

## Climate Change and Socialism: An interview with John Bellamy Foster

Steve da Silva

**Steve da Silva<sup>1</sup> (SD):** Over the last decade you have emerged as a leading thinker in synthesizing radical ecology with the Marxist tradition. From *Marx's Ecology* (2000) to *The Ecological Rift* (2010) and everything in between, you've carried out the much needed intellectual work of recovering the overlooked ecological content of Marx's original thought, presenting us with a side of Marx that many Marxists may have not been aware of. You have also developed a 21st century dialectical materialism, particularly as it pertains to ecology and the unprecedented ecological crises that confront our species and earth. Could you briefly summarize the ecological crises that we confront, perhaps by explaining the concept of the "metabolic rift" and the various "planetary boundaries" that capitalism threatens to surpass or has already surpassed?

**John Bellamy Foster<sup>2</sup> (JBF):** Scientists led by Johan Rockström of the Stockholm Resilience Center now refer to nine "planetary boundaries" defined by the Holocene geological epoch in which civilization arose. These nine boundaries, all of which we have crossed or are in the process of crossing, relate to: climate change, ocean acidification, the destruction

- 
- 1 Steve da Silva is former PhD student who studied political economy and Canadian history in the Social and Political Thought program at York University. da Silva is a former editor of BASICS Community News Service, with which he remains people's journalist; an anti-imperialist activist within CUPE Local 3903, its First Nations Solidarity Working Group, and within the Canadian chapter of the International League of People's Struggles; and a young father within a fledgling Community Parenting Movement and its associated Parenting Coops.
  - 2 John Bellamy Foster is editor of *Monthly Review* and a Professor of Sociology at the University of Oregon. He is the author of *Marx's Ecology* (2000), *The Ecological Rift* (2010, with Brett Clark and Richard York); and *What Every Environmentalist Needs to Know About Capitalism* (2011, with Fred Magdoff) all published by Monthly Review Press. These texts and his frequent contributions to *Monthly Review* have made Foster one of the leading Marxist ecologists today, bridging the critique of capitalist political economy with a materialist understanding of the ecological crisis and the increasingly urgent argument for a revolution in social relations.

of the ozone layer, the loss of biological diversity (or species extinction), the disruption of the nitrogen and phosphorus cycles, the loss of land cover, the loss of fresh water, aerosol loading, and chemical pollution. We can see this as the development of various rifts in the biogeochemical cycles governing the earth system. The notion of a rift in the metabolism between nature and society (or in the universal metabolism of nature) goes back to Marx's *Capital*, where he constructed a theory of how the labour and production process under capitalism, which he defined as the metabolic interaction between human beings and nature, was disrupted by capitalist agriculture through the shipment of soil nutrients in the form of food and fiber to the cities where they could no longer be returned to the soil, and where they contributed to urban pollution. Marx's approach here, in which he introduced the concept of *social metabolism* and connected this to the earth metabolism anticipated the structure of all subsequent ecological systems theory and our understanding of ecological crisis. It is basically in such terms that science has come to understand our present global ecological predicament.

**SD:** A high-level climate change report came out in September 2013 from the United National Intergovernmental Panel on Climate Change (IPCC). What do you make of the findings in this report? Is the sense of urgency reflected in your work to be found there? Are the predictions and estimates you are framing in your work validated, downplayed, or challenged in this new IPCC report?

**JBF:** It think that the most important development in the new IPCC report as compared with previous ones is the establishment of a carbon budget based on the trillionth metric ton of actual carbon emissions, which marks the point of irreversible climate change associated with a 2° Celsius increase in average global warming. In *Monthly Review* we have been basing our analysis of the planetary emergency for the last three years on the carbon budget associated with the trillionth ton, using the same data. So this fits with how we have framed the problem in line with the scientific literature. At current rates of emission the carbon budget will be exhausted (the trillionth ton will be reached) somewhere around 2040 – so the urgency of finding a way of drastically reducing carbon emissions is very great. It is clear, especially given the short time span, that this cannot be accomplished by technological means alone, but will require conservation, changes in social relations, and the self-mobilization of the population. Kevin Anderson at the Tyndall Institute

for Climate Research says we need a moratorium on economic growth, something hard to think of in a capitalist society. Certainly, we need a revolution in our social priorities.

**SD:** I am curious if you have a sense of who has been more receptive to your work: radical environmentalists or Marxists, socialists, communists? Have you found it easier for radical environmentalists to embrace a dialectical materialist analysis and its historical socialist and communist conclusions, or for socialists and communists to apprehend the gravity of the ecological crisis and reorient their programs, strategic orientations, and concrete organizing accordingly? Also, do you think the chasm between class struggle militants and environmentalists is narrowing?

