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Cruel Weather: Natural Disasters and Structural Violence

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Early in 2004, the journal *Science* published a short and, as it turned out, rather controversial article by Sir David King, British Prime Minister Tony Blair's chief scientific advisor. In this piece, King rebuked the Bush administration for its failure to acknowledge the seriousness of human-induced climate change, and its unwillingness to take steps to curb its country's disproportionate share of global greenhouse gas emissions. In view of mounting scientific evidence and the growing severity of extreme weather events, he argued, we need to acknowledge that "climate change is the most severe problem we are facing today – more serious even than the threat of terrorism" (King 176). Although King did not push this comparison any further, the import of his message was clear: that the world's richest country has failed to confront the potentially catastrophic threat of global warming with anywhere near the political urgency it has accorded to the lesser threat of terrorist violence. In the ensuing weeks, King's remarks prompted strenuous efforts at damage-control within the Blair government, and ignited a stream of invective from climate-change skeptics and hawkish conservatives, who accused him of alarmist environmental rhetoric that diminished the importance of the "war on terror" and cheapened the tragedy of those who have died in it.

Although this blustery response is perhaps understandable as a psychological defense against painful self-knowledge, it makes little sense otherwise. Indeed, by almost any measure, King's assessment of the relative dangers posed by climate change and terrorism is hard to deny. According to statistics compiled by the United States National Counterterrorism Center (NCC), only nine Americans were killed in "terrorist attacks" outside of Iraq in 2005 (NCC v) – that is, approximately the same number of people that died in the country that year of whooping cough. The NCC calculates that 14,600 deaths from terrorist attacks occurred globally in 2005, 55% of which took place in Iraq (NCC: V). Put another way, this means that outside of the destabilized war-zone created in Iraq by the United States itself, the total number of people who died at the hands of terrorists in 2005 (6570) was significantly less than the number (8493) that died *each day* that year of HIV/AIDS (UNAIDS 2005). In contrast to the threat of terrorism, Lester Brown writes, the 2003 heat wave in Europe alone "claimed 49,000 lives in eight countries... More than 15 times as many people died in Europe in this heat wave as died during the terrorist attacks on the World Trade Center and the Pentagon on September 11, 2001" (Brown, p. 60). On an even more tragic scale, the World Health Organization (WHO) estimates that climate change is now responsible for approximately 150,000 deaths and 5 million serious illnesses each year, a toll that could double by the year 2030 (Patz et al).

The ideological influence of entrenched economic and political interests has helped to distort our understanding of the most urgent threats to human "security" today, creating a stark imbalance between the moral gravity we attribute to direct but limited forms of violence such as terrorism, and the casual expediency with which we accept the systematic harm inflicted on millions across

the globe by climate change. Part of this imbalance, perhaps, derives from our very conceptualization of “violence” itself. Terrorist acts – understood as direct and premeditated inflictions of physical harm by identifiable perpetrators upon identifiable victims – fit neatly within our commonsense notions of “violence” and moral culpability, whereas the manifold forms of destruction and suffering associated with climate change do not. This paper aims to establish a provisional framework for understanding the manifold types of harm and suffering arising from climate-related disturbances, not as arbitrary environmental “accidents”, but as expressions of “structural violence” – that is, the normal, unexceptional, anonymous, and often unscrutinized violence woven into the routine workings of prevailing power structures.

In the classic disaster movie scenario, floods, fires, tornadoes, earthquakes, impending asteroid collisions, killer bee invasions, and so on, usually become a kind of projection screen for sublimated social anxieties and perceived political threats, providing the rationale for people of all ranks and stripes to lay aside their petty differences and pull together in opposition to some all-purpose inhuman enemy. Ironically enough, such ostensibly “accidental” occurrences in recent years have increasingly become a flashpoint for dissent rather than unity, providing opportunities for reflecting upon the inadequacies of a socioeconomic system that has proven miserably incapable of ensuring the security and well-being of countless vulnerable and marginalized people, and has continually fed and exacerbated the very “natural” disturbances giving rise to so much suffering, insecurity and dislocation. In short, “natural disasters” now promise to become a kind of privileged window onto the forms of structural violence upon which contemporary capitalism rests, and against which environmentalists and other progressive forces must pitch their political energies.

