The Crisis in Crisis

by Joseph Masco

In this essay I consider the current logics of crisis in American media cultures and politics. I argue that "crisis" has become a counterrevolutionary idiom in the twenty-first century, a means of stabilizing an existing condition rather than minimizing forms of violence across militarism, economy, and the environment. Assessing nuclear danger and climate danger, I critique and theorize the current standing of existential crisis as a mode of political mobilization and posit the contemporary terms for generating nonutopian but positive futurities.

If you tune in to the mass-mediated frequency of crisis today, it quickly becomes overwhelming. News of infectious disease outbreaks (Ebola, antibiotic-resistant illnesses, measles outbreaks among purposefully unvaccinated children); wars in the Middle East, Africa, and Eastern Europe as well as new stages in the multigenerational US campaigns against drugs and terror; talk of a new Cold War between the United States and Russia, or maybe one with China; the elimination of privacy to surveillance programs (run by both corporations and the security state); financial contagions, fears of economic collapse, and new extremes in global inequality; species die-offs on an unprecedented scale; megadrought, megasnow, megacold, megaheat; proliferating toxicities and corruptions; racialized violence (state driven, terroristic, individual); stand-your-ground laws; ocean acidification, the near-eternal longevity of plastics; peak oil, peak water; smogocalypse in China; arms races (nuclear, biological, cyber)—the everyday reporting of crisis proliferates across subjects, spaces, and temporalities today and is an ever-amplifying media refrain.

This raises an important historical question about how and why crisis has come to be so dominant in our media cultures. On any given issue—disease, finance, war, or the environment—there are specific historical moments more violent than today. Yet the configuration of the future as an unraveling slide into greater and greater degrees of structural chaos across finance, war, and the environment prevails in our mass media. In the United States, a 24-7 media universe offers up endangerment on a vast range of scales, making it so ever present as to dull consumer senses. The power of crisis to shock and thus mobilize is diminishing because of narrative saturation, overuse, and a lack of well-articulated positive futurities to balance stories of end-times. Put differently, if we were to remove crisis talk from our public speech today, what would remain? And if crisis is now an ever-present, near permanent negative "surround," as Fred Turner (2013) might put it, what has happened to a normative, non-crisis-riven everyday life, not to mention the conditions of possibility for positive futurisms?

In short, there is a "crisis in crisis" today, one that I think is diagnostic of twenty-first-century American capitalism. The United States exists in a structural contradiction, one drawn from being both a democracy and an imperially inclined superpower: since the 1980s, the federal government has increasingly exchanged domestic welfare programs for mass incarceration and permanent war, rewriting the social contract in foundational ways.

In this article I examine American sensibilities about crisis, seeking to historicize and critique the collapsing of a more robust political sphere into the singular language of crisis. Crisis is, in the first instance, an affect-generating idiom, one that seeks to mobilize radical endangerment to foment collective attention and action. As Roitman (2014:82) writes in her extended study of the term, crisis is "an observation that produces meaning" by initiating critique within a given condition. It is thus a predominantly conservative modality, seeking to stabilize an existing structure within a radically contingent world. As social theorists as diverse as Reinhart Koselleck (1988), David Scott (2014), and Susan Buck-Morss (2002) have also noted, crisis and utopia have structured the modernist Euro-American project of social engineering, constituting a future caught between a narrative of collapse and one of constant improvement. The language of collective social improvement has all but disappeared from political debates in the United States over the last generation, a victim of a post-welfare-state mentality and neoliberal economics. "Progress" is no longer tied to collective social conditions (e.g., the elimination of poverty) but increasingly restricted to the boom and bust of markets and changes in consumer technology product cycles. Crary (2013:9) attributes the current "suspension of living" to a 24-7, always-on media and work environment, one that foments a new kind of temporality that increasingly disallows fantasies about improved collective conditions while being increasingly indifferent to the structural violence supporting this economy.

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In the twenty-first century, information technologies offer perhaps the most immediate and available sense of radical change, a sign of how far the social engineering through state planning of the twentieth century has contracted into the market engineering of consumer desires. Technological revolution in consumer electronics is now constant, creating a new kind of techno-social space marked by consumer anticipations of ever-improving informational capacities and a continual transformation in the commodity form. Consider the social effects of the major communication revolutions of the past 20 years in the United States—the Internet, social media, and the smart phone—each of which has been integrated into everyday American life with astonishing speed and ubiquity. This experience of "revolution" in the marketplace is, however, matched by a formal political culture that is theatrically gridlocked at the national level, unable to constitute significant policy on issues of collective endangerment across the domains of finance, war, and the environment. Moreover, policy failure in each of these domains over the past generation has not produced a radical reassessment of supporting assumptions or institutions. Even as shifting information technologies secure an experience of radical structural change in every life today, formal political processes perform being unable to imagine even minor shifts in existing logics or practices despite financial collapse, military failure, and environmental disaster. Thus, while communication has never been easier and information about matters of collective concern has never been more abundant, the media spaces crafted for always-on information systems deliver largely negative portraits of the present and future.

