

Chapter 5

Is Global Warming a State-Corporate Crime?

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The term “crime” has become increasingly common in critical commentary concerning global warming and the associated environmental harm resulting from climate change. In 2009, for instance, Hans Joachim Schellnhuber, a physicist and the chief climate advisor to the government of Germany referred to 8 years of inaction on global warming and climate change by the George W. Bush administration in the United States by saying, “This was a crime” (quoted in Hertsgaard 2011, p. 254). On the academic side, criminologists Lynch et al. (2010, p. 215) similarly condemn the Bush administration for criminal and “callous neglect of the issue of global warming.” Contending that global warming has “criminological and sociological relevance on several levels,” they explore “the politicalization of global warming under the Bush administration” as an example of *state-corporate crime* (Lynch et al. 2010, p. 213).

This chapter expands on this notion of global warming and climate change as state-corporate crime by examining how transnational corporations, particularly in the fossil fuel industry, and the nation states of the global North, particularly the United States, act in concert in ways that, intentionally or not, cause widespread environmental and social harm. Corporate and state actors in interaction with each other create these harms in four ways (1) by denying that global warming is caused by human activity, (2) by blocking efforts to mitigate greenhouse gas emissions, (3) by excluding progressive, ecologically just adaptations to climate change from the political arena, and (4) by responding to the social conflicts that arise from climate change by transforming themselves into “fortress societies while the rest of

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the world slips into collapse” (Parenti 2011, p. 20). After examining each of these offenses, we conclude by arguing that if those who consider themselves “green criminologists” hope to contribute to reversing, or at least slowing, global climate change, then they need to engage in a “public criminology” that communicates the relationship between state-corporate crimes and environmental degradation to audiences beyond their academic peers.

Global Warming and Green Criminology

Although concerns about the possible harms associated with anthropogenic global warming have existed since at least the 1970s, Lynch and Stretesky (2010, p. 62) point out that: “Criminologists have been slow to consider climate change as a relevant issue.” More recently, however, the development of what some term a “green criminological perspective” (Lynch and Stretesky 2003, 2010; Beirne and South 2006, 2007), and others an “eco-global criminology” (White 2008, 2010, 2011), has led a growing number of criminologists to begin considering the criminological import of global warming. This requires blending criminological insights with existing environmental science. This science has provided clear evidence that state and corporate actors have brought the globe to the brink of environmental collapse, and in doing so have committed and are committing grave *crimes* against, not just humanity, but all life as we know it. Not only are these crimes grave, their threat is immediate. As James Hansen (2009, p. ix), director of the NASA Goddard Space Studies Center, stated: “The startling conclusion is that continued exploitation of all fossil fuels on Earth threatens not only the other millions of species on the planet but also the survival of humanity itself-and the timetable is shorter than we thought.”

Currently, there is no established body of international or domestic law that offers a legal framework for criminologists concerned with global warming and the environmental harms flowing from it. There are some efforts underway to change this situation (see Chap. 6). The British lawyer Polly Higgins, for instance, has proposed that *ecocide* be recognized by the United Nations as an international crime along with genocide, crimes against humanity, war crimes, and crimes of aggression. Higgins (2010, p. 63) defines ecocide as: “The extensive destruction, damage to or loss of ecosystem(s) of a given territory, whether by human agency or by other causes, to such an extent that peaceful enjoyment by the inhabitants of that territory has been severely diminished.” If adopted, “ecocide” would constitute a legal definition under which global warming and climate change would become, not just an environmental problem, but also an international crime. The likelihood that the United Nations, dominated as it is by the carbon dependent and carbon profiting nations of the global North, would establish ecocide as an international crime is slim. Another effort to bring harmful greenhouse gas emissions within a legal framework is the ongoing lawsuit brought by a number of US states against the five largest American utilities in an effort to have their emissions defined as a “public

nuisance” (BusinessGreen 2011a). If successful, this suit could force the federal government to impose more stringent regulations on the fossil fuel industry (BusinessGreen 2011b).

Despite these legal efforts, the emission of carbon dioxide and other greenhouse gases, which accumulate in the Earth’s atmosphere where they trap heat that generates both planetary warming and climate change, are currently not defined as crimes under any law. With regard to global warming there is still nothing comparable to the Montreal Protocol, which was adopted in 1987 to eliminate aerosols and other chemicals that were responsible for a growing hole in the Earth’s protective ozone layer. This Protocol has been successful in eliminating the hydrofluorocarbons (HFCs) that damage the ozone layer. Consequently, some policy experts have suggested that we should curb global warming by including greenhouse gases under this existing, and demonstrably successful treaty (Broder 2010).

