MINTERVIEWS!!!

Wall Street is a Way of Organizing Nature

An interview with Jason Moore

Jason W. Moore is a world historian and political economist in the Department of Historical, Philosophical, and Religious Studies, and Umeå Studies in Science, Technology, and Environments, at Umeå University in Sweden. He has published widely on globalization, the history of capitalism, and environmental history and is presently completing Ecology and the Rise of Capitalism for the University of California Press. He is coordinator of the World-Ecology Research Network. He was interviewed by Tom Keefer in February 2011.

You've challenged conventional views of environmental problems and environmental crises, including many radical perspectives. How do you understand the ecological dimension of the crisis today?

I love the way that you put this, the ecological *dimension* of the crisis today. But even this doesn't go far enough. "Ecology" is not a specific part or form of crisis. It is a way of seeing the manifold expressions of the crisis today – from climate change to financialization to food sovereignty – as bundles of human and extra-human natures. Is the reality of one billion hungry people a social problem? An ecological problem? Where does the social problem end and the ecological problem begin? What about financialization and the

cascading crises in global finance since 2008? The latest wave of financialization, which has its origins in the accumulation crises of the 1970s, is premised on turning income flows of every kind imaginable into a security, a claim on that income. Take a city that floats a bond to build a new sewer system. Municipal taxation becomes directly integrated into the world financial system. Is this a social issue? An environmental one?

My point is simple. There is no social dimension to these problems; there is no environmental dimension. At least, not in the way these adjectives are typically understood. The securitization of municipal bonds is a way of organizing the relations between humans and the *rest* of nature. The dietary immiseration of one billion people is, in the same fashion, a consequence of neoliberal food policies and pressures that are part of a mighty project to reshape all of nature.

I consider ecology to be a "way of seeing." *Ecology* is typically used interchangeably with a series of terms that are familiar to all of us – nature, the environment, and so forth. It does not usually include human activity, for which we reserve a whole series of other familiar terms – culture, economy, society, politics. At the same time, most of us now understand that there is no culture, economy, society, or politics that operates independently of biological and geophysical relations; the web of life. This includes the ways that our bodies articulate with other humans and the rest of nature.

The difficulty is that we don't yet have an adequate language to talk and act and analyze as if humans and the rest of nature mutually constitute each other. One of the big things modernity has done is train us to overlook the basic messiness of these relations. This training, this mis-recognition, is the Cartesian binary. The term derives from René Descartes' famous argument about the separation of mind and body, which is then extended to the separation of nature and society. Descartes wrote most of his major works while living in the Dutch Republic, what Marx called the "model capitalist nation of the 17th century." It was the epicenter of a world-ecological revolution that stretched from southeast Asia to the north Atlantic. The relation between Descartes and Dutch capitalism is crucial, since new ideas of nature and the material transformations of capitalism are very closely joined. The "material" and the "symbolic" form an organic whole. Capitalism as environmental history involves not only massive deforestation, pollution, food insecurity, and resource exhaustion, but also a new way of seeing the world. Descartes highlights one

aspect of this. We could also point to the emergence of perspective in Renaissance painting, with direct implications for making maps; a new form of time embodied in the mechanical clock, with direct implications for controlling the labour process; and new forms of cataloguing both humans and nature in quantitative ways, ranging from census-taking to the global cataloguing of botanical life. Each of these transformations encouraged and enabled a way of seeing both humans and the rest of nature as faceless resources to be exploited by capital.

The Cartesian binary says, more or less automatically, that something like unemployment insurance is a social issue, and something like climate change is an environmental issue. But this is completely arbitrary. It distracts us from asking how configurations of power, wealth, and nature are inscribed in everything that humans do. In world-ecological perspectives, unemployment and climate change are better explained by viewing them as bundles of human and extra-human nature.

The difficulty, as I mentioned, is that we lack a conceptual language to talk about these "bundles." Radicals have always emphasized the need to "name the system." This is a way of saying that we need concepts and vocabularies to bring together aspects of reality that are obscured by bourgeois, or modernist, thought. Capitalism, patriarchy, and imperialism are concepts that allow us to connect what is disconnected in mainstream discourse. Greens have wrestled with this issue for a very long time. How might we go about learning a new language that unifies the relation of humans with the rest of nature?