There is, in other words, a steady invitation in American media worlds to fear the future and to reject the power of human agency to modulate even those systems crafted by industry, finance, or the security state. This marks the arrival of a new kind of governance, one based not on eliminating fears through the protective actions of the security apparatus but rather on the amplification of public dangers through inaction. This produces a suicidal form of governance, one that cannot respond to long-standing collective dangers (e.g., climate change) while also generating new ones (such as the poisoning of the public water system in Flint, Michigan, by emergency managers seeking cost savings). The affective circuit of the counterterror state, for example, privileges images of catastrophic future events over such everyday violences, multiplying fears of the future while allowing everyday structural insecurities to remain unaddressed (Masco 2014). Sloterdijk has suggested that the resulting psychic agitation is one important effect of a globalized economy:

> This has progressed to such an extent that those who do not make themselves continuously available for synchronous stress seem asocial. Excitability is now the foremost duty of all citizens. This is why we no longer need military service. What is required is the general theme of duty, that is to say, a readiness to play your role as a conductor of excitation for collective, opportunist psychoses. (Sloterdijk and Henrichs 2001:82)

This is to say that crisis talk serves a wide range of psychosocial purposes, creating across the domains of finance, war, and the environment an ever-expanding invitation to engage the future through negative affects. Thus, the American public can simultaneously know the United States to be an unrivaled military, economic, and scientific superpower, a state with unprecedented capacities, agencies, and resources, and yet feel completely powerless in the face of failed US military, financial, and environmental commitments. Instead of the crisis-utopia circuit that empowered the high modernist culture of the mid-twentieth century, we now have a crisis-paralysis circuit, a marker of a greatly reduced political horizon in the United States.

I am interested in this lack of political agency for those living within a hyperpower state and wish to interrogate it via a conceptual and historical assessment of the two linked existential dangers of our time: nuclear crisis and climate crisis. Existential danger makes a claim on being the ultimate form of crisis—a mode of collective endangerment that has historically worked in the era of nation-states to define the boundaries of the community and focus the responsibilities of government. To evoke an existential danger is to call on the full powers of the state and society in the name of self-preservation. In the current moment of counterterror, financial instability, and climate change, the call to existential danger no longer functions exclusively in this way. Indeed, existential dangers are now being crafted and enhanced by both state action and inaction. After 15 years of counterterror and geopolitical misrecognitions over weapons of mass destruction, the US nuclear complex is promoting a program to rebuild the entire US nuclear triad of bombers, missiles, and submarines and arm them with new nuclear weapons designs. Similarly, through new drilling technologies and a suspension of regulatory oversight, the United States is now poised to become the world's largest energy producer by 2020—the world's number one petrochemical state—even as earth scientists detail the catastrophic planetary effects of releasing all that carbon from the ground. Thus, the existential security challenges of our time are not being met with programmatic efforts to move out of nuclear or petrochemical economies in the name of collective security. Rather than committing to new security and energy infrastructures, and with them creating a different geopolitics (see Clark 2014), the United States is committing ever more deeply to the most well-known and collectively dangerous industrial activities.

In what follows, I interrogate the media politics around the signing of the 1963 Limited Test Ban Treaty (LTBT)—the first arms control agreement as well as the first environmental treaty—to consider an alternate era of crisis management. I then turn to contemporary climate science, interrogating the terms of America's current petrostate strategy. In each case, I consider how existential danger is mobilized via mass media as a collective crisis and consider the conditions of possibility

for a radical reconsideration of the terms of everyday life. Put differently, the crisis in crisis today marks a new political modality that can experience repeated failure as well as totalizing external danger without generating the need for structural change. "Crisis," in other words, has become a counterrevolutionary force in the twenty-first century, a call to confront collective endangerment that instead increasingly articulates the very limits of the political.