To date, the Kyoto Protocol of 1997 is the only major international accord aimed at regulating and reducing greenhouse gas emissions. Unfortunately, this treaty, “an unambitious little thing” as Dyer (2010, p. 142) calls it, is fatally flawed and has done little to reduce carbon emissions. In the first place, the reductions in greenhouse gases mandated by the treaty were too small and applied to only a few countries. Secondly, climate scientists failed to anticipate that extreme weather events and climatic changes due to global warming would increase as dramatically or quickly as they have. Third, most governments resisted calls for larger reductions, and fast-emerging nations such as China and India won agreements that did not oblige them to curb their emissions at all. The biggest failure of the Kyoto Protocol, however, was that the largest emitter of greenhouse gases, the United States, failed to ratify the treaty. As NASA scientist James Hansen points out: “The U.S. sabotaged the effectiveness of the Kyoto Protocol by not signing on. Without the biggest polluter by far, and without the biggest economy, Kyoto could not be very effective” (quoted in Dyer 2010, p. 143). Thus, in its present form the Kyoto Protocol provides little in the way of a legal framework that criminologists can use as a juridical warrant to address anthropogenic global warming as a state-corporate crime.

The lack of a legal framework on which criminologists can base their study of the emission of greenhouse gases as crimes, however, should not be seen as a barrier to this inquiry (see also Chap. 12). Indeed, unless criminologists escape the juridical trap that mandates they only study that which states, through their law-making systems, tell them is a crime, the social injuries caused by the most powerful actors in the contemporary world, transnational corporations and national states, will remain forever outside their reach (Michalowski 2010). Instead, criminologists concerned with global warming can and should utilize concepts such as *social injury/harm* (Michalowski 1985; Tift and Sullivan 2001; Hillyard et al. 2004; Pemberton 2007) and *state crimes of omission* (Barak 1991; Kauzlarich, Mullins and Matthews 2003) as the starting point for their inquiries. As White (2011, p. 21) points out: “A basic premise of green criminology is that we need to take environmental harm seriously, and in order to do this we need a conceptualization of harm that goes beyond conventional understandings of crime.” Lynch and Stretesky (2010, pp. 70–71) argue that green criminology should study the “harms that directly

damage the ecosystem or its parts (direct victimization of the environment), or victimize species through ecosystem damage (indirect victimization).” They also note that, insofar as “scientists are continually discovering new ways in which global warming produces harm ... it is important for green criminologists to stay abreast of this literature in order to address the varieties of victimization and emerging crimes and harms science identifies.” The mandate is both clear and challenging. Green criminologists must understand the scientific literature about, as well as the sociological implications of, global warming and climate change.

Recent overviews of the scientific research on global warming and climate change demonstrate the catastrophic nature of the harms that are being inflicted on the ecosystem (Dyer 2010; Hamilton 2010; Hansen 2009; McKibben 2010), harms that are more severe and occurring at a faster pace than predicted in the 2007 Intergovernmental Panel on Climate Change (IPCC) report. The burning of fossil fuels has already raised the temperature of the planet by almost 1°C (1.8°F) over the pre-industrial average and some scientists estimate it could go as high as an alarming 5 or 6°C, or 9 to 11°F (Dyer 2010; Hamilton 2010). The concentration of carbon dioxide in the atmosphere has increased from 275 parts per million at the dawn of the industrial age to close to 400 parts per million currently, and it appears to be headed for 550 or 650. James Hansen (2009) argues that the only safe level, that is, one that would not risk global warming, is 350 parts per million. Unfortunately, even if we could get back to that level in the near future, great damage has already been done. Again, the research provides clear evidence of this damage: the melting of the polar ice caps, the Greenland ice sheet and the Himalayan glaciers are already contributing to a rise in sea levels; extreme weather events such as an increase in global rainfall in some areas with intractable droughts in others, more severe heat waves, and more frequent and stronger hurricanes; increasing deforestation, particularly in the Amazon rain forest, and the expansion of the tropics which pushes dry subtropics further ahead; and the acidification of the oceans with corrosive effects on shellfish and coral reefs (Hansen 2009; McKibben 2010).

Hansen (2009) also points out that as global warming continues, positive feedback effects will occur that will in turn trigger runaway heating that is essentially uncontrollable and irreversible for thousands of years. Positive feedback tipping points that will dramatically accelerate the heating of the planet include the loss of the Arctic albedo effect (the loss of reflective ice leads to more dark open water in the Arctic which absorbs more solar radiation), the release of huge quantities of methane from the melting permafrost, and the die-back of the Amazon rainforest. Loss of rainforest, in turn will further increase the concentration of carbon dioxide in the global atmosphere, anywhere from 20 to 200 parts per million by the end of the century, with devastating and potentially lethal impacts on many forms of life (Richardson et al. 2011, p. 86).

