ANNALS OF DISCOURSE

Ecology, Distribution, and Identity in the World Politics of Environmental Skepticism*

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Introduction

Environmental skepticism is about civic obligation, or more precisely, it is antagonistic and opposed to civic obligations to collectively address ecological destruction and loss. Environmental skepticism is defined by its rejection of environmental problems as authentic, typically by rejecting environmental science, and has become a serious political force. Skepticism contests ecological scientific knowledge claims for anti-civic interests, but it has little-to-nothing to do with any of the sciences. Elsewhere, we have demonstrated that environmental skepticism is a well-positioned counter-movement within the U.S. conservative movement that rejects the authenticity of environmental problems, particularly global environmental problems that threaten sustainability. This counter-movement holds the conviction that because the non-human ecological world is unimportant to human society generally—morally or pragmatically, through what I call "deep anthropocentrism"—changes in the non-human world are themselves unimportant. This position is neither accidental nor marginal in power, but is seated firmly in the defense of the dominant social paradigm emerging from Enlightenment liberalism. This paradigm is presently besieged with challenges from a more pluralistic global civic politics, as well as appreciable stress from social and natural sciences that indicate it is fundamentally unsustainable. Thus, environmental skeptics "defend the status quo system of accumulation and power for consumptive elites in the Global North."

Environmental skepticism ("skepticism" from here) is an ideological force marshaled to defend modern capitalist accumulation and its attendant institutions through a conservative counter-movement that opposes the growing global environmental movements. It is significant that a review of 141 skeptical books reveals that almost all are tied to conservative think tanks and *none* are published by lead authors from the global South. If one counts South Africa, which had one skeptical authored book, as part of the Global South, then it is the exception that proves the rule. But, even in this case, we find direct ties to Northern conservative think tanks—the Institute for Economic Affairs (IEA) in the U.K., and the Competitive Enterprise Institute (CEI) in the U.S. The organizational and material resources, as well as the promotional resources are clearly marshaled by the North and for the North, though there are signs that it is internationalizing through efforts like those from the conservative (former civil rights) organization, CORE, in Uganda.

Skepticism is—at least if books in print tell the tale—an exclusively Northern social counter-movement with Northern interests in undermining insurgent interests in ecological sustainability. Holding fast to the hammer of ideological modernism, skeptics are committed to the capitalist mode of production and its arrangement of wealth and power, where the flow of value (in wealth and risk) move to the affluent industrial nations who benefit from modernism, while poverty and debt accrue to the periphery. As Timothy Luke has noted,

while "The creative destruction of capitalism has all too often been displaced, mystified, or confused with vague terms like 'modernity,' 'progress,' or 'technological-industrial development'... modernity has much more to do with the advent of market rationality, commodified social relations, private property, and global capitalist interests."

It is clear that distributional justice—that is, the apportionment of the earth's goods among people—is not the most important politics at stake. As modernism is a "dominant" social set of values, other values are silenced and policed, understood through Schlosberg's framework for environmental justice and Gramsci's notion of hegemony. Ironically, much of the environmental skeptic literature argues that if only the rest of the world adopted free trade and neoliberalism more successfully, it too would taste the succulent fruit of affluence. But the idea of ecological unequal exchange, where the most valuable ecological resources are sent to the Northern nodes of power in exchange for debt, violence, and policy impositions tied to loans, explains why this false promise has generated mostly desiccation, not abundance, and has led to the enrichment of the core elite setting the program. Consequently, when we view these issues through the lens of justice as redistribution, recognition and participation of the "subaltern," we can see that skeptics are arguing against an extension of the meaning of justice and instead for retrenchment of Western economistic hegemony, which depends on the continued oppression of the subaltern without regard for ecological sustainability. As such, the political struggle for environmental skepticism is about limiting the meaning and experience of justice in order to maintain the domination of the non-human world necessary to advance a global extension of the Western industrial network of knowledge and power found in the world military apparatuses, the world capitalist system, and statist world politics—what we will call, following Bill Hipwell, "industria."

Distributional Justice and Situating Unequal Ecological Exchange

In the seminal work of Stephen Bunker, the concept of "ecological unequal exchange" is developed as an extension and more profound explanation of dependency theory, while also adding several key modifications to it. First, Bunker sets out Goegescu-Roegen's thesis of "entropy and the ecological problem," where the laws of thermodynamics help explain international development. Energy contained in natural resources and essential for the development of social complexity and power is transferred to the core areas of production. These raw materials, like timber, are valued minimally in the human economy even though they contain the greatest potential energy they will ever have along the production chain. Although this production chain will systematically erode potential energy and speed up the entropy of the energy found in the tree, the products made from the tree will become more economically valuable than the original forest and tree, given the added value from labor and technology. Thus, the concept of ecological unequal exchange starts with the notions of energy and entropy and points out that the core areas in the world system are more affluent, more economically and institutionally complex, and more industrialized because they are "feeding" off of a course of energy that comes from somewhere else. Meanwhile, that "somewhere else" (the periphery) is being systematically eroded in its capacity to do the same, because the energy it would need to do so is going to the core. As the industrial core of the modern globalized economy becomes more predatory, non-human ecology and its well-organized energy with low entropy become the target of a very destructive and increasingly powerful system of exploitation. Non-human ecology becomes less well organized and less diverse as its assets—diverse life on earth—are

