that he neglects the environment or gives it only marginal concern, including the notion that Marx adhered to a simple “Prometheanism” or a crude fetish of industrialization. He highlights Marx’s questioning of the progressive nature of the system where socio-ecological conditions are concerned. Marx, he indicates, provides a holistic vision of the socialist/communist future that is best described as one of sustainable human development.

In the new introduction, Burkett emphasizes not so much the negative achievements of his work in overcoming earlier, shallow criticisms of Marx's ecological outlook, but rather his positive achievements in helping to transform eco-social analysis by reaching back into Marx's corpus and showing how it provides us with the needed dialectical understanding of people-nature relations. "The point is that if we want to understand capitalism's specific forms of interaction with nature, we have to look at the complex dialectical interplay of the value and material dimensions of capital accumulation" (p. xviii). Here he provides an informative treatment of the various types of environmental crises that characterize capitalism. He also incorporates a synopsis of his later inquiries into Marx and Engels's analysis of thermodynamics and their role in the development of ecological economics (Burkett 2006). He concludes with a discussion of how Marx's prescient critique of class-based, ecologically alienated production is coming into its own in our imperiled age, where such a critical-realist, eco-social vision has become a necessity for human survival. As Foster says in his foreword to the new edition of Burkett's book: "Mainstream environmentalism only describes the ecological crisis engendered by today's society; the point is to transcend it" (p. xiii).

Mander's *The Capitalism Papers* reinforces Burkett's analysis, providing a powerful indictment of the capitalist system centered on the present planetary emergency. In Part One of his book, Mander presents three chapters: "Economic Succession," "Going Global," and "The Copenhagen Conundrum." The title of the first chapter is drawn from a comparison with "natural succession" in the ecological field. Mander declares he is not a Marxist or a socialist, but he is nonetheless a critical thinker on the left who has been directly influenced by some of the social theorists referred to above. He employs a Marxian definition of capitalism, which depicts it as a class-based system geared to endless capital accumulation. Capitalism, he argues, has led to a more economically developed civilization with numerous benefits (as well as costs); but the system is now "obsolete," and it is time to move on to "post-capitalist economic

designs that are no longer oblivious to the limits of the planet" (p. 14). A little more than a half century after the first articulations of the vision of unlimited global development, it is now "obvious that to keep arguing that such a system, dedicated to expanding growth in a finite system, can survive much longer amounts to capitalist utopianism" (p. 29).

The rest of *The Capitalism Papers* consists of a series of chapters in Part Two on "The Fatal Flaws of Capitalism" and a brief Part Three, consisting of one chapter: "Which Way Out?" In the former part, Mander indicts capitalism for its intrinsic immorality and inequities, its privatization of democracy and consciousness, its endless treadmill of production, its ever more desperate social-economic-environmental distortions as it seeks to grow within the "closing circle" of the planet (Commoner 1971), its propensity to militarism and war, and the near-total alienation it fosters.

For academics, Mander's direct intellectual onslaught on the system may be a little too forthright, lacking the endless qualifications, the "grey in grey," that contemporary social science typically demands (Hegel [1821] 1952:13). But the vivid colors in which he presents his ideas are animated by the larger radical critique of capitalism's relation to the planet, a critique that is increasingly forceful in our time.

Although the subtitle of Parr's *The Wrath of Capital is Neoliberalism and Climate Change Politics*, the scope of her book is much broader. Its contents include, after two initial chapters directed at climate change, six chapters focused, respectively, on the population problem, the privatization of water, the food system, animal rights, the green city, and oil spills. She confuses matters by providing seemingly conflicting definitions of "neoliberalism," which she describes as (1) "a more virulent strain" of the liberalism inherited from Adam Smith, (2) "a cultural mode of production that in turn defines the political economy," and (3) a particular "agenda" (pp. 2–3, 16–17, 124). She then proceeds to conflate neoliberalism seen in these multiple ways with capital, capitalism, and the law of value—as if these concepts could all be used interchangeably and at the same level of abstraction.



Nevertheless, Parr's core argument has an elegant basis, drawing at least implicitly on Marx's notion—developed in his Hegel-inspired dialectic of barriers and boundaries (Marx [1857–1858] 1973:334–335; Foster, Clark, and York 2010:39–40)—that capitalism treats all boundaries or limits as mere barriers to be surmounted. In her distinctive formulation, “capitalism appropriates limits to capital by placing them in the service of capital; in the process, it obscures the inequities, socioeconomic distortions, and violence that these limits expose, thereby continuing the cycle of endless economic growth that is achieved at the expense of more vulnerable entities and groups”—and at the expense of the natural environment (p. 11). Changes that are presumably “green” in the ecological sense quickly become nothing more than the color of money.