A key impediment to an effective response to global warming is that the consequences of greenhouse gas emissions involve complex causal chains. As Hamilton (2010, p. 25) points out: “The lag between emissions and their effects on climate and the irreversibility of those effects makes global warming a uniquely dangerous and intractable problem for humanity.” Unfortunately, the lag between cause and

effect also makes it uniquely difficult to mobilize political will to address the problem, even though, as McKibben (2010, p. 27) notes, “The planet on which our civilization evolved no longer exists ... The Earth that we knew—the only earth that we ever knew is [already] gone.”

The environmental damage caused by global warming will result in a wide range of social, economic, and political harms to human communities and social systems on which they depend (Dyer 2010; Parenti 2011). For example, the rise in sea levels, extreme heat, and chronic droughts will lead to drastic reductions in the food supply, increasing famine, and mass migrations. The large movement of people across borders seeking food and an escape from the environmental consequences of increased temperatures will continue to fuel violent conflicts, genocides and other crimes. These movements have already led to the militarization and securitization of borders in the global North as neoliberal policies intersect with climate change to produce declines in agricultural and pastoral economies in the global South, leading to increasing mobility of irregular migrants seeking a minimum of food and/or physical security (Dunn 1995; Parenti 2011). Massive social upheavals, class conflict, and pandemics caused by climate change will stress social institutions, create ideological turmoil and generate political crises. The number of failed and failing states will increase as their incapacity to adapt to climate change increases poverty and violence around the globe, but particularly in those parts of the global South Parenti (2011) terms “the tropic of chaos.” Resource wars and other forms of international conflict will increase and perhaps even provoke the use of nuclear weapons. Increased warfare would also sabotage the very planetary cooperation needed to reduce further global warming (Dyer 2010). From a moral–legal standpoint, one of the most disturbing elements of this process is that it harms most those living in geographic areas and countries that have contributed the least to the problem (Lynch and Stretesky 2010). The Northern, industrial nations have, in the words of Foster (2009, p. 243), accumulated a huge “ecological debt” toward Third World countries due to resource plundering and the infliction of environmental harms. But it is a debt that the global North, so far, has demonstrated little interest in paying.

State-Corporate Crime

Given these catastrophic scenarios, green criminology argues that criminologists treat the grave harms, both present and future, resulting from global warming and climate change as serious crimes warranting criminological analysis. As White (2011, p. 36) points out: “Climate change is arguably the most important issue, problem and trend in the world today and a key area of interest to eco-global criminology.” As criminologists take up this issue, Lynch et al. (2010, p. 215) argue that the *state-corporate crime* approach “provides a useful tool for examining” the crimes related to global warming and climate change. Likewise, in his analysis of transnational environmental crime, White (2011, p. 13) also notes the importance

of investigating the nation state as "... a major facilitator of harm in its own right, either on its own or in conjunction with specific sectional interests (such as particular transnational corporations)."

The concept of state-corporate crime, developed by Kramer and Michalowski (1990, 2006), refers to serious social harms that result from the interaction of political and economic organizations. The idea emerged out of the recognition that some organizational crimes are the collective product of the interaction between a business corporation and a state agency engaged in a joint endeavor. The concept of state-corporate crime seeks to breach the conceptual wall between economic crimes and political crimes in order to create a new lens through which we can examine the ways illegal acts and social injuries often emerge from intersections of economic and political power. As Michalowski and Kramer (2007, p. 201) note: "Contemporary social scientists have largely forgotten what our nineteenth century counterparts knew so well. There is neither economics nor politics; there is only political-economy."

State-corporate crime has been formally defined as "illegal or socially injurious actions that result from a mutually reinforcing interaction between (1) policies and/or practices in pursuit of the goals of one or more institutions of political governance and (2) policies and/or practices in pursuit of the goals of one or more institutions of economic production and distribution" (Michalowski and Kramer 2006, p. 15). As this definition makes clear, Michalowski and Kramer also propose to extend the scope of criminology beyond legal definitions, incorporating harmful social actions that violate neither criminal nor regulatory laws at the state level. While the concept of state-corporate crime could be applied to illegal or other socially injurious actions in societies ranging from private production systems to centrally planned political economies, most of the research to date has focused on state-corporate crimes within the private production system of US capitalism (Michalowski and Kramer 2006). State-corporate crimes within a global capitalist economy involve the active participation of two or more organizations, at least one of which is in the civil sector and one of which is in the state sector. The time has come to extend this framework to the study of global crimes of neoliberal capitalism, and in particular to the critical role of corporations and political states in both promoting the release of greenhouse gases and refusing to seriously address the resulting consequences of global warming and planetary climate change.