Structural Violence

Originating primarily within the fields of liberation theology and peace psychology, and migrating into areas such as medical anthropology and development studies, the notion of “structural violence” is now employed quite widely in a variety of popular and academic settings, with varying levels of conceptual precision. Given its fullest early expression by peace and conflict studies pioneer Johan Galtung, the concept has become a powerful rhetorical weapon, and a useful corrective to the markedly conservative bias built into our conventional understanding of violence. Although, as I have suggested above, the dominant political discourse surrounding violence in recent years has been overwhelmingly dominated by the theme of terrorism, this reflects a deeper continuity in the ways in which violence has been conceptualized. Violence, in conventional discourse, is almost exclusively associated with the disorderly actions of deviants and malevolent outsiders; rarely is it applied to the various forms of “legitimate” coercion exercised by the state and its agents in the effort to maintain existing institutions, contain social conflict, or forcibly pursue and defend a particular definition of the collective interest. It typically focuses public attention upon isolated, sensational interruptions of the existing social order arising from the margins, deflecting concern away from the mundane suffering, inequality, and injustice upon which the orderly reproduction of the current system rests. It directs our moral concern towards the criminal, anti-social personal behavior of individuals and small groups, paying little regard to what C. Wright Mills in *The Power Elite* famously referred to as the “higher immorality” of the status quo.

Galtung’s initial formulation of the idea of “structural violence” was designed to counter such conservative biases, and to develop a conceptual means of addressing many types of unnecessary harm that often slip beneath our ethical radar system. While those defending the cause of peace may have noble intentions, he argues, they have often operated with a rather restricted notion of what prevents this ideal from being realized in the world. If peace is defined primarily as “the absence of violence,” then it becomes of paramount importance that our definitions of violence are so narrowly oriented toward direct physical assaults by identifiable perpetrators who

consciously intend some sort of harmful consequence for their victims (Galtung 168). If this were all that violence entailed, he asserts, then highly oppressive and unjust social orders filled with all manner of misery and suffering could be regarded as “peaceful” to the extent that they were relatively devoid of overt conflict.

Resisting the tendency to personalize violence and link it simplistically to conscious will and intention, Galtung defines the term expansively as “the cause of the difference between the potential and the actual, between what could have been and what is” (168). Put another way, this means that violence hinges upon the degree to which a given form of injury or suffering is avoidable. Dying of tuberculosis hundreds of years ago, for instance, was to a large extent unavoidable for those who contracted it. Given modern advances, Galtung suggests, dying from it today is best seen as a form of structural violence bound up with inequality, the maldistribution of resources, socially induced risks, and the dereliction of public agencies. Similarly, widespread starvation and malnutrition in conditions of generalized natural scarcity is tragic but inescapable, whereas it is simply inexcusable in situations where food is over-abundant and the necessary supply chains are readily in place. Ultimately, when harm is avoidable, violence is present; conversely, “when the actual is unavoidable, then violence is not present” (Galtung 169).