liquidated. Exploited areas lose useful energy, and as more and more areas become exploited, they become less energy-rich, and less diverse. And even as they become subject to the expanding modern system, the modern system itself becomes profoundly unsustainable. As its sources of low-entropy energy and complexity are reduced, the modern system sets itself up for social collapse, even as it undermines the periphery's ability to sustain itself. Industria, then, is at once reducing the social and ecological systems of the world towards one with fewer and fewer sources of usable capital in its pursuit of accumulating wealth and industrial power, which are needed to climb the steeper and steeper slope of gathering energy and nature for more and more consumption. Thus, industria consumes the very capacity to foster its own metabolism. However, the core will be the last to starve, in part because of the fact that in this model, the core requires the periphery to starve as they consume more, assuming that the diversity, energy, and complexity of ecological systems are limited.

Bunker writes,

The flow of energy from extractive to productive economies reduces the complexity and power of the first [periphery] and increases the complexity and power in the second [core]. The actions and characteristics of modern states and of their complex and costly bureaucracies accelerate these sequences. Modernization, as ideology, as bureaucratic structure and procedure, and as centralized control through complex regulatory organization, mediates and intensifies the socio-economic consequences of the interaction between global and regional systems.

Further,

Modern systems are themselves highly energy-intensive and can only emerge in regions where industrial modes of production derive large amounts of energy and matter from subordinate modes of extraction.

Bunker holds that a partial understanding of development may be found in this zero-sum relationship that determines the distribution of energy and power, iterated and institutionalized first through colonial legacy, then legitimized and formalized through the relations within the world capitalist system after colonialism. Using the power structures that colonialism engendered, such as the formation or exaggeration of local elites who become interested in maintaining colonial relationships, local elites abet the continuation of "neocolonialism" and export of surplus economic and ecological value to the core. The relationship between colonial powers and the African ruling class provide one example of this. Bunker further notes that the failure of the internal nation-state system of peripheral countries is ill-equipped to deal with "development," because it fails to protect from these conditions, partially as a matter of their centralized bureaucratic structure.

In sum, ecological unequal exchange undermines ecology as a locality for subsistence ways of production or as a source of commodities for fair trade. In the process, it undermines its own sustainability, as Bunker's case regarding Amazonian rainforest depletion makes abundantly clear. Further, the core needs this relationship in order to continue its metabolism of elite consumption.

This discussion has been relatively limited to the over-depletion of resources that are shipped to the North, sent through the manufacturing process, and sometimes sent back to the South for a higher price, creating dependence and a structural inability to put the energy embedded within them toward local social efforts. However, with the advent of Beck's *Risk Society*, it has become apparent that a model solely built upon natural capital is also incomplete from the standpoint of the "risks" that emerge from wastes, byproducts, and results of the industrial processes. Beck, moreover, is convinced that a "boomerang effect" that exposes the affluent to these risks removes much of the class differentiation inherent in traditional industrial society.

To some extent, when affluent consumers drink whatever hazards lie in wait in their teabags or soda, or roll in their flame-retardant beds, or eat from their non-stick cooking pans, it is clear that the risks are being globally distributed throughout the class hierarchies. Yet, to expect that the modern system will remove class as a concern for risks, is, at least right now, premature. Tracing the "recycling" of Northern computer chips and circuit boards to the—places in the global South where they are processed, thereby exposing the workers who breath over them to noxious heavy metals and other toxins, should bring this point home. The poor who "recycle" the heavy and precious metals found in Northern technology are exposed to risks that I, as I type on a computer right now, will not be exposed to, because the toxins are held stable in my computer until it is melted down for recycling. Thus, though Beck adds the condition of risks to the concern of modernism, the risks still largely remain a politics of distributional justice much like the expropriation and redistribution of other raw materials, such as timber or fish or oil.

Skepticism to the Defense

Skepticism defends the modern arrangement and distribution of wealth and risk by arguing two principle concerns. The first strategy is based on denial. Julian Simon created the template for early environmental skepticism by saying that scarcity in general is not a concern or reality, and that people fight off scarcity rather than being driven by it.

In the debate about abundance and scarcity, skeptics often appear to be arguing that thermodynamics does not apply to natural resources like oil. Simon was particularly clear on this point:

...those who worry that the second law of thermodynamics dooms us to eventual decline necessarily see our world as a closed system with respect to energy and entropy; those who view the relevant universe as unbounded view the second law of thermodynamics as irrelevant to this discussion.