As a sensitizing concept the term state-corporate crime has three useful characteristics. First, it directs attention toward the way in which upper-world crime emerges at organizational intersections, in this case the intersection of institutions of accumulation and institutions of governance. In doing so, it foregrounds the ways in which many deviant organizational outcomes are not discreet acts of institutional wrongdoing, but rather the product of the relationships between different social institutions pursuing different goals and responding to different sets of pressures.

Second, it approaches the state as a nexus of *relationships* rather than a set of governmental institutional actors (Wonders and Solop 1993; Sassen 1993). This relational model directs us to examine the ways in which horizontal and vertical relationships between economic and political institutions contain powerful potentials

for the production of illegal and other socially injurious actions. For example, US legislation designed to address global climate change, or more often the failure to pass legislation to address climate change, cannot be understood simply as a set of decisions taken by legislators pursuing varying political or organizational agendas. Rather, these outcomes are the product of long chains of relationships and conflicts among carbon-intensifying corporations (e.g., petroleum, coal, auto and auto related, highway construction), carbon-reducing industries (e.g., alternative energy, urban mass transit), political organizations of workers and communities dependent on these various industries (e.g., unions, Chambers of Commerce), environmental organizations, lobbying firms, banks, and other nodes of finance capital with a stake in environmental policy, along with a complex stew of regulatory bodies, advisory commissions, think tanks, and international governance and nongovernmental organizations. It is the flow of “information,” data, money, and interpersonal linkages along these channels of power that constitutes the real operations of the US capitalist state. This relational approach provides a more nuanced understanding of the processes leading to deviant state actions than approaches that treat governments as closed systems, or locate the wrongdoing within individual decision makers operating within individual institutions.

Third, approaching the state-corporate context as a relational process directs analytic attention to the vertical relationships between different levels of organizational action in government and business. It asks us to be alert to three things. First, is the way particular individuals can, by their institutional movements and locations, shape flows of information, data and money through what Mills (1956) called the “circulation of elites.” Second is the way in which standard operating procedures and cultures within institutions can facilitate or inhibit deviant organizational behavior (Vaughn 1996). And third, the way larger-scale political economic arrangements define the particular relationship between capital and the state (e.g., regulatory welfare state, neoliberal workfare state, state capitalism, etc.) and shape the opportunities and rewards for both socially harmful and socially responsible behaviors by individuals and organizations (Jessop 1991).

By examining these three levels we can recognize that political-economic arrangements are more than technical mechanisms for determining the relationship between state and capital. They also reflect and reproduce particular ideologies not just of the relationship between capital and state, but the relationship between capital and individuals and individuals and the state.

State-Corporate Crimes Related to Global Warming

We suggest that the harmful consequences of global warming and climate change are shaped in fundamental ways by four forms of state-corporate crime. Two of these forms concern failures of *mitigation*, that is, the need to drastically reduce the production of carbon dioxide and other greenhouse gases. The other two are failures of *adaptation*, the process of adjusting to or preparing to live with the effects of

climate change that are either already underway or inevitable given the damage already done. In both cases, mitigation and adaptation, state corporate crimes can occur either through acts of commission or acts of omission.

Before proceeding, we wish to be explicit that we recognize that global warming and climate change are, in the broadest sense, the cumulative outcome of 200 years of industrialization, and particularly the rapid acceleration in fossil fuel consumption over the last century. Increasing consumption of industrial commodities, the underlying cause of climate change, has long been fueled by corporations seeking profit and states seeking popular legitimacy. The fetishism of commodities has been further accelerated by the intentional production of material desires among consumers (Ewen 2001). Thus, we are also aware that the expansion of material consumption, a key driver of development policies and industrial practices that have poisoned and are poisoning the planet, are broadly supported in nations of the global South as well as the global North. Although these macrorealities may themselves be crimes as Zerzan (2002) suggests, they are beyond the scope of our consideration here. However, even within these grand historical processes that arguably transcend approbation as crime, it is possible to discern concrete state–corporate relationships (1) that caused knowable and predictable harm, and (2) that could have avoided by state and capital managers who chose not to do so. It is this more specific arena of state–corporate crime to which we now turn.