With this critical perspective, and making frequent reference to Marx's value analysis, Parr demonstrates that attempts to introduce environmental reforms under capitalism are transformed into new circuits of capital (M-C-M'). In the process, she provides penetrating analyses of numerous dimensions of the contemporary ecological problem, from carbon markets to LEED-rated buildings, from “Animal Pharm” to the Deepwater Horizon oil spill.

Parr's critique of capitalism's environmental deprivations is far-reaching and uncompromising. She closes her book with Venezuelan President Hugo Chávez's statement at the 2009 Climate Summit in Copenhagen, in which Chávez, drawing on Marx's metabolism argument as presented by Mészáros (1995), declared: “Let's talk about the cause. We should not avoid responsibilities, we should not avoid the depth of this problem. And I'll bring it up again, the cause of this disastrous panorama is the metabolic, destructive system of . . . capital and its model: capitalism” (p. 146).

Klein's *This Changes Everything: Capitalism vs. the Climate* is both a reflection of this explosion of critical work in environmental sociology in the United States, drawing at crucial points on Marx's environmental critique, and also an outgrowth of the climate movement itself in which Klein has long been a participant. (Although Klein

[2014:5–7] says that she only came to a full realization of the importance of climate change five years ago, I was present at a protest with her at the World Summit for Sustainable Development in Johannesburg, South Africa in fall 2002, where it was clear that she was on her way to learning that lesson.)

Klein represents a deeper, broader, more urgent approach to the question of climate change, in line with the ecosocialist movement System Change, Not Climate Change. She focuses not on neoliberalism, which she generally refers to as “deregulated capitalism,” but on capitalism itself. As she puts it, “The things we must do to avoid catastrophic warming are no longer just in conflict with the particular strain of deregulated capitalism that triumphed in the 1980s. They are now in conflict with the fundamental imperative at the heart of our economic system: grow or die” (p. 21). She makes it clear that she is not concerned primarily with the mechanics by which a transition to a low carbon, environmentally sustainable economy would take place, but rather with the issues of power and ideology (i.e., directly sociological questions) that have thus far prevented society from moving down that road. The principal problem is a system organized around capital accumulation within a finite environment. The result is a war between capitalism and the planet, in which thus far “capitalism is winning hands down” (p. 22). Until this issue is confronted and a new logic of change is implemented, even small steps in the direction of protecting the world's population become virtually impossible. Taking a cue from Marx's concept of metabolic rift (and much recent sociological literature), she argues, “The Earth's capacity to absorb the filthy byproducts of global capitalism's voracious metabolism is maxing out” (p. 186).

What makes Klein's book so indispensable for socio-ecological analysis is her very clear incorporation of the message that climate scientists have been delivering with ever-greater urgency. Boiled down to its essence, this message is that the planet is facing a point of irreversibility somewhere around a 2° Celsius increase in global average temperature, after which we will likely

lose our ability to limit climate change or to get back to a relatively stable 350 parts carbon dioxide per million in the atmosphere (which defines the Holocene, our geological epoch). After a certain point, “where the mercury stops is not in our control” (p. 13). That point, though it cannot be determined with precision, is fast approaching under business as usual. Climate science is haunted by the specter of such a planetary tipping point. Put another way, once climate change reaches a certain threshold, positive feedbacks on a planetary level—the decreasing albedo effect from the disappearance of Arctic ice; the melting of ice sheets in Greenland, Antarctica, and the world’s glaciers; the release of methane from the permafrost; a massive dieback in Amazon species; changes in the ocean’s capacity to absorb carbon—will cause climate change to spin out of control. If a 4° Celsius increase is reached, leading climate scientists such as Kevin Anderson of the Tyndall Centre for Climate Change Research argue that the continuation of human civilization will become virtually impossible (Klein 2014:13). There is, then, no time to waste in confronting the social system that is threatening us not only with climate change, but also *runaway climate change*.

Klein’s argument places its emphasis squarely on the nature of our social system. The first chapter of her book is entitled “The Right is Right.” By this she does not mean that the climate-change denialists are correct about the science, but rather that they are right (in a way that middle-of-the-road “warmers” are not) in recognizing that the changes required to avoid climate change are so massive that they would mean a revolutionary reconstitution of the socioeconomic order; that there is, in short, no compatibility between the law of value imposed by capitalism and the laws of nature imposed by the biosphere. Economic growth would need to be limited and forms of democratic planning would need to be introduced if we were to confront the planetary emergency head on. There is no other way of promoting ecological sustainability and enhancing social justice (each of which, she insists, requires the other). Klein argues that the plutocratic elites that now run our society can see the writing on the wall. They are digging trenches to defend a system

of which they are the main beneficiaries against the impending struggles of humanity to ensure its own survival. The “core problem” is “the stranglehold that market logic” has “secured over public life” (p. 19). Today’s global capitalism, she observes, is a “uniquely wasteful model of production, consumption, and agriculture” (p. 20). We can do a lot better.