Structural violence may often not be perceived as violence by its victims because the harm to which it gives rise cannot be easily connected to an identifiable actor who can be held responsible. In spite of its depoliticizing effects, this persistent invisibility is in many ways understandable, Galtung argues:

Violence with a clear subject-object relation is manifest because it is visible as *action*. It corresponds to our ideas of what *drama* is, and it is personal because there are persons committing the violence. It is easily captured and expressed verbally since it has the same structure as elementary sentences in (at least Indo-European) *languages*: subject-verb-object, with both subject and object being persons. Violence without this relation is structural, built into structure. Thus, when one husband beats his wife there is a clear case of personal violence, but when one million husbands keep one million lives in ignorance there is structural violence. Correspondingly, in a society where life expectancy is twice as high in the upper as in the lower classes, violence is exercised even if there are no concrete actors one can point to directly attacking others, as when one person kills another. (171)

A related problem that we face in attempting to categorize such impersonal outcomes as violence is that they appear to us as unintended – as historically-given features of our social world that lie beyond assignments of guilt or blame. The presence of intention is often central to the way we define violence. For example, the act of deliberately hitting another person over the head with a rock is typically thought of as violent, whereas a similar action carried out by an earthquake-triggered avalanche is not.

While this emphasis on *intention* makes sense in many cases, it fails to adequately address the issue of *consequence*. It is easy to think of many violent but seemingly accidental situations – death and injury caused by drunk driving, for instance, or the “collateral damage” caused by intensive aerial bombardment campaigns – in which the absence of explicit intention to harm offers no absolution from responsibility. At a larger level, the very same principle applies to collective responsibility for the plight of those currently suffering from a wide range of avoidable afflictions that contemporary social institutions tolerate and to a large extent produce – from hunger and homelessness, to disease, displacement, and squandered human potential. Indeed, as Galtung argues, “ethical systems directed against *intended* violence will easily fail to capture structural violence in their nets – and may hence be catching the small fry and letting the big fish loose” (172).

Acts of God?

The unnecessary human suffering associated with climate change is perhaps one of the biggest “fish” now slipping through our ethical nets. In contrast to the fallout of terrorism or street-crime, the types of harm associated with climate change cannot be readily traced back to the malicious intent of a band of “evil-doers,” presenting themselves to us instead as the accidental and impersonal consequence of innumerable uncoordinated human decisions unfolding slowly across time, tangled up with the inscrutable workings of the winds, clouds, tides, and deep-sea currents. Even in their most acute and spectacular instances – as in the case of hurricanes amplified in intensity and duration by unduly warm ocean waters – we can draw no simple causal link between human activity and a particular extreme weather event. Recapitulating the mythic struggle between humanity and the brute forces of nature, the ferocity we have helped to generate confronts us as an alien and hostile power, immune to our judgments and our appeals.

In times of yore, natural disasters were interpreted as signs of anger and displeasure among the gods, and hence as opportunities for reflecting upon the potentially dire consequences of our own transgressions. As unenlightened as this traditional, pre-scientific worldview may seem to us now, it is preferable in some ways to our own approach to the disasters in our midst. As environmental historian Ted Steinberg compellingly argues in *Acts of God: the Unnatural History of Natural Disasters in America*, the traditional view of disasters as forms of divine punishment has gradually given way to a “demoralized” vision of natural disasters that is built upon a fundamental disavowal of human responsibility:

According to the dominant view of natural calamity ... these events are understood by scientists, the media, and technocrats as primarily accidents – unexpected, unpredictable happenings that are the price of doing business on this planet. Seen as freak events cut off from people's everyday interactions with the environment, they are positioned outside the moral compass of our culture. As a result, no one can be held responsible for them.... This constrained vision of responsibility, this belief that such disasters stem solely from random natural forces, is tantamount to saying that they lie entirely outside human history, beyond our influence, beyond moral reason, beyond control. (xix)

By “making nature the villain” (Steinberg xxiii), we ignore the many social forces that amplify and compound natural disturbances and heighten the risk and vulnerability of those in their path. In doing so, Steinberg suggests, we also provide economic and political elites with a convenient means of rationalizing their irresponsible decisions, and of normalizing the harm and injustice to which they give rise, among the socially disadvantaged in particular.