The Nuclear Danger

The period between the Soviet launch of the first artificial Earth satellite on October 4, 1957, and the signing of the LTBT on August 5, 1963, witnessed geopolitical and environmental crises of an astonishing range, scale, and scope. In addition to the building of the Berlin Wall, the Bay of Pigs invasion, and the Cuban Missile Crisis, the United States and the Soviets waged fierce proxy wars in Latin America, Africa, the Middle East, and Southeast Asia. A voluntary nuclear test moratorium between the two powers in the years 1959–1960 ended suddenly in 1961 with 59 Soviet nuclear tests. The following year, the Soviets detonated an additional 79 nuclear devices while the United States exploded 96. Between the two weapons programs, this amounts to a nuclear detonation every other day for the calendar year of 1962 (see fig. 1). The speed and volume of nuclear detonations in 1962 belies a scientific research program, becoming instead a global theater of nuclear messaging, establishing a US and Soviet commitment to nuclear war. Almost all of these explosions were conducted in the atmosphere. After the atomic bombing of Hiroshima and Nagasaki in 1945, this makes 1962 probably the most dangerous year in the first two decades of the nuclear age. In addition to narrowly avoiding a nuclear war that would have destroyed North America, Europe, and much of Asia inside a few minutes of conflict (see Rosenberg and Moor 1981–1982; Scott 1987), the nuclear testing programs were a substantial disaster for the global environment. Each of these nuclear "tests" was a planetary ecological event, one that destroyed local ecosystems and sent radioactive fallout high into the stratosphere, where it circled the earth. Aboveground nuclear explosions distributed contamination to every living being on the planet in the mid-twentieth century to a degree that is still measurable today (Masco 2006:302).

The year 1962 thus stands as a superlative year of "crisis" in the nuclear age, involving a war fought via "test" programs and covert actions around the world that nearly became a planetary inferno. By 1962, it was well understood that aboveground nuclear explosions were a major environmental and public health risk. Beginning a decade earlier with the first hydrogen bomb tests in the Pacific, earth scientists began tracking radioactive fallout as a means of understanding ecological transport across atmosphere, biosphere, geology, and oceans. In

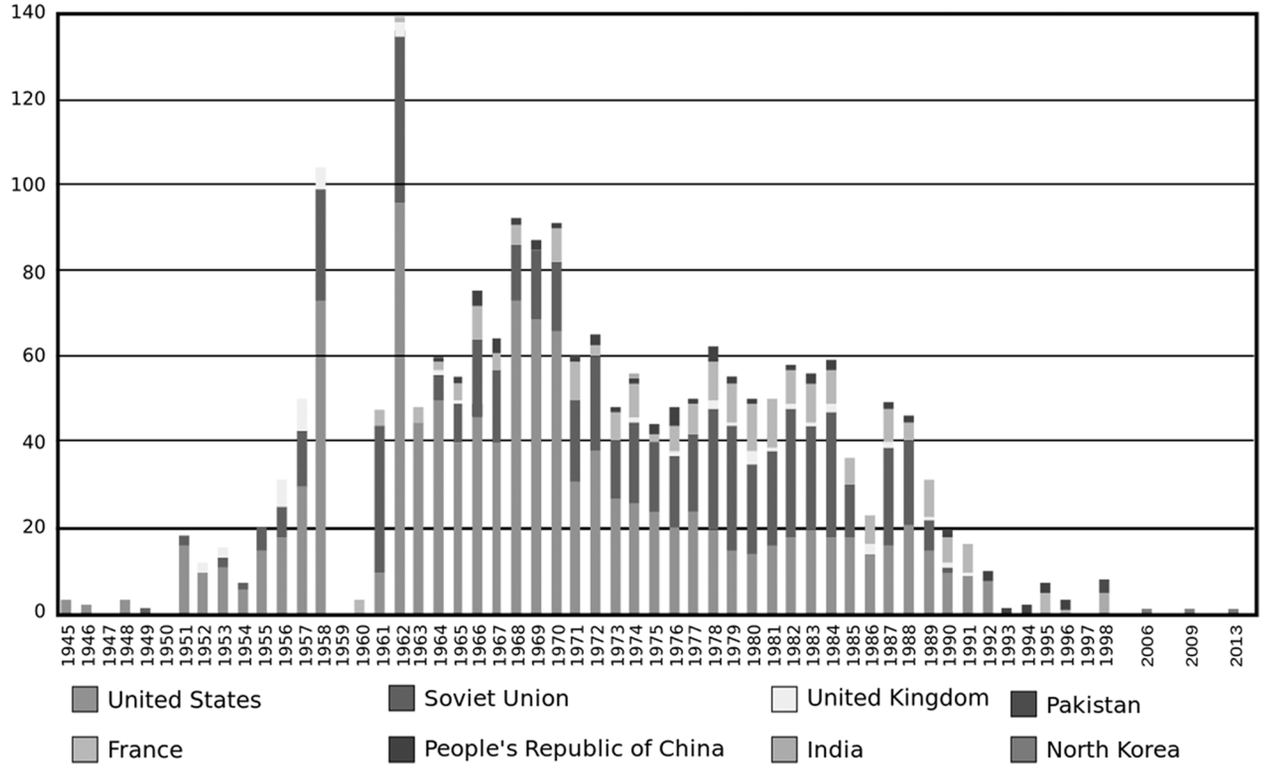

Figure 1. Nuclear tests by country and year, 1945–2013 (courtesy of Wikimedia Commons). A color version of this figure is available online.