Instead, the skeptic sees environmental problems like chemical threats or global warming as "soft" or mythical, and manufactured to generate fear in order to empower the Left. Skeptics also attempt to conceptually sever ecology from society. In the case of a finite world of resources, they argue that the laws of nature do not apply to humans who, are "above' the ecological nexus that defines the boundaries for non-humans: they are the 'ultimate resource." The first argument makes the case that environmental scarcity is not a problem, and the second argument makes the case that even if scarcity were a problem, it is not relevant to human society.

Skeptics claim scarcity is not important for various reasons, such as arguing that the market will tackle the problem of allocation of resources over time. This informs Peter Huber's latest skeptical thesis, which argues that because we have a "bottomless" well of oil for gas, there is no need to worry about its scarcity, because we will never run out of *energy*. This is a very interesting and controversial claim. But what makes it interesting is that it argues for continuation of the current arrangement and allocation of energy in order to eventually serve humanity as a whole. Huber and Mills, however, write that humanity has tapped a logic that will allow it to blaze a trail around the law of thermodynamics:

End users consume increasingly compact and intense forms of high-grade power, relying on suppliers to pursue and capture increasingly distant, dispersed, and dilute sources of raw fuel. The gap is forever widening, as the history of oil extraction reveals, but that doesn't stop us—the more energy we consume, the more we capture. It's a chain reaction, and it spirals up, not down. It is, if you will, a perpetual motion machine.

They describe those like Paul Ehrlich, who insist that the law of thermodynamics relates to humanity, as "lethargics." Importantly, Huber and Mills note later in the book that for the U.S., "Energy consumption and wealth have since [the steam engine] risen exponentially" and that the rise of hydrocarbon fuel consumption virtually mimics the rise in GDP. This—along with their premise that power in motion pursues power "standing still"—indicates that energy consumption in its raw form, even apart from entropic-related concerns, is directly linked to the industrial state and its ability to use power to pursue more power. I read the "power standing still" as energy not being consumed locally, and being pursued by power in motion as that being consumed from expansion and predation. However, the question remains—who comprises the "we" in Huber and Mills' writing? Is it the U.S. or the affluent North? Where does this "power standing still" come from?

Unlike other skeptics, Huber and Mills argue that nature is replete with energy; they remark later in the book that while the universe catapults towards chaos, apparently fulfilling the law of thermodynamics, life itself, and people in particular, defy this generalization. Of course, in order for this defiance of chaos, life requires more energy to keep chaos at bay. The capitalist mode of production has a metabolism that drives history and requires everincreasing amounts of energy to sustain and feed the reorganization and complexity that fights off entropic equilibrium. Yet Huber and Mills believe this indicates that energy scarcity need not concern "us."

This remarkable claim rests upon two assumptions. The first is that—the public should not impose social responsibilities in the form of liability, regulations, or other limits to commerce. And second, that modernism and its institutions—the nation-state and the world capitalist market in particular—are working elegantly and should not be undermined by illegitimate ecological concerns. In other words, not only is this a civic defense for industry but for industria. This is a position common to much of the skeptical literature as it reiterates worn notions of Hobbesian modern progress against nature.

While Huber and Mills offer a case regarding scarcity, skepticism is clearly not confined to issues of scarcity. In Huber's earlier work, *Hard Green: Saving the Environment from the Environmentalists*, *A Conservative Manifesto*, he writes that many environmental concerns are

"soft"—that is, not concrete, not real, not pragmatic—as seen in the cases of chemical contamination, ozone depletion, global warming, and loss of biodiversity. Huber is here in the company of many skeptics who make similar claims about the "hobgoblins" of environmentalism that usher environmentalists into power, grants, or tenured university positions. The argument is almost always the same—environmentalism has been poorly constructed, and is less compelling than other human concerns, hence environmental concerns do not make the threshold for public action and are an illegitimate public interest. Environmental concerns are not important enough to enact legislation, regulation, or liability, and they are especially illegitimate when they threaten the modern system of world politics and order. Here skeptics become condemnatory, calling for the shakeout and "accountability" for the radical fringe that has the gall to criticize the march towards progress. Bjørn Lomborg, for example, writes that modern civilization is a "fantastic story" of success, and for environmentalists [e.g., Al Gore] "...to call such a civilization 'dysfunctional' is quite simply immoral."

Consequently, skeptics like Dunn and Kinney warn against the expanding civic claims of environmentalists, environmental scientists, the media, and government which have perpetuated myths that reinforce the "liability" (i.e., pessimistic) culture of an active regulatory state, or more profoundly, call for a revolution in the core political values that organize world politics and the distribution of natural capital and risks. Dunn and Kinney argue for their "asset culture" as a way to see the world both more truthfully and more optimistically for the future of industrial society. Instead of guarding against famine, disease, and drought, they argue that environmental protections rob the global South of its ability to marshal resources and provide for itself.

America cannot afford its current environmental regulations. For Third World nations, America's regulations are a disaster. They divert both wealth and energy from solving human environmental problems thousands to millions of times more serious than those addressed by America's environmental regulators.

And.

In the context that a few cent's worth of vitamin A would save half the children who die in India, the enormous wealth America spends to solve "problems" with Alar, asbestos, dioxin, or acid rain looks pretty silly.