My framing of the word ecology is one response to this question. My use of the term builds from a nice word I borrow from the Greek philosopher and botanist Theophrastus: the *oikeios*. The *oikeios*, for Theophrastus, is the relation between a plant and its environment. It's a creative relation that gives rise to specific living creatures and to specific environments, which of course include lots of living creatures. The Left needs a concept that keeps this creative relation front and centre. The danger is that we rely on a way of thinking and on concepts that were forged during the rise of capitalism – like society (humans without nature) and nature (nature with humans). There may well be a better term for this creative relation, but I think the *oikeios* is a useful way to begin.

This beginning opened my eyes to capitalism as "world-ecology." Capitalism is in the first instance world-historical. Marx and Engels, in a remarkable passage written in the 1840s, argued

that daily life under capitalism gets more and more wrapped up with the flux and flows of world transformations. All of us live this today. Capitalism is ecological in the sense of the oikeios; it is a way of harnessing that creative relation in the service of the endless accumulation of capital. The world-ecological perspective says, in short, that the great movements of modern world history - imperialism, transitions in family and gender relations, commodification, financial expansions, and much more - are messy bundles of human and extra-human relations. The theory of capitalism as world-ecology starts from a simple proposition: just as a farm is a way of organizing nature, so is a market, a financial center, a factory, or an empire. The production of nature has been as much about the factories, stock exchanges, shopping centers, slums, and suburban sprawl as it has been about soil exhaustion and species extinction. Capitalism as world-ecology therefore seeks to connect what is typically disconnected, even in the work of radicals: the accumulation of capital, the pursuit of power, and the production of nature.

The capitalist world-ecology is a kind of gravitational field. At its vortex is the commodity. Capitalism's basic tendency, the commodification of everything, is often considered a social process; in fact, it is powerfully ecological. The commodification of everything says that human nature, as labour productivity, is what really counts. Extra-human nature is literally devalued, mobilized in support of rising labour productivity. Capitalism is the gravitational field within which the "big picture" historical movements of the past five centuries have unfolded. Financialization, shifts in family structure, the emergence of new racial orders, colonialism and imperialism, industrialization, social revolutions and workers' movements – these are all world-ecological processes and projects, all with powerful visions for re-ordering human- and extra-human natures. Capitalism, in other words, does not *have* an ecological regime; it is an ecological regime.

This has been much easier to say in general terms than to fundamentally rework the narratives that guide our thinking about the modern world – nationalism and nation-building, commercialization, imperialism, industrialization, family formation, and inequality. With a few exceptions, these narratives treat such "big picture" processes as if they were cooked up in a social laboratory and then applied to the rest of nature. Sometimes, we get a theory of converging crises, which argues that the present global depression – as an economic crisis – reinforces ecological

crises. But once we take a closer look at these so-called economic problems, we find that all of them concern the ways that humans relate to the rest of nature. Financialization, in the neoliberal era, has penetrated everyday life as never before through pensions, consumer credit, and school financing.

I use ecology as a way to talk about the relations of the whole, and to illuminate humans relations with the rest of nature in specific ways – US suburbanization after World War II, the shareholder value movement in the neoliberal era, or the rise of Dutch world power in the 17th century. These are all "packages" that emerge through this relation, the *oikeios*. The intention is to transcend this curious firewall that forces us to understand the social and the environmental as independent from one another. "Social" and "environmental" histories look a lot different if we understand them in terms of unified bundles of distinctive relations. The histories of indigenous struggles for autonomy, of labour movements, and of financial crises all begin to look so much different when we move back and forth between biophysical and human natures.

How does this understanding of ecology relate to the ongoing financial crisis?

I would say two big things. First, there is no singular ecological crisis. Second, the financial crisis *is* an ecological crisis in the terms I've outlined. My view can be stated simply: Wall Street is a way of organizing nature, differently but no less directly than a farm, a managed forest, or a factory. The financial speculation that reinforced underlying contradictions in the production of food, energy, and metals between 2003 and 2008 – the longest, most volatile, and wide-ranging commodity boom of the 20th century – was a decisive moment of world-ecological crisis.