Much of Klein’s book is spent driving home the point that climate change is really a problem of “the reigning economic paradigm”—an argument that she develops by looking at the role played by economics and ideology in the present system (p. 63). She also criticizes what she calls “the extractivist left,” particularly in Latin America, in which societies, caught up against their will in the self-same system, build their economies on the extreme extraction of fossil fuels and other resources rather than promoting a true ecosocial transformation (pp. 176–182). Latin America’s “Twenty-first Century Socialism,” she believes, captures part of the necessary transition (p. 182). But insofar as it is still entrapped in the larger world-capitalist growth economy, it is clearly not enough. “Magical thinking” is Klein’s label for another target of critique: the notion that such Lone Rangers as Big Green business, new physics-defying technologies, capitalist philanthropic foundations, and geoengineers will suddenly appear on the horizon complete with silver bullets to rescue humanity.

Klein’s solutions are movement solutions. The last part of her book thus documents the struggles of people who, despite the barriers erected by the system, are “starting anyway” (p. 291). She tells the stories of “Blockadia”: new climate warriors fighting the Keystone XL pipeline and blocking coal trains with their bodies; the progress of the fossil fuel divestment movement; the indigenous-led Idle No More, mobilizing against extreme fossil-fuel extraction in Alberta; and the global South’s struggle over ecological debt. These are democratic peoples’ movements that are trying to counter the power of capital with the power of humanity, inspiring greater collective action by their courage.

Klein’s conclusion, entitled “The Leap Years: Just Enough Time for Impossible,” is a firm declaration that there is still time

and that what is necessary can be accomplished by massive global struggle (p. 449). As Marx once observed, even when the tempo of historical change has slowed down so much that it would be wrong to conceive of “20 years as more than a day,” we can look forward to and promote the return of “days into which 20 years are compressed” (Marx and Engels 1975:468). Klein insists that “pockets of liberated space” won by relentless struggle can create the Archimedean point from which to leverage a winning-back of the entire global commons. “The stakes,” she writes, “are simply too high, and time too short, to settle for anything less” (p. 466).

Klein’s persuasiveness is a testimony to the influence that environmental sociology, with its critique of the logic of capital, has had on the climate movement. At the same time it reminds us how far removed sociology as a discipline remains from these pressing planetary issues and how wide the gap between a rapidly radicalizing environmental sociology and the larger discipline has now become. Meanwhile, with environmental sociologists underrepresented on the ground, a host of others, from physical scientists to science historians to science fiction writers, are trying to fill the gap in the sociological imagination.

*The Collapse of Western Civilization: A View from the Future* is, at the time of this writing (October 2014), the best-selling book on the environment on Amazon.com. Respected science historians Naomi Oreskes and Erik M. Conway provide a plausible and very sociological history of Western civilization up to its final collapse in 2093. This collapse is traced to the “Penumbra Age,” commencing in the 1980s, in which society put “capitalism”—defined as a “form of socio-economic organization” in which “the surplus value produced by workers [was] funneled to owners, managers, and ‘investors’” (p. 54)—before the preservation of a livable environment. Oreskes and Conway’s fictional future historian describes in realistic detail how reductionism in science, the growth of neoliberal capitalism, and a lack of sociological imagination led to the failure of Western nations to respond to climate change before it was too late—a failure graphically illustrated in their book by

a map of the underwater “former state of Florida (part of the former United States)” (p. 50). China, with its more centralized economy and penchant for planning, led the way in adapting to the new circumstances, relocating its population inland in response to sea-level rise and responding systematically to other threats, thereby ensuring a survival rate of 80 percent—far higher than elsewhere. Despite being “science fiction,” *The Collapse of Western Civilization*, which grew out of an earlier contribution to *Daedalus* (the journal of the American Academy of Arts and Sciences), is meant to be taken seriously in its role as a warning. The book ends with an interview of the authors in which they explain the bases of their concerns and projections.

With such worst-case scenarios now being broached by leading scientists and intellectuals on the left and by a rapidly radicalizing climate-change movement—encouraged by the path-breaking work of environmental sociologists—it is important that *all* sociologists now make the issue of the coevolution of society and nature their own. More important, it is time to act.

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