Mitigation Failures: State Inaction and Climate Change Denial

The failure by individual states and the international community to undertake any serious efforts to mitigate global warming constitutes what Michalowski and Kramer (2006) term a *state facilitated* corporate crime, that is, an action or set of actions designed to enable corporate and state actors to pursue some pattern of harmful behavior.

Anthropogenic global warming stems from the production of heat-trapping greenhouse gases. In view of the extensive scientific evidence of the environmental and social harm resulting from emission-caused global warming, it would be reasonable to expect that the international political community and its member states would move immediately and aggressively to mitigate the production of greenhouse gases. Yet, to the contrary, many of the key corporate and state actors responsible for the greatest production of greenhouse gases have chosen to not only continue their current production practices, but in many cases have supported policies that will expand greenhouse gas production (see Chap. 4).

Some critical commentators have argued that the continued high levels of carbon dioxide emissions by corporations and the US military are crimes of corporate and state violence. As James Hansen puts it: “The trains carrying coal to power plants are death trains. Coal-fired power plants are factories of death” (quoted in Foster 2009, p. 21). In a similar vein, Sanders (2009, p. 22) says, “The military—that voracious vampire—produces enough greenhouse gases, by itself, to place the

entire globe, with all its inhabitants large and small, in the most imminent danger of extinction.”

That the emission of greenhouse-gases beyond levels scientifically determined to be low enough to avoid or slow global warming should be illegal is noncontroversial for most green criminologists. We take this one step further, arguing that the failure to reduce or mitigate the production of greenhouse gases and decarbonize the economy should be understood as a form of state-corporate crime. The failure of state officials to take effective and immediate actions to compel both the private sector and governmental institutions to reduce their emission of greenhouse gases is, arguably, a state crime of omission. For example, the George W. Bush administration not only refused to pass domestic policies that would limit the production of greenhouse gases in the United States, but also worked proactively to sabotage the Kyoto Accord by effectively withdrawing from the Kyoto process and promoting its own strategy to address climate change, one which, would of course, have no impact on US business-as-usual. His acts were so egregiously supportive of industries and practices contributing to climate change that Kennedy (2004) accused the administration of “crimes against nature.” As Lynch et al. (2010) document, 8 critical years were lost in the battle against global warming due to the stonewalling and negligence of an administration that had extraordinary ties to the main culprits in the coal and gas industry.

The United States is not alone in its foot-dragging on the matter of climate change. Other states, and the international political system in general, have also failed to take aggressive action. The Copenhagen Conference in December of 2009 may have been the last, best opportunity for the governments of the world to act forcefully to prevent catastrophic climate change. Yet, the Obama administration and the entire international political community failed to take any strong actions that might avert impending ecocide. As John Sauven, executive director of Greenpeace U.K. bluntly stated after the failure of the conference: “The city of Copenhagen is a crime scene tonight, with the guilty men and women fleeing to the airport. There are no targets for carbon cuts and no agreement on a legally binding treaty” (BBC 2009, p. 3). Similarly, White (2011, p. 148) contends that the failure at the Copenhagen conference was indeed a state-corporate crime, noting that “The abject failure of the Copenhagen talks to actually do something about carbon emissions and to address climate change issues in a substantive fashion is a striking example of the fusion of state and corporate interests to the detriment of the majority.”

While the failure to take aggressive action to limit global warming is a state-corporate crime of omission in our schema, the orchestrated denial of climate change, despite extensive evidence to the contrary, is a –state-corporate crime of commission. It is not a failure to act, but a deliberate attempt to thwart efforts to respond in an effective and just way to the emerging problems resulting from global warming.

Global warming denial efforts are largely carried out by conservative think tanks funded for the most part by money from the fossil fuel industry (Gelbspan 2004; Greenpeace 2011; Jacques et al. 2008; Oreskes and Conway 2010). For example,

Western Fuels, a large coal cooperative, and the giant Exxon Mobil oil company, have each contributed millions of dollars to conservative think tanks and environmental skeptics working to deny global warming (Adams 2009; Jacques 2009; McNall 2011). Oreskes and Conway (2010, p. 247) note that, “Exxon Mobil’s support for doubt-mongering and disinformation is disturbing but hardly surprising. What is surprising is to discover how extensive, organized, and interconnected these efforts have been, and for how long.”