1952, the "IVY-Mike" detonation produced a mushroom cloud that rose to over 120,000 feet and was 25 miles wide (fig. 2). United States earth scientists used this radioactive cloud as an experimental lens, tracking the global dispersal of strontium-90 as a means of understanding stratospheric flows and showing with a new specificity how earth, ocean, ecologies, and atmosphere interact.

The fallout produced by the Mike detonation was tracked globally by Machta, List, and Hubert (1956), one of a series of studies that followed the stratospheric transport of nuclear materials produced by atmospheric testing, offering increasingly high-resolution portraits of atmospheric contamination within an integrated biosphere. These wide-ranging studies directly challenged a national security concept that was no longer able to protect discrete territories but was instead generating, in Ulrich Beck's (2007) terms, new "risk societies" united not by territory, national identity, or language but rather by airborne environmental and health risks increasingly shown to be global flows (see Fowler 1960).

Radioactive fallout studies demonstrated a new kind of collective injury emerging on top of the imminent threat of nuclear war, namely, that of an industrially transformed environment. Tracking the radioactive signatures of nuclear tests allowed scientists to map the biosphere as an integrated ecological space, one in which toxicity was a "flow" that connected geologies, oceans, organisms, and atmospheres in specific ways. Fallout studies required new surveillance systems and generated major data sets for the earth sciences, formally pursued with the goal of understanding nuclear environmental effects and to track the Soviet nuclear program. The early Cold War produced a massive investment in air, ocean, geology, ice cap, and increasingly outer space research. The US nuclear project sought both to militarize nature for national advantage (see Fleming 2010; Hamblin 2013) but also to understand planetary space in a new way. The resulting data sets established, as Paul Edwards (2010) has shown in detail, a new kind of global information infrastructure allowing constantly improving portraits of earth systems to be possible. Contemporary understandings of climate change are based on the foundational scientific and big data work of this early Cold War period. In this way, the nuclear state participated in a larger militarization of environment in the twentieth century (see Sloterdijk 2009), one that enabled new forms of environmental thinking, including a scalar multidisciplinary commitment to connecting locality with regional and global technological infrastructures and ultimately planetary-scale processes (Masco 2015).

By 1960, earth scientists could already document the stratospheric height of fallout, connect it to specific nuclear detonations, and show how US and Soviet nuclear detonations were merging the global north and global south as irradiated space (see fig. 3). The development of US national security in the form of the hydrogen bomb was thus linked to the production of

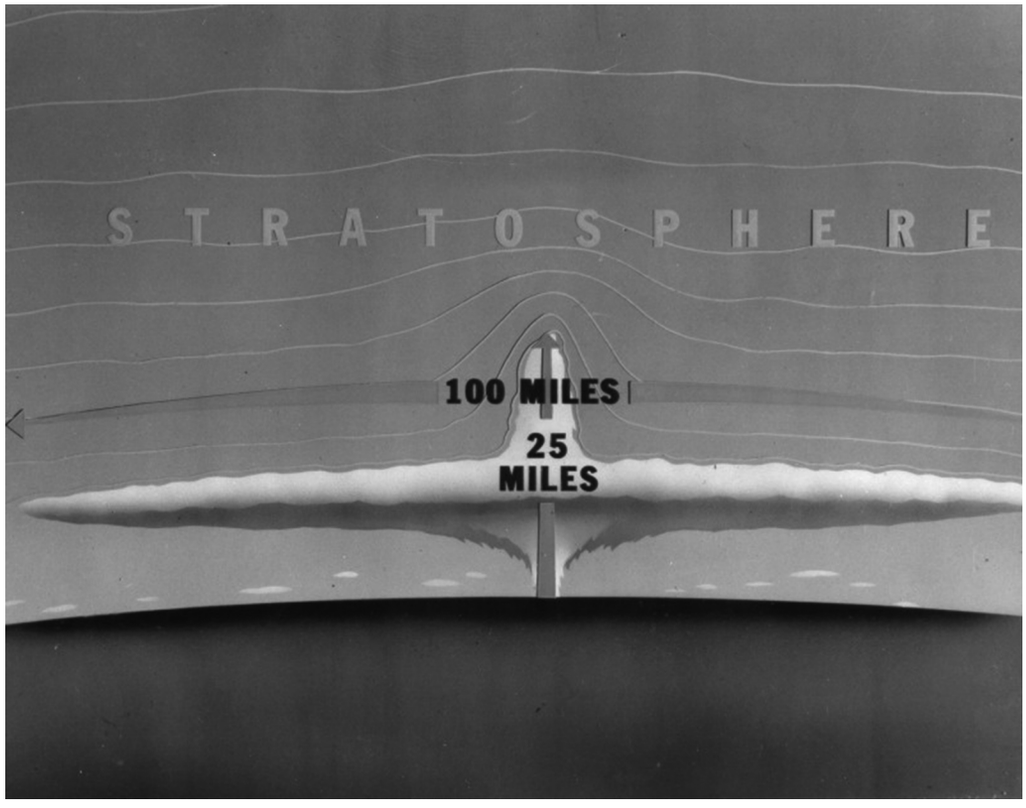

Figure 2. Illustration of the Ivy-Mike fallout cloud (courtesy of US Department of Defense).