In this regard they ask how many people in the global South have perished thanks to the machinations of environmentalists.

Is this genocide? If so, America's leftist Liability Culture leaders may rank well ahead of the other great killer leftist societies—the Soviet Union (61.911 million deaths) and China (35.236 million deaths)...deaths from Liability Culture policies do not spring from dictatorial government, but from Left-controlled shadow-government bureaucracies in America....Most Americans are not even aware of the part the Liability Culture may have played in producing human misery on a massive, unheard of scale.

Without denying the necessity for a critique of Northern environmentalists and their influence on the global South, it is clear that the environmental threats faced by poor societies go far beyond what is given credence here. Dunn and Kinney imply that were the U.S. to stop spending money on the reduction of acid rain, it would send more money to the

South for vitamin A—but this is a Hobson's choice and a construed one at that, since there is no reason why such a trade-off would be realized if, for example, asbestos cleanup were aborted. But, the implication is important, because the Hobson's choice is arguing that we are choosing to focus on the hysteria of non-problems instead of addressing the life-and-death problems of the poor.

It gets worse. As both Dunn/Kinney and Paul Driessen argue, environmental choices are literally murderous. Driessen calls for a universalized neoliberal world to solve this egregious problem. He argues that pressures for "corporate social responsibility" are killing poor people in the global South who need industrial pesticides that come with industrial growth and markets, inasmuch as pressures for corporate social responsibility disable corporate abilities to provide these benefits. Here, the converse of the ecological unequal exchange argument is presented—where class-based murder is perpetrated on people who are said to desperately want and need modern capitalist accumulation:

CSR [corporate social responsibility] advocates have done a brilliant job of disguising their eco-imperialist tendencies and effects. Through the use of concepts like sustainable development and the precautionary principle—and theories like catastrophic global warming and estrogenic chemicals—they protect healthy, affluent First World activists from distant, conjectural, exaggerated risks. Worse, they often do so by imposing real, immediate, life-threatening risks on the world's most powerless and destitute people.

Driessen wants civil groups to answer for the deaths in the global South this has imposed. He calls for a "global social responsibility" where "everyone" is accountable for any responsibility they may have in blocking development in the global South. For Driessen, development means the provision of biotechnology, energy production, and disease control/malaria control through the application of pesticides. This requires, "supporting property rights, free enterprise, enforceable laws and contracts, reasonable regulations and modern technology—the keys to health, innovation, wealth creation, life, liberty and the pursuit of happiness." In short, Driessen believes that the dominant paradigm of Western Enlightenment needs to be imposed upon the world, making the WTO and civil groups accountable to these doctrinal commitments so that the poor can be saved from suffering, misery, and environmentalist-imposed genocide. I read this as arguing that neoliberalism or even just straight-up capital (and by proxy the United States) is the "golden city on the hill" whose purpose is missionary and messianic for the unenlightened global masses looking for refrigeration and shopping malls. What Driessen leaves out of the prescription, however, is the harsh fact that as the global South is sending away what natural capital it has and trading this for more valued manufactured goods, it will only be the Southern elites who taste these treats from the North, while the poor squirm for subsistence under "austerity" measures that result from loans to pay off the inevitable debt.

Driessen's claims are seductive, and reinforced by a background of affiliation with seemingly-progressive groups such as the Congress of Racial Equality (CORE). Indeed, who would deny the provision of vitamin A or that malaria should go unchecked? But as Gramsci, and indeed the whole Marxist tradition, would argue, theory/ideas must act in reality to liberate the poor. If they do not, the ideas reproduce the ideology that reinforces the division of labor, class, and oppression. As such, the test for skeptical praxis should be:—"has this mode of politics liberated the poor thus far exposed to it?" Has an equitable

development been realized in the last 50 years of globalization of Western political-economic norms where, as Robert Paehlke notes, "economism is triumphant"? Not according to Arturo Escobar, who writes that the dream and promise of development has, "produced its opposite: massive underdevelopment and impoverishment, untold exploitation and oppression." From another angle, if Enlightenment liberalism were so liberating, why have the last 500 years been so oppressive for non-Western societies? Unlike the genocide the skeptics blame on environmentalists, modernity's genocide comes from being on the wrong end of hundreds of years of firepower, steel, disease, extrinsically-created poverty, dislocation, and pervasive misery for people that lay in the wake of industria.

Hegemony and Cultural Politics

Environmental skepticism is marshaled to defend against potential changes to the dominant world order that allows for unequal distribution of wealth and risks, and the continued accumulation of power in the North. And it often operates, as we have seen, by claiming to speak of justice in opposition to the alleged injustice of environmentalist interference with the world economic system that would have people live their lives in freedom, peace, and prosperity. This claim for justice is unrelentingly inserted in a neoliberal perspective, with important consequences for identity and cultural politics.

One consequence is that environmental skeptics ignore environmental justice movements and arguments that resist the state system, the world military apparatuses, and the world capitalist economy. This is consistent with a Gramscian-type hegemonic discourse where the dominant bloc polices against resistance to industria, which it frames as unjust or working against the cosmopolitan progress of humankind.