The point is crucial, because there is so much confusion over the nature of capitalism. Capitalism is commonly understood as the sphere of commodity production and exchange; but this ignores the even more expansive *relations of reproduction* necessary to sustain commodification. Capitalism as world-ecology is therefore a dialectic of plunder and productivity – appropriating nature's free gifts outside the commodity system in order to maximize labour productivity inside. Plunder, or appropriation, exhausts the non-commodified relationships that allow capital accumulation to proceed. Financialization, allied in the closest possible fashion with the military capacities of imperial states, has accelerated this process.

44 UPPING THE ANTI, NUMBER TWELVE

Financialization now seems to be actively driving the "end" of cheap food, resources, water, and pretty much everything else. The large-scale penetration of finance capital into the global reproduction of human and extra-human nature represents a new era of nature-society relations in capitalism. From the agrofood sector to working class households that depend on credit cards to pay groceries and medical bills, global nature has become dependent on a circuit of capital premised on accumulation by financial means rather than industrial and agricultural production. Finance capital in the neoliberal era has penetrated everyday life as never before and, in so doing, has sought to remake human and extra-human nature in its own image. Since the 1970s, finance capital has decisively reshaped the rules of reproduction for the totality of nature-society relations – extending, horrifically, to the molecular relations of life itself.

Your analysis of the history of capitalism looks at how capital appropriated new resource frontiers in order to ensure its development. What are these resource frontiers and how did capitalism take advantage of them?

Civilizations long before capitalism expanded across space, and drew in vital resources necessary for war, commerce, and culture. *Resource* frontiers are an enduring feature of human civilization. For all their variation, there was a common dynamic. Populations grew within established zones of settlement leading to various overflows of people into new frontiers. Commerce then followed these settlement frontiers. With the rise of capitalism after 1450, however, we see something radically different. We see a shift from resource frontiers to *commodity* frontiers. The global expansion of the commodity form, embodied in sugar plantations and the great silver mining centers of Latin America during the 16th and 17th centuries, became a powerful lever of demographic change. Instead of commerce following people as had been the case in premodern civilizations, people now followed the commodity.

This world-historical inversion of the relation between population and commodification was not simply a market-based process. Rather, these commodity frontiers embodied capitalism's productive dynamism in a deeply prefigurative way long before the Industrial Revolution. This productive dynamism was premised on the peculiar reconfiguration of nature that enabled the rise of capitalism. At the core of this reconfiguration was the prioritization of labour productivity over land productivity. In

regions incorporated into the capitalist world-ecology through these commodity frontiers, the scale and speed of landscape transformation was unlike anything known before in human history.

This is well-known but poorly understood. Landscape transformation under capitalism is so rapid and globalizing because the system is premised on the rapid consumption of extra-human nature to maximize labour productivity. As we know, this hardly benefits the vast majority of humans who are subjected to the same treatment, exhausted, and externalized by capital just as readily. This is why the language of the *oikeios*, which illuminates the differentiated but essential unity of human and extra-human nature, is so important. Historically, the exhaustion of these human and biophysical natures becomes significant only when it begins to fetter labour productivity in a serious way. At this point, regional competitiveness falters, and capitalists and empires begin to look for new frontiers.

This was what happened, for example, in the shift from Brazilian to Caribbean sugar during the 17th century. The result was a succession of commodity frontier movements as one region after another was plundered and exhausted. And these regions were indeed plundered, as Third World radicals have long argued. But the dynamism of capitalism comes from the mobilization of the fruits of plunder in the service of productivity-maximizing innovations. This dialectic of plunder *and* productivity is at the heart of capitalism's recurrent waves of geographical expansion; the savage character of neoliberalism's displacements and redistributions owes much to the relatively few opportunities for frontier expansion since the 1970s.