In order to begin to denaturalize our understanding of weather-related disasters and reconceptualize them as expressions of structural violence, we need to first take stock of the ways in which anthropogenic climate change has fundamentally blurred the boundary between the natural and the social. In today's context, the damage wrought by our increasingly entropic weather system cannot simply be attributed to brute, accidental and nonhuman origins; indeed, it has increasingly drawn attention to our own culpability in destabilizing the climate and undermining the natural support systems that help to shield us from its unmediated effects. As Achim Brunnengraber puts it:

The ubiquitous greenhouse effect no longer allows the demarcation between the concepts of environment and society.... Floods, storms and droughts are therefore risks immanent to the system, or *internal* risks. To put it more dramatically: humans and societies are threatened by the spirits which they themselves have called up. Ecological problems rebound on humans in the form of damage to the foundation of

their lives and to their health, or as additional costs. (218)

Traditionally, as Bill McKibben writes in *The End of Nature*, we have been accustomed to thinking of nature as a magisterially large, elemental, and independent reality – “the world apart from man [sic] to which he adapted, under whose rules he was born and died” (48). Historically, we may have despoiled, exploited and misused parts of that world, but could never really conceive of altering our relationship to it in any fundamental way. Now that our destructive practices have so thoroughly altered natural systems, making our presence felt in every gust of wind, raindrop, and increment on the thermometer, McKibben asserts, we are “no longer able to think of ourselves as a species tossed about by larger forces – now we *are* those larger forces. Hurricanes and thunderstorms and tornadoes become not acts of God but acts of man [sic]” (xx).

The Politics of Vulnerability

“The denial of the naturalness of disasters,” critical geographer Neil Smith has recently written, “is in no way a denial of natural process. Earthquakes, tsunamis, blizzards, droughts and hurricanes are certainly events of nature that require knowledge of geophysics, physical geography or climatology to comprehend” (2005). Natural disturbances of various kinds – floods, fires, storms, and so on – are entirely common and, indeed, beneficial to many ecosystems and plant and animal species. Even in the wake of “the end of nature,” as McKibben describes it, we cannot claim as a species to “control” natural processes in any simple sense, or to be directly responsible for each disaster to which they give rise. Few would likely suggest, for instance, that human actions were at the root of the undersea earthquake that led to the December 2004 Indian Ocean tsunami that killed approximately 230,000 people – although they might rightly point to a variety of social factors that needlessly amplified the vulnerability of those in its path.

Although the United Nations declared the 1990s to be the International Decade for Disaster Reduction, we have witnessed an unprecedented rise in the human and financial toll exacted by disasters in recent years. That said, as Janet N. Abramowitz argues, a growing proportion of the devastation caused by so-called “natural disasters” in past decades ultimately derives from our own ecologically destructive practices:

Many ecosystems have been frayed to the point where they are no longer resilient and able to withstand natural disturbances, setting the stage for “unnatural disasters” – those made more frequent or more severe due to human actions. By degrading forests, engineering rivers, filling in wetlands, and destabilizing the climate, we are unraveling the strands of a complex ecological safety net. (6)

The ordinary operation of our relentlessly growth-oriented economic system, coupled with political inertia in the face of mounting ecological crisis, is increasingly disrupting the equilibrium of natural systems in a variety of complex and often unforeseeable ways, creating conditions of heightened unpredictability and risk. In this sense, ecological violence – that is, the callous misuse and despoliation of nature itself – rebounds back upon us as structural violence, destroying lives and livelihoods, amplifying existing conflicts and inequalities, and exposing countless people to severe storms, floods, drought, fire, disease, displacement, and chronic food and water insecurity.