The cultural ramifications of this are considerable. First, modernism has been associated with a severe hierarchy and homogenization in which European powers are strongly incorporated into the industrial core, while spaces that have been colonized become peripheral and comprise the global South. This gradient is reproduced in the neo-colonial system imposed by the rules and logic of neoliberal globalization, such as those found in intellectual property rights for seeds, and these rules favor the core and its metabolism of goods from the South. The fact that Bjørn Lomborg's second book, Global Crises, Global Solutions, published by Cambridge University Press, was part of a project named "The Copenhagen Consensus," in which a group of Nobel economists identified the ten most important and solvable world problems, illustrates the point. Whose consensus is Lomborg referring to, and how does a group of economists—most of whom are affluent Westerners and all of whom appeal to the mainstream economic canon—make up a consensus of any kind on world problems that by their own admission chiefly afflict the poor? It is only under the assumption of a cultural hegemony—where the dominant ideological forces in the world construct the problems and the solutions to be engaged—that such a project can be rationalized.

As environmental systems have begun to change structurally toward simplifying biodiversity, changes in climate, or changes in the hydrologic or nutrient cycles, modernism's defenders have argued there is no real pragmatic or moral connection between society and nature. Thus Huber writes,

After the flood, God directs Noah to 'subdue' creation, to take 'domination over the fish of the sea, and over the fowl of the air, and over every living thing that moveth upon the earth.' Today we can think of nature as benign only because we have obeyed that one command so very faithfully. We have no more practical reason to conserve nature than we have to conserve cows. We can subdue at will and replenish at will too, with transgenic mice and cloned sheep.

Further,

At this point in history, the second vision is a lot more likely than the first. We can go it alone. We need energy, nothing more, and we know how to get it from many more places than plants do. We don't need the forest for medicine; as often as not, we need medicine to protect us from what emerges by blind chance from the forest. We don't need other forms of life to maintain a breathable balance of gas in the atmosphere or a temperate climate. We don't need redwoods and whales at all, not for the ordinary life at least, no more than we need Plato, Beethoven or the stars in the firmament of heaven. Cut down the last redwood for chopsticks, harpoon the last blue whale for sushi, and the additional mouths fed will nourish additional human brains, which will soon invent ways to replace blubber with olestra and pine with plastic. Humanity can survive just fine in a planet-covering crypt of concrete and computers.

Again, who are "we?" Plainly, not the great majority of humankind, and certainly not those who belong to movements around the world fighting economism and economic globalization, nor those who see the severance of society from non-human ecology as a form of cultural homogenization and an elimination of diversity. This is exactly the kind of resistance Hall and Fenlon are referring to in their description of a non-capitalist worldwide indigenous movement struggling against homogenization of their cultures, rituals and economics. However, environmental skeptics focus on an internal inconsistency of Northern environmental concerns and neglect a growing worldwide set of environmental concerns shared across economic dimensions. It is not just some fringe Northern environmentalists fighting modernism and modernity, but a host of authentic voices in and outside of the nodes of the North. Further, mainstream Northern environmentalists mostly appear to acquiesce with the major tenets of modernity,;they are not fighting against industria as much as they hope to reform its practices.

Nonetheless, the skeptical counter-movement brings issues of justice to their rhetoric, and this begs the question "whose justice" is at stake? As David Schlosberg argues, justice includes equitable distribution but is incomplete without notions of "recognition" and participation. Schlosberg's conception of environmental justice is based on the insistence that we must understand "the 'why' of inequity in order to both understand and remedy it."

These theorists [Iris Marion Young and Nancy Fraser] also note the direct link between a lack of respect and recognition and a decline in a person's membership and participation in the greater community, including the political and institutional order. If you are not recognized, you do not participate.

Schlosberg sees anti-globalization activists and indigenous activists as examples of movements and groups that view economic globalization, the imposition of a Western nation-state, and the rationalization of economics and politics to the exclusion of other values as an "outright attack on diverse local cultures, practices and identities." He argues

that activists in the international environmental justice movements regard these attacks as based in a lack of respect for their identity, which further feeds their inability to participate in modern world political institutions. All this has a direct bearing on their lives. Many of these groups are fighting so that the political machine that consumes their life support systems and drops hazardous wastes in their laps can be stopped, not empowered, as environmental skeptics demand. And these claims also undermine the skeptic's belief that they are serving the interests of the world's poor by opening up access to DDT (which is not banned by international law for malaria anyway, despite the claims of Driessen, Milloy, and others that it is inaccessible for related reasons), or that capitalism will bless the poor with a trickle of income and a division of labor that suits everyone, so that eventually liberal democracy will serve every group on earth.