The theory of commodity frontiers first took shape out of my study of the history of sugar plantations, beginning in the 15th century. Sugar consumed forests, soils, and workers (usually slaves) at a ferocious pace. Consequently, between 1450 and 1800, the leading sugar producer shifted every half-century or so. There was a profound geographical restlessness to this history. Sugar production moved, in roughly half-century cycles, across the Atlantic world after 1450, from Madeira to São Tomé, enclosing in successive turns Pernambuco and Bahia in Brazil, then Barbados, and then to the wider Caribbean in places like Jamaica and Cuba.

Nor was sugar exceptional in this regard. Silver mining flowered in central Europe during the late 15th century, moving restlessly from one site to another, before relocating halfway across the world to Potosí in the Andes in the 1540s. Potosí, in turn, gave way

to the great silver mines of Mexico in the 18th century. Commodity frontiers based on forest products, fish, iron, and copper moved with the same rhythm: occupying, producing, and exhausting the ecological formations of the North Atlantic. The rise of capitalism was premised on this recurrent frontier movement. Capital was constantly in search of greenfields, where commodification was either non-existent (as in the New World) or very low (as in Scandinavia). In these places, a small amount of capital could appropriate a very large basket of nature's gifts: cheap forests, fertile soil, workers unable to offer effective resistance, and so forth.

Commodity frontiers propelled two big ruptures with premodern civilizations after 1450. First, biological and geological surpluses were extracted in the quickest way possible. Depletion, waste, and pollution were of little concern so long as they did not undermine profitability. But the very dynamism of capitalist production meant that planters, mine owners, colonial regimes, and many others were compelled to exhaust the very webs of life that sustained regional commodity booms. Sooner or later, the era of easy profits came to an end. Silver veins were depleted, trees were cut down, soil fertility became exhausted, and peasantries were transformed. This translated into declining labour productivity, and the region's competitive position declined along with it. In the early modern era, it was often a story of deforestation. Brazil's Atlantic rainforest and the forested zones of Poland's Vistula Basin. were reduced on a scale – and at a speed – unprecedented in human history. But it was also a story of class struggles from below: the German Peasants War of 1525 was partly a revolt against the forest enclosures driven by metallurgical capitalism. To make a long story short, the rapid appropriations of commodity frontiers undermined the socio-ecological conditions of profitability, typically within 50-75 years in any given region. These conditions, as I've said, were not simply biophysical; scarcities emerged through the intertwining of resistances from labouring classes, landscape changes, and market flux – all specific bundles of relations between humans and the rest of nature, specific forms of the oikeios.

What kind of opportunities does capitalism have to escape this current crisis? Do biotechnology, nanotechnology, or a transition to solar energy offer a solution to the crisis faced by capital and nature?

Faith in capitalism's technological dynamism remains very strong. Along with "capitalism," "development," and "nature," "technology" is one of the most complicated words in our modern vocabulary. The world-historical genius of capitalism, in contrast to all previous world-ecologies, has been its capacity to maximize labour productivity by drawing in massive flows of nature's "free gifts." This is a term that Marx used to refer to capitalism's appropriation of sources of wealth that it did not produce – the difference, for example, between an old growth forest and a tree plantation. These gifts included natural resources like timber and coal, but also included human nature in the form of labour – and I would also include the reproduction of labour power.

An abundance of these gifts has fueled capitalism's technological dynamism, which is directed at the development of new machines that allow a geometrically rising volume of extra-human nature to attach to an average hour of work performed. More stuff can be produced in less time. Good examples include the mass production systems of 20th century Fordism and successive agricultural revolutions – from England to the American Midwest to the Punjab – over the centuries. The history of innovation in a capitalist sense is about great leaps forward, not incremental change. However, although it was widely heralded in the 1970s, a new technological revolution in labour productivity does not seem to be coming to save the day.

Neoliberal capitalism has been characterized by a remarkably uneven pattern of scientific-technological development. On the one hand, technologies of surveillance and mapping, transport and communication, and data assessment and calculation have developed rapidly. These innovations have been central to financialization, "just-in-time" production systems, and monitoring and suppressing opposition to the neoliberal project. On the other hand, technologies associated with commodity production in agriculture and industry have demonstrably failed to deliver the kind of revolution in labour productivity that has underpinned all great eras of capitalist development. This is important, since the productivity of labour is capitalism's metric of wealth. This failure to launch a new revolution in labour productivity is at the heart of present-day capitalism's technological exhaustion – the exhaustion of the relations that enabled modernity's successive great leaps forward in socio-ecological surplus.