The growing severity of tropical storms has been the most acute and visible manifestation of this violence in recent years. According to the Intergovernmental Panel on Climate Change (IPCC), all but one of the 21 hottest years on record have taken place within the last 25 years. Although there continues to be much debate over the connection between climate and the frequency of extreme weather events such as tropical storms, there is a growing scientific consensus that global warming, and the rising water temperatures it creates, is directly linked to their increased duration and intensity (Gore 81). For many people, particularly in the United States, the record-

breaking storm season of 2005 brought home the reality of global warming, making it seem less abstract and projected into an indefinite future. Many climate change skeptics and conservative pundits rightly resisted the implication that events like hurricane Katrina were directly caused by anthropogenic climate change, but such attempts to duck responsibility largely missed the point. As scientists have long argued, no single extreme weather event can definitively be said to be the direct result of global warming, but the overall pattern is pretty clear. The more heat trapped in the atmosphere by greenhouse gases, the more energetic the climatic system becomes, and the more prone it becomes to extreme, unpredictable and volatile behavior.

Although spectacular events such as severe tropical storms have tended to garner the most public attention, climate change is also directly associated with other forms of harm and devastation that have a slower onset and are even harder to perceive or comprehend as violence. In late December of 2006, Geoffrey Lean of *The Independent* reported that rising seas had completely submerged the Indian island of Lohachara, marking the first time that global warming had “washed an inhabited island off the face of the Earth.” The gradual and virtually unnoticed disappearance of this small island, which once had 10,000 inhabitants, is indicative of the many slow-motion disasters to which climate change is giving rise. It is also indicative of the growing intersection of ecological vulnerability and global social injustice in our world, whereby those who benefit least from energy-intensive economic development bear the overwhelming brunt of its externalized costs.

A 2006 report by Christian Aid put this issue into stark relief, showing how poor people in the world's most vulnerable communities “are already suffering disproportionately from the effects of global warming ... [and] will bear the majority of the forecast future shock” (1). Citing figures from the Red Cross and IPCC, the report estimates that global warming has already displaced more than 25 million people worldwide, and that rising sea levels and other consequences of climate change could turn 150 million people, predominantly in Asia and Africa, into environmental refugees by 2050 (12). In Africa, whose overall contribution to global greenhouse gas emissions is negligible, 70 million people will likely be at risk from coastal flooding by 2080, and over 182 million may die from climate change associated conditions such as diarrhoea, malaria, dengue fever, cholera, and meningitis (Christian Aid 11, 8). For Molly Conisbee and Andrew Simms, such scenarios are not signs of natural calamity but of “environmental persecution.” Indeed, they argue, the “causes and consequences of climate change – who is responsible, who gets hurt – are now sufficiently understood. To disregard that knowledge, or to fail to respond adequately, must be classed as intentional behavior” (30).

As Conisbee and Simms' comments suggest, the structural violence associated with climate change can arise both from acts of commission (what we are actively doing to create and aggravate the problem), and from acts of omission – that is, what collective institutions and those wielding power are systematically failing to do in order to prevent it or mitigate its effects. Here, we need to remember that the “disastrous” consequences of any given natural disturbance often arise not from the direct force of the occurrence itself, but from socially induced forms of vulnerability that deny people the means to protect themselves and achieve some level of physical and material security in times of crisis. This is a point that Mike Davis makes very powerfully in his book *Late Victorian Holocausts*, which is highly critical of the idea that the tens of millions of deaths resulting from famines in late 19th-century China, India, Brazil, and other colonized countries, could in any way be seen as a naturally driven “climatic accident” divorced from the economic and political project of European imperialism. Indeed, he argues, such deaths can more properly be seen as the direct consequence of the economic and political structures imposed upon such countries by self-interested imperial powers. At a time of acute crisis, such structures subordinated these vulnerable areas to a particularly rigid model of free market economics that undercut existing state capacity, eradicated traditional protections against food insecurity, and categorically ruled out the type of interventionist social and economic policies that could have substantially alleviated the population's experience of starvation and famine. In this

regard, as Davis argues, “imperial policies towards starving ‘subjects’ were often the exact moral equivalents of bombs dropped from 18,000 feet” (22).