The global warming denial countermovement consists largely of corporate propaganda built around lies and deceptions masquerading as science which is then disseminated through conservative think tanks, industry trade associations, right-wing opinion leaders, the corporate media and by some government officials (Friel 2010; Gelbspan 1998, 2004; Hamilton 2010; Hoggan 2009; Jacques 2009; McCright and Dunlap 2000, 2003; Oreskes and Conway 2010; Chap. 4). The intent of these denial efforts is to cast doubt on the scientific evidence of anthropogenic global warming, and thus impede governmental actions that would force the fossil fuel industry to make changes that would reduce emissions. Some environmental scientists contend that such corporate and/ or government-sponsored climate science disinformation and denial should be labeled as crime. For instance, climate scientist Donald Brown (2010, p. 2) states, “We may not have a word for this type of crime yet, but the international community should find a way of classifying extraordinarily irresponsible scientific claims that could lead to mass suffering as some type of crime against humanity.”

While space limitations preclude an extended analysis, it is important to at least note that state-corporate crimes that result in catastrophic climate change are rooted in broader structural and cultural forces. The continued “criminal” emission of greenhouse gases in much of the world arises from the global dominance of a predatory corporate capitalist economic system and the popular desires it stimulates, protected by imperial economic and/or military actions against any nations that might seek to pursue policies and practices that contradict the interests of that system (Burbach et al. 1996). As Foster (2009, p. 46) points out, “Capital by its very logic imposes what is in effect a scorched earth strategy. The planetary ecological crisis is increasingly all-encompassing, a product of the destructive uncontrollability of a rapidly globalizing capitalist economy, which knows no law other than its own drive to expand.”

The global political economy of predatory capitalism also gives rise to two broad cultural factors that, in turn, reinforce the economic relationships and forces that facilitate global warming. The two factors are “growth fetishism” (Hamilton 2010) and state supported cultures of consumption and production (Ewen and Ewen 1982; Lynch and Stretesky 2010). The pathological promotion and pursuit of endless economic growth on a planet with finite resources, such as fossil fuels, is unsustainable in the long run. It also produces “tunnel vision” which restricts people from considering any solution to the global warming problem other than a technological one which would facilitate continued high levels of consumption, only at a “cleaner” level (Hamilton 2010). Insofar as “The more an individual or culture consumes, the more that person or culture contributes to climate change” (Lynch and Stretesky

2010, p. 64), the only path away from continued global warming is reductions in levels of consumption. Unfortunately, any US political leader (or probably the leader of any other nation of the North) who suggests individuals consider lives built around consuming less does so at grave political risk. The only US President to make such an effort was Jimmy Carter who, in the midst of the fuel crisis of the 1970s, suggested Americans lower their thermostats and put on sweaters. He was pilloried for the very idea that Americans should use less (Carter 1977). Yet, had the United States pursued his overall energy policy of reduced consumption, its carbon footprint would be less today than it is.

Jacques (2009) also analyzes both structural and cultural factors behind environmental skepticism in general and climate change denial specifically. He argues that environmental skepticism is a social countermovement organized by corporate funded conservative think tanks. These think tanks provide cover for private industry and the conservative ideology itself. According to Jacques (2009, p. 45), environmental skepticism “is working to counter the advances of international diplomacy and negotiations about trans-boundary environmental changes,” such as climate change. He argues that this broad based countermovement is rooted in and seeks to protect the world capitalist system, or what Hippwell (2004, p. 370) calls *Industria*, an “industrial, homogenizing force” that manifests itself “as an anthropocentric, rationalizing, colonizing and ecologically destructive network of capture and control.”

The environmental skepticism behind climate change denial is more complex than simply protecting profits or distributional interests. As Jacques (2009, p. 89) argues, the skeptical world-view is “held together by a deep anthropocentrism that seeks to annihilate non-human ecology or at least has little ethical use for non-humans, a severely narrow sense of civic obligation and duty, and an ontology of possessive individualism that sees consumption and property as defining features for being human.” This anthropocentric view is directly counter to what pioneering environmentalist Aldo Leopold (1949/1989, p. 204) termed a “land ethic,” which he describes as a way of thinking and being that “simply enlarges the boundaries of [our] community to include soils, waters, plants, and animals, or collectively: the land.” In contrast to the environmental-domination perspective that Jacques critiques, a land ethic asks that we behave in ways that “affirm” and protect the right of the land “to continued existence, and, at least in spots ... continued existence in a natural state.”

These two perspectives reveal that at the root of the climate-change debate lays a much deeper conflict over fundamental visions of the relationship of humans to their environment, and by extension, ultimately to one another. The environmental-domination view is essentially modernist and closely associated with the rise of accumulation as the central engine of political economic organization, whether that accumulation be through private capitalism or some form of state capitalism. The land-ethic standpoint is simultaneously pre-modern and future-modern. That is, it both reflects the practices of the pre-modern era when humans fully recognized their dependence on the land and thus treated it in ways to ensure their survival, and (possibly) the ideology and practices of a future period when we once again share

the recognition of this intimate connection with the land, and thus our need to preserve it and all that it contains for both human survival and for the equally valid good of protecting “the land” for its own sake (Zerzan 2002).