Linked closely to the declining ecological surplus, this technological exhaustion figures prominently in neoliberalism's well-known bias toward dispossession and rising inequality. This redistribution of wealth is not confined to human nature alone – it's

not merely a matter of rising "social" inequality. A decisive feature of the neoliberal project has been to create new conditions for the "four cheaps" – cheap labour, cheap energy, cheap food, and cheap resources. Together, financialization (including new debt regimes), imperialist counter-revolution, and the imposition of "free trade" on the periphery were decisive in enabling neoliberalism to create these four "cheaps." Food prices declined sharply from the 1970s until the commodity boom of 2003-08; oil prices stabilized at a relatively low level, with episodes of volatility, for two decades after 1983. Neoliberalism's grand achievement was therefore to drive down the costs of strategic inputs to commodity production without a revolution in labour productivity.

The neoliberal failure to launch a new scientific-technological revolution is rooted in the hegemony of finance capital over capital as a whole. Finance capital is notoriously impatient. It is unwilling to tolerate the middle-run investments necessary to propel a revolution in labour productivity. Today, this impatience is fused with the deepening exhaustion of frontiers of appropriation. In previous eras, these frontiers were crucial sites for epoch-making innovations – steam engines were developed at pitheads where coal was cheapest. The result has been a progressive contraction of opportunities for productivity-maximizing innovation.

This technological exhaustion is closely connected to the exhaustion of the commodity frontier strategy. The situation of the world food system is a good example. The era of not only cheap oil, but also cheap food, may now be over. The Organisation for Economic Co-operation and Development forecasts real price increases of 10-35 per cent for key food commodities over the next decade. It is a forecast based on the wildly optimistic expectation that agricultural yield growth will follow the "historical trend" of 1960-2000. But yield growth has been slowing for a quarter-century. The so-called biotech revolution has been unsuccessful at reversing the decline. Global warming has only just begun to kick in, in terms of its impact on agriculture; however it is already implicated in what plant ecologists call "yield suppression" for all major cereal crops.

The UN Environmental Program issued a report in 2009 that nicely summarizes some of the more-or-less intractable problems of food in the late capitalist world-ecology: reduction in global cropland by 8-20 per cent by 2050; mounting pressures on aquifers and glaciers, signaling looming water scarcity; the proliferation of invasive species, and rising biological resistance to pesticides and

herbicides; rising fertilizer prices, and their declining effect on yield growth; escalating competition for arable land from agrofuels (already one-third of the US maize crop in 2008); and a decline in net primary productivity across 12 percent of the planet, directly impacting nearly one-fifth of the world's population. However, the report does not factor in the growing global movement for food sovereignty. Expressed most dramatically by Via Campesina, which challenges the fundamental logic of capitalist agriculture, this movement pushes for a democratic alternative to the neoliberal food regime.

These world-ecological tensions indicate that cheap food will not be returning anytime soon. This is bad news for capitalism, as it experiences the most serious depression since the late 19th century. The difference is that in the late 19th century, world cereal prices declined significantly. This cheap food underwrote a rapid shift in the global center of gravity, which moved from Britain as the "workshop of the world" to the US as the world's "assembly line." What is the analogous process for today's workshop of the world? If the crisis of neoliberalism is in fact a developmental crisis open to resolution within the capitalist mode of production, we would expect to see an agricultural revolution taking shape in China, the most dynamic new center of accumulation. But, following the burst of productivity and aggregate output in the 1980s, there's little to suggest that China is on the brink of an agricultural revolution capable of feeding the world and leading capitalism to a new golden age.

One of your central arguments about the crisis has to do with the notion of a "crisis of underproduction" in which capital is forced to substitute increasing amounts of capital and labour for the diminishing "free gifts of nature" it used to appropriate. How does this perspective differ from Malthusian notions and the "limits to growth" arguments that are popular in some discussion of peak oil?