**JB:** There has been a broad receptivity of all of these groups to the interpretation offered in my *Marx's Ecology* and Paul Burkett's *Marx and Nature*, and to what has come to be known as the *theory of metabolic rift*, drawn from Marx. The biggest remaining hurdle for Marxists has to do with the issue of the "dialectics of nature," of which there is a long-standing criticism within Western Marxism. It was argued, following Lukács' *History and Class Consciousness*, that the dialectic applied only to society, not to nature – a position that led Western Marxists largely to ignore natural science and external (non-human) nature. Lukács in his later work offered a way out of this dilemma, arguing that the key to a qualified, materialist dialectics of nature was to be found by following Marx's stress on the labor process as the metabolic interaction between nature and society. Thus Marx's concept of social metabolism is now recognized to be of fundamental ontological, epistemological, and ecological significance, promising a wider critical synthesis within Marxian theory. I have discussed this recently at a talk I have given in Stockholm on October 20, and this will be published in more complete form in the December 2013 issue of *Monthly Review* under the title "Marx and the Rift in the Universal Metabolism of Nature."

**SD:** Environmentalists and leftists aside, have you observed a shift in consciousness concerning ecological crises in recent years amongst people more broadly? Here in Canada, there has certainly been a growing awareness of the destruction wrought by Alberta's tar sands. This is translating into popular resistance that cuts across and bridges, uniting Indigenous and non-Indigenous people, which is a very posi-

tive development. From Hurricanes Katrina and Sandy to fracking, I'm wondering if you can describe the pulse of people's consciousness in the United States concerning ecological issues? Or, do the existing rising environmental currents reside within a NIMBY-istic framework?

**JBF:** I wrote an article entitled "The Fossil Fuels War" in the September 2013 *Monthly Review* that dealt with these issues. There are a lot of environmental activists who understand the necessity of blocking tar sands and other unconventional fossil fuels if we are going to have a chance of avoiding breaking the carbon budget. If we were to use all of the tar-sands oil in Alberta we would cross the point of irreversibility creating devastating conditions beyond our control. As a result there is a fierce battle taking place across North America to oppose the Keystone XL Pipeline. In Canada, the resistance is being led by Idle No More, arising out of the Indigenous communities, around which a larger alliance has developed. This is not simply a "Not in My Backyard" or NIMBY movement, but a real revolt – though one that has huge obstacles in front of it. People are already physically opposing the Keystone XL Pipeline in its critical southern leg.

**SD:** From the Bolivarian revolution in Latin America to the Arab Spring, have you any sense of the extent to which the mass movements and popular uprisings sweeping the world in recent years are developing a consciousness of "the ecological rift."

**JBF:** There are some indications of this. I believe that *La Via Campesina*, the international peasant's movement, has embraced the concept of the metabolic rift in some of their work. The Vice President of Bolivia, Álvaro García Linera, has drawn on Marx's metabolism concept in his discussion of ecological issues. Marx's notion of social metabolism has played a big role in intellectual discussions and movement activities in Venezuela and Brazil, mainly through the influence of István Mészáros's work. Samir Amin has been emphasizing Marx's distinction between wealth and value as part of an ecological argument that he has been advancing within the World Forum for Alternatives, based in Senegal. In China the metabolic rift concept is now central to discussions of ecological Marxism. How much these ideas have actually filtered down within the movements globally I don't really know. But the kind of theory we are talking about, which aims at a more synthetic view of material-ecological conditions, erasing the traditional distinctions between workplace and

environment, for example, is itself a reflection in part of the dire conditions we face and the convergence of economic and ecological crises in our time.

The fact that Marx's classical ecological critique is being rediscovered in this context does not alter the fact that the motivation for such analysis arises from the planetary emergency of our time, in which all that is solid in the material existence itself is seemingly melting away and people are at last forced to come face to face with the dire consequences and the contradictions of a whole epoch. It is hardly surprising that we are now seeing what may be the emergence of a new environmental working class worldwide, reminiscent of the early industrial revolution, where the struggles were equally based in factories and communities; and that this is part of what has contributed to the growing unrest in emerging economies such as Egypt, Brazil, Turkey, and China.

**SD:** The argument has been put forward in the new volume *Catastrophism* (2013) by Sasha Lilley and others that 'catastrophist' discourses are more harming than they are helping the Left. Certainly, the themes of the end times and apocalyptic scenarios are ubiquitous in the cultural apparatus of capitalist-imperialist North America – from the apocalypse genre in Hollywood to the increasingly dominant conspiracy theories being propagated by rightwing libertarianism – which suggests the use of catastrophist discourses as a reactionary ideological form. As dialectical materialists, how should we cut through the consciousness of defeatism, apathy, and helplessness that *Catastrophism* takes issue with without downplaying the actual ecological crises on the horizon?

Also, though you seem to have been spared the 'catastrophist' label in Lilley *et al.*, there seems to be an implicit critique of your form of presentation in their work. What do you make of their presentation of 'catastrophism' and their argument that catastrophe-mongering on the Left is a dead end strategy?

**JBF:** The right introduced the term "catastrophism" to attack the environmental movement and the scientific community. There is no such thing as catastrophism anywhere on the left, since this would be a contradiction in terms. The slogan of the Green Left in Australia is "System Change, Not Climate Change." It is the global scientific consensus that tells us that we are headed towards catastrophic developments on a planetary level *if we don't alter our relations with nature*. To deny this is to deny science itself, and reality as we know it. To argue, as the world

scientific community does, that we are facing a certain planetary disaster if we continue along the lines of *business as usual*, is merely to insist that the latter must change.