Unfortunately, the human-centric and modernist vision of environmental domination not only serves the economic and political interests associated with neoliberal capitalism’s agenda to exploit planetary resources to the maximum for profit, but they also intersect with powerful cultural forces that believe human consumption of commodities should take precedence over environmental protection. Combined, these forces help support a climate-change denial movement that facilitates the continued production of greenhouse gases and, by sowing seeds of doubt about global warming, helps block regulative efforts on behalf of mitigation.

The Politics of the Armed Lifeboat and the Exclusion of Progressive Political Adaptation

Many environmental activists resist even talking about adaptation (actions designed to reduce vulnerability to the negative effects of climate change), insisting that the mitigation of global warming must be placed first and foremost on the action agenda. But as McKibben (2010) has pointed out, due to climatic changes that have occurred, we live on a planet today that is already significantly different from what it was at the end of World War II. Those who accept that climate change is already underway, argue that it is imperative we explore the least destructive ways to adapt to these changes while simultaneously seeking to mitigate the causes of global warming.

Adaptation can take two forms. One form is positive, progressive, cooperative and socially just. The other is militarized and repressive, what Parenti (2011) calls the “politics of the armed lifeboat.” We contend that the exclusion of the first type of political adaptation to climate change from economic and political discourse and the adoption of the second, are state-corporate crimes insofar as they will bring predictable and avoidable harm to large portions of the human population in order to benefit smaller segments in the richest and most powerful nations of the world.

Hertsgaard (2011) describes a number of adaptations to climate change already underway. Some local governments, such as in Seattle, Chicago and New York are responding with strategies that simultaneously serve mitigation and adaptation by seeking routes to sustainable economic development, increasing energy efficiency, planting more trees and shifting to wind powered electricity. He points out that as an adaptation to the threat of rising ocean levels the Netherlands is in the process of raising the height of its sea walls. A tree-based approach to farming, called “farmer-managed natural regeneration” has transformed the western Sahel (the climatic band between the Saharan and savanna areas of Africa) in recent years. Other ecological agricultural practices to increase food production are also being investigated (Hertsgaard 2011).

The problem with such measures is that there are too few of them, they are localized and widely scattered, lack political support, and are often underfunded.

Moreover, many of these examples do not address the significantly greater impact global climate change will have on the human populations of less developed countries. According to the IPCC (2001, 2007), climate change will be far more devastating for populations in less developed countries insofar as they depend more heavily on the environment for subsistence, already face problems of food insecurity, desertification, limited access to potable water, often have low levels of arable land relative to population, and lack levels of technological development that might be adapted to ameliorate the impacts of climate change.

The consequences of global climate change in less developed countries will reach well beyond the boundaries of devastated areas. As Reuveny (2007, p. 656) notes:

People can adapt to environmental problems in three ways: stay in place and do nothing, accepting the costs; stay in place and mitigate changes; or leave affected areas. The choice between these options depends on the extent of the problems and mitigation capabilities. Developed countries (DCs) are likely to mitigate problems through technological innovation and institutional redesign. Less developed countries (LDCs) are less likely to mitigate such problems since they lack wealth and expertise.

Insofar as human populations typically do not accept their demise passively, we can anticipate substantial climate induced migration from less developed countries as the effects of global climate change deepen. Over two decades ago the IPCC (1990, p. 2) warned that the “greatest single impact of climate change could be on human migration with millions of people displaced by shoreline erosion, coastal flooding and agricultural disruption.” More recently a report by the Asian Development Bank (2009) concluded that in the Asia/Pacific region alone anywhere from 700 million to one billion people “will come under substantial pressure to migrate (temporarily or permanently, and internally or across borders)” due to climatological disruptions to shorelines and food systems.

These migrations will not be benign. In addition to the deep disruption to the lives of those who are forced or feel compelled to migrate due to climate induced environmental changes, these migrations hold a significant threat of violent conflict. According to estimates by Reuveny (2007), between 1960 and 1990 there were 36 violent conflicts resulting from or exacerbated by climate induced migration due to increased competition for resources, intensified ethnic tensions, inter- and intra-governmental distrust and deepening socio-political fault lines. These data cover only the earliest possible impacts of global climate change. They suggest that in the absence of genuinely progressive, cooperative adaptations to global climate change, as the impacts of climate deepen, we can expect a significant increase in migration induced conflicts.