On a smaller but still tragic scale, the same kind of approach can be used to analyze the 2005 calamity in New Orleans. Indeed, in spite of the high winds, this disaster was not primarily the direct consequence of the destructive forces of nature unleashed by hurricane Katrina, but the result of social, political, and economic structures that determined the ways in which this event unfolded and was experienced by the most disenfranchised segments of the population. Katrina, as Neil Smith puts it, provided proof that in “every phase and aspect of a disaster – causes, vulnerability, preparedness, results and response, and reconstruction – the contours of disaster and the difference between who lives and who dies is to greater or lesser extent a social calculus.” In spite of his seemingly chummy relationship with God, George W. Bush was unable to command the hurricane; that said, his administration and other levels of government played a key role in exacerbating its dangers and the vulnerability of the people facing its wrath. The shape taken by this disaster had less to do with a natural accident than with a range of prior decisions – cuts to federal funds intended to fortify the levee system, commercial development of surrounding wetlands that might have functioned as a buffer for the storm surge, bureaucratic bungling and cronyism, and so on – that amplified and concentrated risk for the local population, not to mention the subsequently woeful and inadequate disaster response and reconstruction efforts.

Of course, as many commentators have underlined, the violence wrought by this disaster cannot be attributed solely to the incompetence or callousness of current politicians or administrations; indeed, it goes to the heart of structural racism and class inequality in the United States. Moreover, it functions as a kind of morality tale, highlighting the failures of a marketized social system oriented around maximizing private profit rather than meeting collective human need; one in which under-resourced, atomized individuals are left to fend for themselves in quasi-Darwinian conditions, while collective institutions remain inherently incapable or unwilling to respond to even the direst forms of human distress. Conversely, Katrina also served as a kind of roundabout advertisement for the virtues of a planned economy. In the previous year, the Cuban government had successfully coordinated a massive relocation and relief effort in the face of an especially powerful hurricane that destroyed tens of thousands of homes, successfully evacuating 1.5 million people without a single lost life.

As Michael Albert has compellingly argued, Katrina clearly highlighted for us the violence subtly embedded in capitalist property relationships themselves. Thus, the imperative of maintaining the sanctity of private property meant that people in a city with relatively low rates of private car ownership were expected to devise their own way out of the disaster area by individual means, in spite of the massive unused transportation capacity represented by various bus and train companies in the region. It meant that armed personnel were given orders to shoot so-called “looters” who dared to seek out the only means of survival available to them – the commodities locked away in privately owned stores. Finally, it meant that poor, predominantly black people were jammed together in degraded conditions in a leaky sports dome instead of being housed in the thousands of empty hotel rooms in the outlying region. Taken together, such scenarios provide us with a distilled image of contemporary structural violence, in which poor and oppressed people are tossed headlong into calamities that have been produced by a social order over which they have little influence, while being systematically denuded of the rights and resources needed to protect and sustain themselves.

Conclusion: the Normality of Disaster

As “exceptional” as extreme weather events such as Katrina may seem, they clearly gesture towards what Pierre Bourdieu regards as the underlying violence and political fatalism that is a

normal, integral part of the ongoing reproduction of capitalist society in the neoliberal era (*Acts of Resistance*). As Bourdieu argues, the neoliberal project – by incrementally eliminating many of the intermediary resources and institutional supports which shield ordinary people from the direct blandishments of the market – has altered the pragmatic social context in which people experience their own subordination. To this extent, he implies, the hegemony of neoliberalism has not so much rested on any generalized popular acceptance of free-market ideas or values, as upon the direct experience of precariousness and compulsion engendered by conditions in which the free market reigns supreme, private economic power has been absolved of collective social and environmental constraints, and the responsibility for personal survival has been effectively privatized – offloaded from the state and public institutions onto the backs of insecure, isolated individuals.