Systems ecology (limits to growth), peak oil and "peak everything," and neo-Malthusians (like Paul Ehrlich) have something powerful in common: the idea that nature is an external and essentially ahistorical limit. It's true that there is a finite amount of solar energy and that there are biospheric limits of some sort; however, while important, it doesn't in itself tell us very much.

The problem with Malthus is that he removes scarcity from history. If you remove scarcity from the actually existing relations

of power and production, then scarcity becomes abstract. This is where Marx is so helpful. While the majority of people living under capitalism have always been subjected to deprivation and scarcity, Marx highlights how the only scarcity that capital cares about is the scarcity that makes vital raw materials expensive and customers too poor to buy commodities.

Capitalism presents us with an absurdity: wealth is accumulated for the purposes of accumulating more wealth. Marxists use a lot of different terms to deal with the question of capitalism's recurrent crises, but they all pivot on the central contradiction that the accumulation of wealth is an end unto itself. At some point, a sufficient mass of capital cannot find profitable investment opportunities, and this is overaccumulation. Financial activities – especially the invention of new financial products that can take any income stream and turn it into a commodity – are good examples of capital's response to overaccumulation. But sooner or later the bills come due. And this is what we have seen with the fiscal crisis that, since 2008 has cascaded into the weaker Eurozone states, most recently Ireland.

Overaccumulation is sometimes confused with overproduction. Overproduction is a situation in which there are too many commodities and too few customers. Marxists debate the precise operation of this tendency, but that's the essence of the problem because overproduction is only one part of the dynamic. The other part is underproduction, a concept that Marx uses in a very specific way.

Marx's theory of underproduction – he calls it a "general law" of accumulation – basically says that the cheaper the inputs (energy, raw materials) the higher the rate of profit. The dynamism of capitalist production tends to outstrip the system's capacity to provide vital inputs, which leads to renewed pressure to find new sources of cheap food, metals, energy, and so forth. These are the first sectors to be restructured whenever a region has been incorporated into the world-ecology. In identifying underproduction, Marx was specifying a tendency that works alongside overproduction. It's not one or the other but a matter of their relative weight within an organic whole. Since the early 19th century, the great accomplishment of capitalism has been to reduce the cost of inputs, while simultaneously expanding the material volume of commodity production. Hence the centrality of the commodity frontier in modern world history, which has

enabled the rapid appropriation – with minimal capital outlay – of epoch-making ecological surpluses.

From this perspective, the ecological limit of capitalism is capital itself. How do we know an ecological crisis when we see one? For much of the left and the mainstream too, the answer seems to be more or less like the definition of pornography - I know it when I see it. All of us can mobilize a huge list of biophysical problems and argue for tipping points in many areas of socio-ecological life. I point instead to the relations that maintain and reproduce the capitalist world-ecology. Capitalism is premised on the endless accumulation of capital, which implies - and indeed necessitates - the endless subordination of nature's diversity to the commodity form. This is one of the essential features of ecological degradation but, strangely, one of the least theorized concepts in green thought. Basically, the generalization of the commodity form entails treating all of nature as an interchangeable part. This is the tension between what Marx calls the "natural distinctiveness" and the "economic equivalence" of every specific commodity. This drive toward interchangeability is starkly revealed in cash-crop monocultures but, of course, has many other forms. The project of interchangeability, of simplifying nature increases capital's control and profitability. The project maximizes short-run gains. But it does so at the cost of exhausting the webs of life necessary to maintain steady and reliable production over the long run. The problem for capital is that this strategy, which has yielded impressive gains for the better part of six centuries, is now running out of gas. Aquifers from China to the American Midwest are being depleted, oil is becoming more costly to extract, all sorts of metals have passed the point of easy extraction, and so on.

Your analysis has tended to focus upon ecological crisis from the standpoint of capital accumulation. How could your analysis be adopted to look at the current crisis from the perspective of global resistance to capitalism?

One of the first things we can do is abandon the idea that some social movements are "environmental" and others are not. It's an arbitrary divide. It always struck me as a bit odd that a social movement seeking to protect habitats for owls or bears is "environmental" while a movement seeking to protect habitats for humans – say, by resisting the tidal wave of home foreclosures in the US – is somehow "social." A home, an apartment complex, a factory, an office, a fast-food restaurant: all are "environments."