Despite these looming threats, adaptation to global climate change was not even on the agenda of the international political community until the developing nations of the global South demanded adaptation assistance and funding from the rich nations at the Copenhagen conference. This, however, became a significant stumbling block to an agreement because governments of the global North refused to acknowledge that they owed an ecological debt to the South, let alone act to reduce this debt. The states (and corporations) that derive the most benefits from the global

capitalist economy have refused to participate in any adaptation efforts that require “economic redistribution and development” or “a new diplomacy of peace building” (Parenti 2011, p. 11). Given the likelihood of violence resulting from climate-induced migration, the failure to plan for and adopt progressive, cooperative and just adaptation policies warrants analysis of global climate change as a state-corporate crime of omission.

While the failure to adopt peaceful measures of adaptation is a crime of omission, the state-corporate nexus is also guilty of the direct commission of a violent crime by “responding to climate change by arming, excluding, forgetting, repressing, policing, and killing” (Parenti 2011, p. 11). Parenti (2011, p. 7) notes that, “The current and impending dislocations of climate change intersect with the already-existing crises of poverty and violence,” crises that are the products of Cold War politics and neoliberal economic policies. In his words, this collision of global poverty and violence with climate change constitutes “the catastrophic convergence.” States in the global North are responding to this catastrophic convergence primarily with militarism, violence and repression. As Parenti (2011, p. 11) observes:

One can imagine a green authoritarianism emerging in the rich countries, while the climate crisis pushes the Third World into chaos. Already, as climate change fuels violence in the form of crime, repression, civil unrest, war, and even state collapse in the Global South, the North is responding with a new authoritarianism. The Pentagon and its European allies are actively planning a militarized adaptation, which emphasizes the long-term, open-ended containment of failed or failing states-counterinsurgency forever.

Parenti (2011, p. 11) adds, “This sort of ‘climate fascism,’ a politics based on exclusion, segregation, and repression, is horrific and bound to fail.” We contend that a militarized response to climate conflicts, such as the 2006 US proxy war and other forms of military involvement in drought and famine stricken Somalia (Scahill 2011), is state-corporate crime designed to keep powerful economies and their governments in power at the expense of the rest of the world. Whether we have reached the point of catastrophe as Parenti suggests, or whether there is still time to avert its worst consequences, the path toward some alternative and less grim future lies through important transformations at the intersection of corporations and states, and it is here that a public criminology can play an affirmative role by confronting the state-corporate crimes of climate change.

Conclusion: Public Criminology, State-Corporate Crime, and Climate Change

This chapter has argued that global warming is a state-corporate crime that warrants further criminological inquiry. We end with a plea for the development of a public criminology of the crimes related to global warming and climate change. Following Burawoy’s (2007) conceptualization of public sociology, Kramer et al. (2010) have argued that a public criminology of state crime would seek out extra-academic audiences and enter into conversations with various publics concerning these crimes.

Public criminologists willing to speak about global warming and climate change in what Jensen (2009) calls the “prophetic voice,” then have a responsibility to act in the public arena. Kramer (2012) has recently offered three ways that criminologists can engage in progressive political action to confront the state-corporate crimes analyzed in this chapter. The first approach is to play a role in breaking through the denial and normalization that usually covers crimes related to global warming [presenting research to document climate harms and dispute literal denials of these crimes or theory to counter narratives of interpretive denial]. The second involves engaging in transnational activism with social movement groups to contest the power of the corporate state in an effort to achieve specific progressive policy changes concerning the de-carbonization of the global economy and progressive adaptations to climate change [acting as consultants to specific environmental NGOs such as Greenpeace or Climate Action Network who are working to challenge corporate agendas]. Finally, Kramer argues that criminologists can contribute their insights and understanding to help enhance the ability of international legal institutions to establish controls over global warming [advocating for international agreements that cut greenhouse gas emissions and promote the development of alternative energy sources].

Pursuing these tasks is not easy. They require time and energy which many academic criminologists already find in short supply. These tasks also require transcending the “normal science” mandate that researchers and scholars refrain from activism that would undermine their “value neutrality.” However, as Robert Heilbroner (1974) once observed, when it comes to social inquiry into “the human prospect,” value neutrality is always an impossibility. Rather than simply be observers cataloguing state-corporate crimes, criminologists concerned with climate change need to engage as public intellectuals, that is, as overt activists for new visions of how humans can live on this planet and how economic and political institutions can be remade in pursuit of those new visions.

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