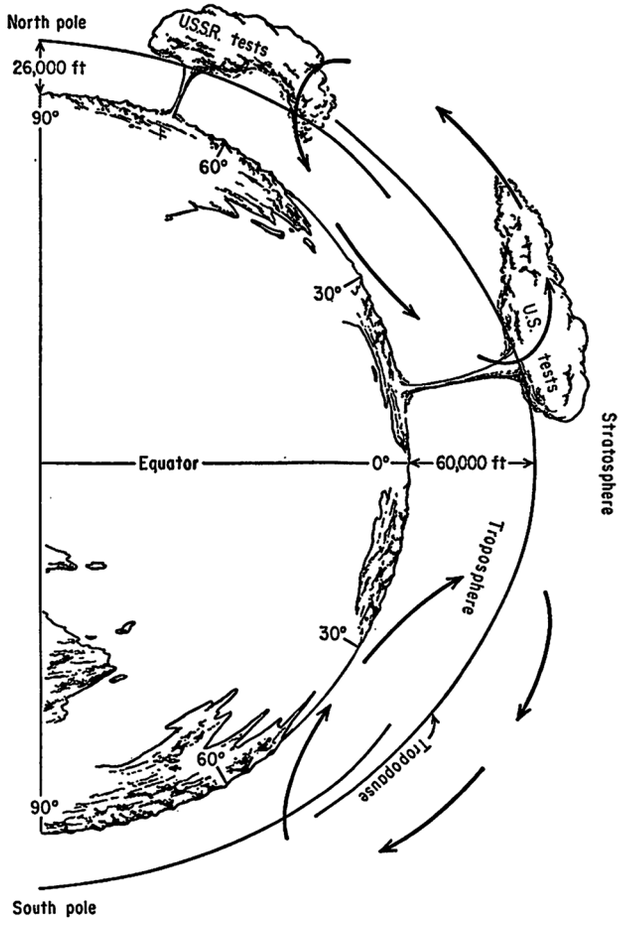

Figure 3. Illustration of the global travel of fallout (from Machta and List 1960).

(1) an entirely new global ecological danger and (2) a new technoscientific and environmental investment in understanding ecological transport in an integrated environmental space, which lead to revolutions in biomedicine, computing, geology, oceanography, and atmospheric sciences (see Doel 2003; Edwards 2010; Farish 2010; Hamblin 2013; Masco 2010). The nuclear danger created research programs that continue to this day, including biomedical studies of exposed populations (from Hiroshima and Nagasaki to the Marshall Islands to the vast population of workers within the nuclear complex itself—see Johnson and Barker 2008; Lindee 1997; Makhijani and Schwartz 2008). These forms of internal and external sacrifice—operating on both fast and slow scales of violence (Nixon 2011)—became embedded within Cold War national security practices raising basic questions about what kind of a human population was being created via the bomb (see also Brown 2013; Kuletz 1998; Petryna 2002).

By 1962 the US media space was filled with contradictory visions of the nuclear present and future, offering up a world of imminent danger across territories and biologies in a manner that is difficult to appreciate today. As the Cold War civil defense programs asked Americans to practice the destruction of the nation-state in yearly drills, earth scientists detailed the dangers to the human genetic pool posed by atmospheric nuclear explosions. Visions of an end of the nation-state in the flash of nuclear war were thus matched in newspaper, radio, and television accounts by portraits of a human species being transformed by the long-term genetic damage of fallout from the test programs. Consider for a moment the *New York Times* for November 21, 1961: alongside a front-page obituary for one of the world's richest men—Axel Wenner-Gren, the philanthropist who created the Viking Fund (the future Wenner-Gren Foundation for Anthropological Research)—and an article on a United Nations vote to ban the use of nuclear weapons and to make Africa a nuclear-free zone, was a detailed report on the Kennedy administration's plan to "dissolve the crisis atmosphere" over atomic civil defense in the United States by committing to a large-scale program to build community fallout shelters across the country (*New York Times* 1961). This discussion of the national panic over nuclear civil defense was followed on page A-2 by "Babies Surveyed for Strontium 90," an account of a St. Louis-based research program to collect baby teeth to measure the effects of fallout on the human body (Sullivan 1961). Publicized by ecologist Barry Commoner (see Egan 2007), this study of strontium-90 in baby teeth continued through 1970. It projected every American family as potential casualties of nuclear testing even as the fallout shelter program sought to protect the population at large by moving it underground. Alongside other fallout studies, the baby-teeth program documented accumulating strontium-90 in American infants, a startling new metric of industrial contamination. Indeed, it is difficult to imagine today in our so-called age of terror the nuclear crises of this early Cold War moment, which asked Americans to move their lives underground while also testing their children's bodies for new forms of injury created by the US national security apparatus in the name of collective defense. As a result, many new forms of activism arose at this moment across issues of war and peace and environmental protection, realigning race, class, and gender politics, to foment a large-scale social justice movement in the United States.