The severance of society from non-human ecology reeks of cultural imperialism. Many skeptics, as noted above, see human destiny tied to the domination of nature, and those who interfere with said domination are said to interfere with human progress and the purpose for which people were placed on the earth. Moreover, the assumption that human purpose is universally derived from the evangelical Christian roots of Huber or of others like Coffman is nullified by widespread indigenous, Buddhist, (or Franciscan) ideas of human purpose that explicitly include compassion for the non-human world, or that place society squarely in an ecological worldview. The dominant social values frame alternate values as "backwards" or "savage," and as such, in need of management. This, however, systematically denies the role of the state system and the global economy it serves as enforcers of an ideology—and the militarism to match—that normalizes violence against those on the bottom rungs of world political power.

In *The Book of Hopi*, a description of the progression of ritual after a child is born illustrates a very different idea of justice from that of the skeptics:

When the sun cleared the horizon the mother stepped forward, held up the child to the sun, and said "Father Sun this is your child." Again she said this, passing the Corn Mother over the child's body as when she had named him, wishing for him to grow so old he would have to lean on a crook for support, thus proving that he had obeyed the Creator's laws. The grandmother did the same thing when the mother had finished. Then both marked a cornmeal path toward the sun for this new life.

The child now belonged to his family and the earth...For several years the child was called by the different names that were given him...For seven or eight years he led the normal earthly life of a child. Then came his first initiation into a religious society, and he began to learn that, although he had human parents, his real parents were the universal entities who had created him through them—his Mother Earth, from whose flesh all are born, and his Father Sun, the solar god who gives life to all the universe. He began to learn, in brief, that he too had two aspects. He was a member of an earthly family and tribal clan, and he was a citizen of the great universe, to which he owed a growing allegiance as his understanding developed.

Contrast this with the thought of environmental skeptic Michael Coffman, who writes as if he has found the Achilles Heel of environmental concerns because they are not Christian-centric. Coffman claims that the environmental movement is actually anti-Christian and anti-modern because of its ties to Eastern mysticism, among other things, as well as the "New Age Counterculture Movement" that has "propelled the fledgling

environmental movement to dizzying new heights of god/nature worship, mysticism, and radical antimodernism." Coffman sees this thinking as having "embarked upon a holy war against anyone they believed was destroying god [which is equated with nature]." This "holy war" is justified by an anti-Christian morality and religiosity, which favors biocentrism and "permits no pro-human compromise." Importantly, he believes this has led to an ecological interest in indigenous cultures: "Ironically, the biocentric blindness that causes these believers to glorify native cultures for their supposed harmonious life with the Great Mother Earth also has blinded them to the reality that those cultures never existed."

Coffman then identifies research from Denevan that associates the alteration of forests and the use of agriculture with negative environmental impacts and uses this research to claim that "early American cultures"

caused more environmental destruction than the European-centered culture that followed them. In some cases these pre-Columbian Indians altered the environment more than the Europeans and their descendants have in the 500 years since Columbus landed.

To deny the indigenous ontological position as manifested in *The Book of the Hopi* while neoliberalism plows through diverse cultures is to deny recognition to such people as full human beings, and therefore to deny their distributive claims. Yet Coffman goes further; for in the above passage he denies the *very existence and possibility*, historical or otherwise, of social groups that have felt cosmologically accountable to the non-human world. This is a foreboding denial of recognition if ever there was one, which fits well with the ontological positioning of the skeptical movement.

The type of justice defended by Driessen, Lomborg, Arnold and Gottlieb, and Dunn and Kinney, respects only those working within or for modernism. The "backward" protests of "subaltern" politics—whether of the Hopi, the Dalit, or other groups outside and suppressed by status quo world politics—draw out this contradiction in the skeptic's ideas of progress. To recognize the subaltern is to allow the subaltern to emerge from mere resistance and become a people who command respect and participation. To do this would alter the whole trajectory of indusria and accumulation—and give the subaltern discretion regarding the uneven distribution of rights and justice:

But when the 'subaltern' becomes directive and responsible for the economic activity of the masses, mechanicism at a certain point becomes an imminent danger, and a revision must take place in the modes of thinking because a change has taken place in the social mode of existence. The boundaries and the dominion of the 'force of circumstance' become restricted.

Why?

Because, basically, if yesterday the subaltern element was a thing, today it is no longer a thing but a historical person, a protagonist; if yesterday it was not responsible, because 'resisting' a will external to itself, now it feels itself to be responsible because it is no longer resisting but an agent, necessarily active and taking the initiative.

The subaltern becomes real, no longer subsumed into a "source." Importantly, this is parallel to the contention of sustainability itself—namely, that if resistance in the name of

sustainability becomes real, it must be taken seriously; it changes the social mode of existence in its claim on social space; and the modern project is challenged, if not displaced. As such, even though some skeptics point to poverty and disease as a concern, their purpose is to reiterate the dominant hegemonic sources of politics that are in part responsible for producing these maladies, *and* to hide the subaltern resistance to the political structures that permit them.

In sum, beyond resisting distributive justice claims, environmental skepticism also is related to the conservative suppression of subaltern politics. These movements imply a deeper struggle over the essence of reality—*ontology*, or the inquiry into what *is*.