Aside from resorting to the direct application of physical violence where needed to maintain public order in conditions of growing insecurity and inequality, the neoliberal state increasingly sustains and expands the process of capital accumulation through a number of “insecurity-inducing strategies.” Such strategies, he argues, have coalesced into a new mode of domination “based on the creation of a generalized and permanent state of insecurity” (*Acts of Resistance* 85), serving to render individuals and public institutions alike more cautious, fearful, and submissive to the impersonal imperatives of the global capitalist economy. In such conditions, people increasingly experience their own personal struggles not as the consequence of political choices made by identifiable social agents, or of the prevailing distribution of power, resources and life opportunities, but as the byproduct of arbitrary, capricious, unpredictable external forces. Disconnected from their social antecedents, Bourdieu argues, the countless seemingly unconnected tragedies of today’s world “seem to differ little from natural disasters – the tornadoes, forest fires, and floods also occupy so much of the news” (*On Television* 7).

Challenging this fatalistic worldview, in which disaster has been normalized and accepted as inevitable, is an important step in confronting the structural violence imposed by climate change today. In the first instance, this means challenging the fetishistic character of capitalist economic life, whereby the “economy” is experienced not as something entwined with our own life-activity, not as a structured social process embodying certain human prerogatives and interests, but as a randomly changing constellation of numbers and things – an arbitrary and amorphous external reality which is beyond our power to comprehend or control. The various changes being wrought by global warming – expressed through hurricanes, flooding, droughts, air and water borne diseases, soil contamination, and so on – can be regarded as a form of fetishism, as described by Marx, at an entirely new level: not only do the byproducts of our own activity turn around and rule over us ‘like’ an inexorable natural force, they in some ways fuse with, distort and aggravate nature itself, unleashing forms of violence that both aggravate socioeconomic injustice and undermine the whole material foundation of our continued survival.

Ultimately, transcending “climate fetishism” will require us, to borrow Galtung’s terms, to disentangle the “actual” from the “unavoidable,” and to actively pursue the possibility of a more rational, just, democratic, egalitarian, and sustainable future. Although public awareness of global warming and its effects has been growing in recent years, to date this has taken a largely individualized and pre-political form. As ecologically conscientious as we may be in our private lives, personal action alone bears little promise. As Bill McKibben has written, the “greenhouse effect is the first environmental problem we can’t escape by moving to the woods. There are no personal solutions. There is no time to just decide we’ll raise enlightened children and they’ll slowly change the world” (204). Nor is there time to continue on with the tired strategy of making polite moral appeals to the conscience of our political and economic elite, tugging at their heartstrings and trying to make environmental reform seem palatable and unthreatening to them. Positioned as it is in the social structure, and as imbued as it is with the unquestionable tenets of market ideology, this stratum does not or cannot perceive the climate crisis in its proper light.

Indeed, as Naomi Klein has provocatively written, it may even see this crisis in many instances as an economic and political opportunity, spearheading “the rise of a predatory form of disaster capitalism that uses the desperation and fear created by catastrophe to engage in radical social and economic engineering” (9).

The resoluteness with which neoliberal politicians and the corporate establishment have resisted taking effective steps to combat climate change, John Bellamy Foster has argued, reflects more than shortsightedness or personal greed; indeed, it

... suggests that capitalism is unable to reverse course – that is, to move from a structure of industry and accumulation that has proven to be in the long run (and in many respects in the short run as well) environmentally disastrous. When set against the get-rich-quick imperatives of capital accumulation, the biosphere scarcely weighs in the balance. The emphasis on profits to be obtained from fossil fuel consumption and from a form of development geared to the auto-industrial complex largely overrides longer-term issues associated with global warming – even if this threatens, within just a few generations, the planet itself.

In this sense, responding effectively to the structural violence of climate change will require a correspondingly *structural* program of social change, oriented not simply towards technological fixes, but towards achieving a greater degree of democratic control over economic life, refitting the scale of production and consumption to respect environmental limits, reweaving our social and ecological “safety nets,” and creating a culture that simultaneously respects the integrity, value, and complexity of human and nonhuman life.

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