The fraught discussions of this doubled planetary danger—nuclear war and radioactive fallout—in the public sphere enabled an unprecedented treaty between the United States, the United Kingdom, and the Soviet Union. The LTBT eliminated nuclear testing in the atmosphere, outer space, and under water between those nuclear powers. It was the first act in a 40-year sequence of efforts to manage the global nuclear danger via diplomacy and treaties. It also stands as the first global environmental protection treaty. In his radio address to the nation announcing the treaty, President John F. Kennedy (1963) spelled out the stakes of the moment:

> A war today or tomorrow, if it led to nuclear war, would not be like any war in history. A full-scale nuclear exchange, lasting less than 60 minutes, with the weapons now in ex-

istence, could wipe out more than 300 million Americans, Europeans, and Russians, as well as untold numbers elsewhere. And the survivors, as Chairman Khrushchev warned the Communist Chinese, "the survivors would envy the dead." For they would inherit a world so devastated by explosions and poison and fire that today we cannot even conceive of its horrors. So let us try to turn the world away from war. Let us make the most of this opportunity, and every opportunity, to reduce tension, to slow down the perilous nuclear arms race, and to check the world's slide toward final annihilation.

Second, this treaty can be a step towards freeing the world from the fears and dangers of radioactive fallout. Our own atmospheric tests last year were conducted under conditions which restricted such fallout to an absolute minimum. But over the years the number and the yield of weapons tested have rapidly increased and so have the radioactive hazards from such testing. Continued unrestricted testing by the nuclear powers, joined in time by other nations which may be less adept in limiting pollution, will increasingly contaminate the air that all of us must breathe.

Even then, the number of children and grandchildren with cancer in their bones, with leukemia in their blood, or with poison in their lungs might seem statistically small to some, in comparison with natural health hazards. But this is not a natural health hazard—and it is not a statistical issue. The loss of even one human life, or the malformation of even one baby—who may be born long after we are gone—should be of concern to us all. Our children and grandchildren are not merely statistics toward which we can be indifferent.

The crisis evoked here is both of the minute and also cast into untold future generations, linking the project of nuclear deterrence to multigenerational health matters in a new way. For Kennedy, the LTBT was primarily an environmental treaty. It also was a public relations project in light of the Cuban Missile Crisis and the well-publicized scientific and environmental activist campaigns against nuclear testing. But even with this highly detailed rendering of the violence of nuclear war and a scientific consensus about the cumulative danger to the human genome and global environment from radioactive fallout, the LTBT did not stop the arms race or eliminate the capacity for nuclear war. Indeed, the move to underground testing consolidated the experimental regimes in the United States and Soviet Union, allowing another 40 years of testing. While the fallout danger was largely eliminated from the USA-USSR arms race, the vast majority of nuclear weapons on planet Earth were built after the LTBT. So in this Cold War moment of existential crisis, the nuclear danger was managed rather than removed, stabilized rather than resolved, allowing the global infrastructure of nuclear war to remain firmly in place to this day. Nonetheless, the LTBT importantly made both public health and the environment national security matters. By twenty-first-century standards, the scope of the LBTB and its important role in establishing a role for treaties and international law in managing insecurity in the global environment remains a vital achievement, one that informs every hope and ambition for an international agreement on climate change today.

Climate Crisis

The most recent projections of the Intergovernmental Panel on Climate Change (IPCC 2013, 2014) are shocking, depicting a new kind of danger that is escalating and will play out violently over the coming centuries in every ecosystem on Earth. The extraordinary achievement of the IPCC is its radical interdisciplinarity, allowing teams of scientists across a vast range of fields to integrate huge data sets and via computer simulations to project atmospheric effects out into the coming decades (Edwards 2010). The portrait of the coming century that the IPCC presents, however, asks us to seriously rethink industrial-age understandings of both progress and catastrophe and restages the scale of "collective crisis." The predicted elevation of global temperature over the coming decades, the IPCC argues, will create increasingly volatile environmental conditions: melting polar ice will lead to rising ocean levels, which will flood islands and coastal cities worldwide. It will also produce a more acidic ocean, leading to vast oceanic dead zones. Similarly, extreme weather patterns (producing regional droughts and flooding and heat waves) will challenge food production worldwide while changing habitat zones on a massive scale and enabling new diseases to emerge. Moreover, human population growth, potentially rising from seven to nine billion people by 2050, will create ever more consumers, amplifying greenhouse gases and their reverberating effects. The resulting ecological stress could exceed what ecologists calculate is the "carrying capacity" of the global biosphere, leading to widespread scarcity or even more shocking ecological destabilizations. The worst-case vision is of a future where the food chain collapses, leading to mass starvation and pushing species of all kinds toward extinction (see Kolbert 2014). In short, the industrial-age human has become a planetary-scale force leading to a future of fewer species and potentially catastrophic disruptions in the food chain if consumption patterns and carbon emissions stay on their current course.