Hegemony and Ontology

The position of deep anthropocentrism, in which an ontologically important non-human world is "erased" by the environmental skeptic, is perforce a statement about being, and hence itself is ontological. The political ontology of environmental skepticism is representative of the crumbling legitimacy of neoliberal globalization and the global capitalist system itself, where *homo economicus* is still alive. C.B. Macpherson's critique of "possessive individualism," where freedom is defined by the independence from other people's will by being an owner of property is relevant.

The possessive quality is found in its conception of the individual as essentially the proprietor of his own person or capacities, owing nothing to society for them. The individual was seen neither as a moral whole, nor as part of a larger social whole, but as an owner of himself.

If, as post-modernists argue, modernism is about control, then the changes in global ecology indicate that the control of the non-human world is illusory. If this is true, then the putative distance between society and the non-human world is threatened, and the material basis of the world capitalist system comes into question. If economism and possessive individualism defines the boundary of being for members of the environmental skeptic movement, this is not simply a profiteering scheme to protect ecological unequal exchange, but a defense against the existential tensions that justify exploitation and the idea that the West is advancing in progress and democracy. To live in a world that rests on the alienated labor of the great majority means that privilege is also alienated: one never has to acknowledge the conditions that produce affluence. If I go to the store and buy bananas, I never have to confront the world of the banana harvesters, because they exist outside my immanent world, even as my world hangs above and presses in upon them. The labor of these individuals and the exploitation of the land required for the export of bananas—and other commodities, whether cars or sushi—comprise the unseen base of modern world politics. To the capitalist, then, the destabilization of the planetary ecology becomes a beacon of the "end of the world, the end of their material security"—a false security paradoxically dependent on the erasure of the rest of life on earth through the capitalist mode. But,

One realizes that such despair is the luxury of a pampered minority in the North...It hinders the particular assessment of the present situation and acting accordingly. It hinders them in particular from understanding that their privileges

are based on loot and that a good life for all—that is what we call subsistence—does not need such privileges.

While Bennholdt-Thomsen and Mies argue for subsistence, others have argued for a more democratic state or ecological citizenship that would take into account all those affected by environmental breakdown induced by capitalism. Notwithstanding, in all three of these positions, which vary from ecofeminist to "post-liberal," the center of gravity of ecological politics shifts from the neoliberal globalizers to the democratic empowerment of subalterns in the periphery. The appearance of political innovation and resistance accompanies the loss of centralized control guided by the "new class" of technocrats from the formerly colonized societies.

Thus, neoliberalism's and industria's evangelistic doctrine of spreading "democracy" to the global South is dependent on disciplining and blocking the expansion of democratic principles to include the non-human world. This is not a grand leap for the possessive individualists, because to spread market capitalism increases the scope of what is considered property as former commons are enclosed, for example, in the coastal zones of Southeast Asia or Central America where privatized shrimp ponds exporting exclusively to the U.S. and Japan have been built. The expansion of property then allows for the expansion of the knowable and relevant world and the sense of freedom of ownership that comes to those who own and control it. For the possessive individualists, to limit this potential is to limit freedom and the progress signified by industrial capitalism. That some of the "environmental establishment" criticizes this advance or interferes with it for various reasons, led Julian Simon to call them "enemies of humanity." I suggest here that this has occurred because worldwide concern over ecological breakdown has brought possessive individualism—not just as ideology or as a program, but as an ontology—into an existential crisis. That global environmental change challenges human sustainability indicates that nonhuman ecology is most relevant to the being of individuals, no matter how atomized they are conceived to be. Thus the solipsism is rudely interrupted. The skeptics then try to mend the rupture by arguing environmental problems do not exist. Thus environmental skepticism has emerged as an effort to stick fingers in holes in the dam while arguing that the dam (nonhuman ecology) does not exist.

This erasure of nature seems reminiscent of Bruno Latour's work, but there are fundamental differences. The skeptical and modernist variant of erasure is, in fact, the antithesis of what Latour has suggested when he notes that we need to "let nature go." Here Latour argues that nature is an artifact of authoritarian control over knowledge through Science, whose job is to travel to nature and then come back to society to reiterate what was discovered. The idea of nature is used to suppress politics, and to let go of nature means that we instead see an infinite array of potential associations of human and non-human actors. In this sense, nature always means separation, and to let nature go is to embrace a more full universe of important actors from human associates to frogs to canyons to mountains to sharks, etc. Within these associations, the democratic sphere would determine how to interact in our life together, but because the democratic sphere is "full," arbitrary dismissal of canyons or frogs becomes illegitimate.

In contrast to Latour, whose work is grounded in democratic values, the erasure of non-human ecology in deep anthropocentrism critically relies on Cartesian and Hobbesian

dichotomies between society and nature that build a path for the extension of the antidemocratic tendencies that Latour is ultimately concerned about. Latour summarizes: "Since politics has always been conducted under the auspices of nature, we have never left the state of nature behind, and the Leviathan remains to be constructed." He is not arguing that we make up for lost time in order to construct the Leviathan, but to create a "good common world" through a democratic political ecology—for both humans and non-humans. Thus Latour's "letting go" and the skeptical erasure are at odds.