The small number of individuals on the left who have been saying lately that we have to avoid any kind of environmental “catastrophism” seem mostly to be people who are beginning to take the environmental problem seriously for the first time, and yet who are still reluctant to acknowledge the severity of the crisis – or for some reason would rather deny it. So their first reaction is to say that it is all exaggerated – or, alternatively, that telling people the truth in this area should be avoided, since they will then simply freeze and be unable to act. But what is really making it difficult for the population to act in response to this crisis is not the immobilizing force of so-called “catastrophism,” as has been lately suggested, but rather the power structure of capitalism itself, which is currently blocking at every level and by every means possible the necessary radical shift to a sustainable society.

I know of only one case on the left where I myself have been accused of falling prey to a mindless “catastrophism” and that is in an article, entitled “Transcending the Metabolic Rift,” that my friend Jason Moore wrote in the January 2011 issue of *The Journal of Peasant Studies*, where he wrote: “A theory of capitalism that identifies the convergence of rapidly explosive contradictions need not succumb to catastrophism. (A world that runs like a red thread through Foster’s work.)” I was quite bemused by this because I knew of no occasion over the years where I had used the word “catastrophism” – except of course to deny it recently in the face of such criticisms. In this sense I would draw a sharp line between talking about likely catastrophes if society continues to follow a certain course – *when the object is to change it* – and what is being called “catastrophism,” or a position that vacates all hope. I think it is incontrovertible that for the *first time in human history*, beginning in 1945 with Hiroshima, and since then with the disruption of the biogeochemical cycles of the earth, humanity has created the conditions for its own potential annihilation as a species – and certainly the destruction of civilization as we know it. This conclusion is one of the most startling discoveries of modern science. Nothing could be more opposed to historical materialism than to deny such conditions.

**SD:** The perennial challenge of socialist/communist strategy has always been to identify concrete struggles around which people can be rallied around on a progressive basis that moves them in the direction of confronting the broader social contradictions that make up capitalist-impe-

rialism. The challenge of rallying around “the ecological rift” seems to be the equally remote and seemingly intangible threat it poses. The incrementally minute changes year-over-year just don’t seem to convey the truly catastrophic consequences of moving beyond the “tipping points”. Where do you see the points of intervention being taken up or that have yet to be utilized for generating a stronger ecological consciousness?

**JBF:** I don’t think it is remote at all. This ecological rift is everywhere apparent today. Extreme weather events which science has traced to climate change are occurring all over the globe now. Water shortages, crop failures, destruction of forests, loss of biological diversity, global land grabs, are becoming ubiquitous realities. At the same time the system is searching more rapaciously for fossil fuels, leading to fracking, ultra-deep-sea oil drilling, exploitation of tar sands oil, etc. People’s lives are being affected in dire ways, and countless numbers of people across the globe are engaged in struggle. My argument is that the material conditions of the globe and the world economy are being undermined across the board creating the conditions for the emergence of an environmental working class and a broader, co-revolutionary struggle. The struggle is taking more rebellious forms, as one would expect, in the global South, but it must be universalized everywhere on the planet if we are to succeed. Marx’s concept of the metabolic rift is useful in this context because it helps us understand how this crisis is structurally related to capitalism itself.

**SD:** My final question concerns the capacity of generalized international monopoly capitalism to meet the looming crises in a manner than strengthens its system. You address the rise in the exploitation of unconventional oil sources in *Monthly Review* November 2013, a course of action that is hurling us even more rapidly off the “carbon cliff” and that is ultimately unsustainable. But what about nuclear energy? Capitalism can’t escape the second law of thermodynamics, which states that energy in the universe proceeds in one direction from low to high entropy, but it does seem intent on trying to tap energy sources at a whole new level. What are the possibilities and risks associated with nuclear? Is this the site of capitalism’s next “technological fix”?

**JBF:** Nuclear energy has been promoted by some climate scientists as a partial solution to the carbon problem. In the past I have called all attempts to go in this direction a Faustian bargain. To go in this direction

would be to seal our doom. One is reminded of the sign at the entrance to hell in Dante's *Inferno*: "Abandon every hope, ye who enter here." But in truth nuclear energy is not really on the table anymore where carbon emissions are concerned. It takes a long time to build and put into operation new nuclear power plants, they are notoriously expensive, and they raise all sorts of security issues. Can one really imagine the global expansion tenfold of nuclear power throughout the world? The simple truth is that there is simply not enough time to go in that direction, if we are trying to avoid breaking the carbon budget. The only real answers are alternative, non-carbon, energies coupled with conservation on a huge scale, requiring the transformation of social relations. Of course, capitalism is not going to go in this direction. Its last-ditch attempt at a "technological fix" is more likely to proceed along planetary geoengineering lines. One is reminded that Marx and Engels in *The Communist Manifesto* invoked the Sorcerer's Apprentice when addressing capitalism. For those with any sanity left the only answer to our problems lies in an ecological and social revolution on a global scale. Humanity as a whole has to reenter history once again.