Media depictions of climate change now offer a vision of end-times to rival that of the nuclear danger. But if the global nuclear danger is characterized by its shocking immediacy (minutes and hours), climate danger works on an opposite temporality constituting a slower violence that is treacherous precisely because it is so incremental that it is difficult in any given moment to sense a change in the environment or to connect discreet issues (such as sea level or drought or violent weather) to industrially generated greenhouse emissions. It is a cumulative- and momentum-driven process operating on so vast a scale that it raises basic questions about human perception, memory, and the terms of visualization necessary for a planetary-scale problem (Masco 2015). In light of climate change, geologists are now debating how to resequence planetary time to recognize the effects of human industry. The

professional geological societies are formally contemplating the adoption of the term "Anthropocene" to recognize people as a new agentive force with earth systems. As Steffen et al. (2011) put it,

> The advent of the Anthropocene, the time interval in which human activities now rival global geophysical processes, suggests that we need to fundamentally alter our relationship with the planet we inhabit. Many approaches could be adopted, ranging from geoengineering solutions that purposefully manipulate parts of the Earth System to becoming active stewards of our own life support system. The Anthropocene is a reminder that the Holocene, during which complex human societies have developed, has been a stable, accommodating environment and is the only state of the Earth System that we know for sure can support contemporary society. The need to achieve effective planetary stewardship is urgent. As we go further into the Anthropocene, we risk driving the Earth System into a trajectory toward more hostile states from which we cannot easily return.

The 10,000-plus years of the Holocene emerge here as a temporary atmospheric condition on planet Earth but one particularly beneficial to humans, who, living in that special air, rose to become the dominant species, inventing agriculture, writing, cars, computers, smart phones, and atomic bombs in the process. Our concept of the planetary environment is now fundamentally shifting, literally from the stable ground under our collective feet, unchangeable in its nature, to a rather fragile "life boat" in the turbulent waters of petrocapitalism.

Climate change reveals and requires a fundamentally new kind of geopolitics, one that can operate both in and above the nation-state level. Consider figure 4, an illustration from the *Lancet* documenting the proportion of carbon emissions by country (fig. 4*A*) in relation to the related health effects from climate change (fig. 4*B*; Costello et al. 2009). This chart