The ontology of possessive individualism eventually breaks down into solipsism where the only existent reality is the self. As this possessive individualism is threatened by limits to sustainability, the solipsistic boundaries are violated, and the reigning hegemony is threatened by a looming new world. This is what the environmental skeptics are defending against in their civic politics when they fight the issues of climate change, biodiversity loss, stratospheric ozone depletion, etc. As these issues become more prominent, the consumption of the non-human world by industria and the foundations of possessive individualism will come further into question, and the capricious dismissal of canyons and frogs will become more and more conspicuous. However, I do not expect the countermovement to ever give up the larger debate—because to do so would allow what they experience as nothingness to devour their being. The more the "environmental establishment" agitates for global environmental change, the more I expect the skeptics to ratchet up their well-rewarded warnings that unhitching the neoliberal paradigm from the deep anthropocentric frame of reference threatens the existence of "man."

Anti-science

It is odd that a movement so clearly aligned with the dominant social paradigm and its globalizing neoliberalism rejects a fundamental aspect of science, at least in its ecological aspect. After all, "faith in science and technology" is a critical hub in the dominant matrix. Yet, environmental skepticism rejects the methods, the basis, and even the system of peer review institutionalized in environmental sciences. We may account for this paradox by recalling that modernism is about controlling and policing those exploited—including the non-human ecological world—as Foucault and others have persuasively argued. It follows that when contradictions within this position are in tension with its purpose, then this element of science is discarded as no longer useful. Environmental skeptics faithfully defend science that serves oppressive technological ends, such as that found in the Green Revolution or in genetic modification. Certain environmental skeptics, most notably Julian Simon, have refused to endorse the Malthusian notion that increasing population will outstrip resources. This follows from their technological optimism. For Simon, more people means more technical prowess, in a never ending cornucopia that violates all precepts of ecological thought. Of course, this also means that the skeptics must accept to some degree the fact that increasing population entails potential misery. Were this not the case, how could the Green Revolution save the wretched and the hungry?

The skeptic's rejection of the core notions of ecology, with its appreciation of internal limits to growth, should not be taken to mean, however, that current ecological science has adequately solved the modern exclusion of nature from society. Latour is emphatic on this point. While some environmental science is attempting to work with coupled human-nature systems, this still falls well short of a political ecology that would

incorporate "natures" and "sciences" and not privilege the scientist who walks out of the Platonic Cave in which the ignorant dwell to describe the world outside and comes back to define what is real. Latour argues that the non-human world must be seen as sets of agents within reformed "sciences." I take this to mean that we can no longer see the non-human world as a mechanism for exploitation, but as part of a real space and community where human societies are woven into the fabric of the whole. This does not mean, however, that parts of the fabric cannot be torn, nor does it mean that building knowledge about the fabric is futile; rather it means that the issue of control over knowledge is undesirable and leads to distortion because of the complexity and multiplicity inherent to knowledge and truth.

Ultimately, the difference between "letting nature go" in Latour, and the "erasure" of the non-human world in environmental skepticism is one of voice and democracy, where Latour is inclusive and skepticism is exclusive. Skeptical erasure really implies that the meaning of non-human ecology is replaced with an exploitive mechanism. This means that the skeptics still require the idea of an anti-social nature as a benchmark for the "progress" of society. Therefore, the important difference between Latour's "letting go" and the skeptic's erasure becomes what is erased. As Latour argues for the West to let go of the idea of nature, and moreover, that Western and modern politics have been defined by this concept, he is actually arguing for the erasure of Western modernism and a more democratic accountability to the human and non-human lives within the world. The environmentally skeptical erasure of nature is an erasure of meaning and ethical obligation to anything outside the possessive individual—including those who do not define themselves in terms of ownership, such as subsistence peasants, and is an effort to reproduce and defend the oppressive structures of modern politics.

Conclusion

Environmental skeptics are defending the flow of value from the global South when they deny that environmental problems are real or important. But this recognition is not quite enough to understand the issues of justice at stake, because skeptical discourse necessarily leaves unrecognized those on the margins of world politics, who suffer from unequal ecological exchange. This loss of recognition, as Schlossberg indicates, is even more important than concerns over distribution, because it undergirds the ability and power to produce the maldistribution in the first place. Furthermore, the maldistribution and lack of recognition enter into a possessive individualism that stems from a solipsistic ontology and sees the global North and its market liberalism and consumption as what is real and what defines worthwhile existence. As global environmental change advances as a form of consciousness and popular understanding, the modern possessive individualism that has created and feeds from ecological problems becomes threatened at an existential level.

As such, we should expect that environmental skeptics will never admit that their knowledge claims are false, not simply because of the economic power these claims secure, but more deeply because doing so would overwhelm the elite identity as a possessive and spuriously free individuality. In order to maintain this anti-politics, I believe the environmental skeptic counter-movement will increase the force of its rhetoric as it resists more democratic movements and ideas.