Humans interact with, and refashion, all of nature in these activities – human nature included.

Early in my intellectual development, I was influenced by environmental justice movements in the US. These movements connected the racial order with toxification. Racial orders and racism were bound up with environmental history. "Race" and "ecology" were not independent processes that just happened to interact; they made each other. Coming of age in the Pacific Northwest in the 1990s, I learned much from initiatives to connect organized labour with green movements. Although this was a fraught experience in practice, it opened a new vista: class relations emerged through the transformation of extra-human nature. Just as the northwest's mighty timber frontier (and its subsequent exhaustion) was a class project, so was its resolution. More recently, I've been captivated by all manner of progressive and radical initiatives around humanity's relation to food. The family of movements grouped around Via Campesina and its call for food sovereignty, for example, is not only a frontal assault on cheap food - a pillar of every era of capitalism - but also a call for transcending the cheap food regime which simultaneously devalues human and extra-human nature.

My intention has been to illuminate specifically *capitalist* forms of crisis from the perspective of the *oikeios* by approaching the dynamics of capital accumulation as a kind of gravitational center that survives by turning the rest of the world into a commodity – a vast storehouse of interchangeable parts. In doing so, it becomes apparent that capital undermines the very webs of life that sustain its project. The accumulation of capital doesn't explain everything, but it's hard to say much about the history of the past five centuries without understanding the contradictions of accumulation.

Although accumulation is insufficient on its own, it nevertheless is an indispensable way of thinking about class struggle. Joseph Schumpeter noted that one of Marx's enduring contributions was to dialectically bind the "economic" category of labour and the "sociological" category of proletarian. Similarly, the world-ecological perspective aims to unify the accumulation of capital and the production of nature with class struggles from above and below. The emergent contradictions of the accumulation process provide the point of departure for this larger project. The hope is to unify the history of capitals, human and biophysical natures, and class struggles as mutually constituting; they all make each other.

What does my analysis of the present crisis offer to the world's anti-systemic movements? I would point to a way of seeing the present crisis grounded in the long-run patterns of evolution and recurrence in the capitalist world-ecology. But first, an observation: the signifier "crisis" is rarely deployed with less historical and conceptual precision than it is in critical environmental studies. Partly, that is, because the argument for crisis is too often based on a catalogue of environmental problems, whose gravity cannot be overestimated. We very much need, but don't yet have, an adequate theory of world-ecological crisis.

Second, a distinction that yields an important question: we can observe two great forms of world-ecological crisis - epochal and developmental. Capitalism, from its origins in the 16th century, emerged out of an epochal ecological crisis. This was the crisis that marked the end of European feudalism in the 14th and 15th centuries. The pillars of European feudalism - the Church, the states, the city-state capitalists, the lord-peasant relations - were crumbling and could not be re-established. These four pillars were all socio-ecological; that is, all were implicated in the reproduction of the symbolic and material relations that governed feudalism's ordering of human- and extra-human nature. Soil exhaustion was indeed a consequence of feudalism's socio-ecological contradictions, but so were the proliferation of peasant revolts and the escalation of warfare. These too were world-ecological processes. Since 1492, capitalism has developed through successive developmental ecological crises. It developed through cyclical ecological crises, not in spite of them. Long centuries of accumulation were made possible through new crystallizations of nature-society relations that extended from agricultural revolutions to new centers of world finance. We must therefore ask: does the present conjuncture represent a developmental crisis that capitalism can resolve through further commodification and the massive appropriation of nature's gifts, or are we now witnessing an *epochal* crisis of capitalism? ★







UPPING THE ANTI

...a journal of theory and action...

Keep Radical Publishing Alive! Become a UTA Sustainer!

Radical periodicals are in peril. Over the last five years, we've witnessed many of our friends go under.

But it doesn't have to be this way.

By becoming a UTA Sustainer and making a \$10 or \$20 monthly donation, you can help us cover our operating costs. In return, we'll continue publishing great material about the struggles that affect us. We'll also send you a copy of everything we put out.

For more information about the UTA Sustainer's Program, **visit www.uppingtheanti.org**