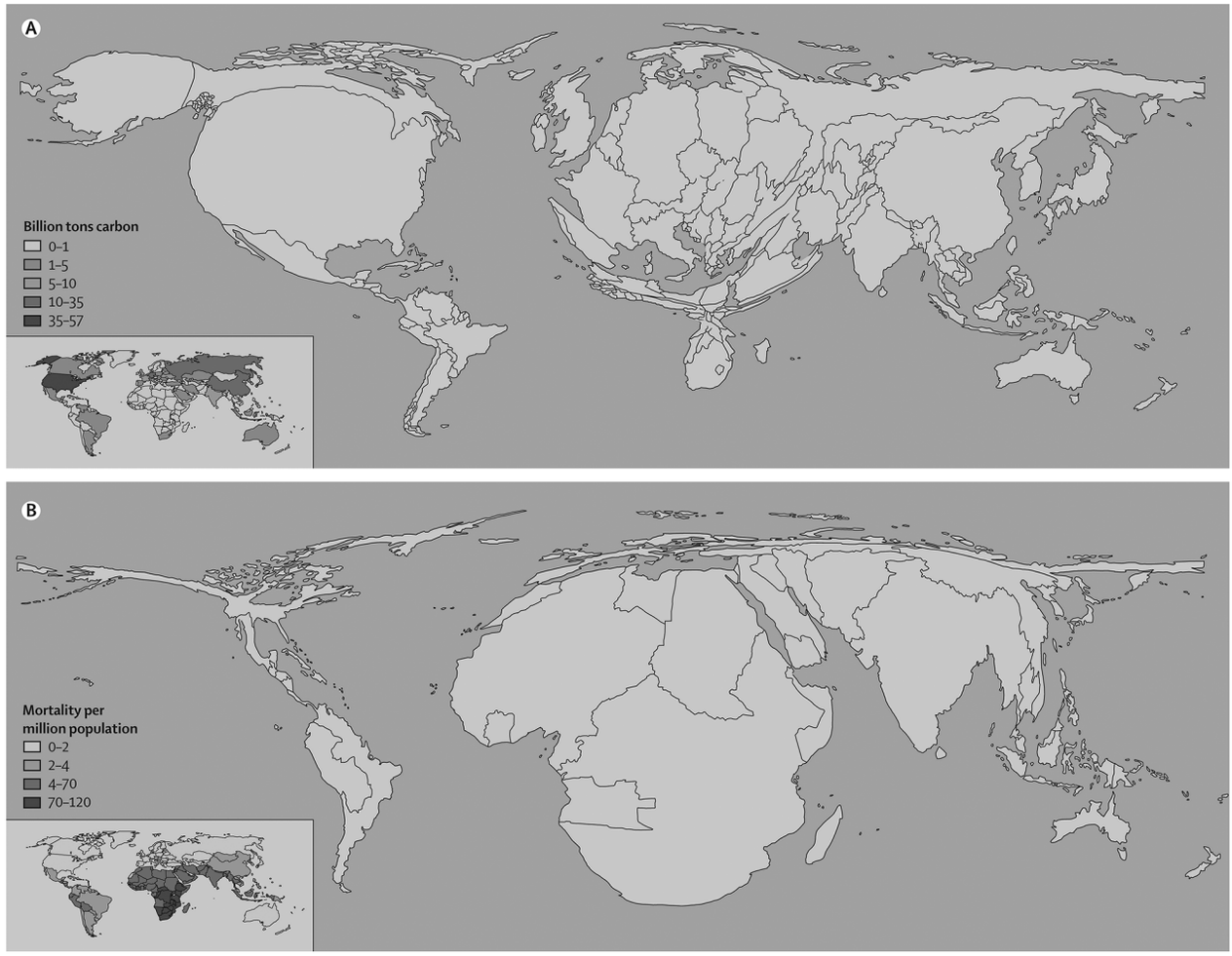

Figure 4. Location of carbon emission (*A*) in relation to proportional health consequences (*B*) of global warming (reprinted from Costello et al. 2009 with permission of Elsevier). A color version of this figure is available online.

documents an emerging relationship between the global north and global south, one played out in the conversion of carbon emissions from the north into new levels of illness in the south. This global circulation requires that one think on a planetary scale while also keeping in focus the differential effects of anthropogenic practices across nation-states and regions. While the global north was first to industrialize and thus has put in motion the current climatic changes, the race to create consumer middle classes in the global south promises to amplify these forms of violence for all organisms on Earth (see Parenti 2011).

Chakrabarty (2009) has pointed out how climate change merges human history with natural history in a new way, creating a temporality that radically undercuts long-standing logics of economic progress and development. This collapsing of human time into geological time forces us to think on unfamiliar scales—such as the planet—and to think not of populations and nation-states but species-level effects on earth systems involving atmosphere, glaciers, oceans, geology, and the biosphere. Climate change challenges our current political, economic, and industrial orders, requiring not only a reverse engineering of energy infrastructures to prevent a deepening ecological crisis but also new conceptual structures that can work on novel scales and temporalities. The built universe of things as well as the desires that organize human consumption patterns are revealed in climate models to be literally catastrophic. The petrochemical economy that has so revolutionized human society, creating the possibility for large-scale urbanization and the rise of nation-states and nuclear superpowers, has unintentionally generated a comprehensive environmental crisis, one that transforms the smallest of everyday consumer activities into a new kind of end-times.

Consider the everydayness of the metrics earth science used to document the starting shift in consumption patterns after World War II. Steffen et al. (2011:742) have graphed human population growth in relation to global GDP, the damming of rivers, water use, fertilizer consumption, urbanization, paper consumption, cars, telephones, tourism, and McDonald's restaurants and have found a shocking parallel process: starting around 1950, these metrics rise exponentially, mirroring one another in an explosive rate of growth that matches fundamental changes in earth systems, including rising carbon dioxide levels, flooding, rising temperature, reduction in fish stocks, forest loss, and species extinctions, among other factors. These metrics confirm a major inflection point beginning around 1950 across consumption patterns, atmospheric chemistry, temperature, and biodiversity loss. The everyday consumption patterns of each person on the planet, unremarkable in their singularity, have become cumulatively destructive in their species totality. This makes the basic requirements for human life (including food, transportation, heating, and clothing) fundamentally dangerous to the future stability of the climate if they remain embedded in the current petrochemical-based global economy. The virtues of modernization, globalization, and technological revolution have thus been turned upside down by climate change: rather than extending equality, security, and comfort, the petrochemical economy has become a slow moving and highly negative form of geoengineering.

The implications as well as consequences of this "great acceleration" are profound. First, it means that everyday American consumption (a global standard for middle-class living) has been a planetary force since the mid-twentieth century, indexing the greatest historical contribution to carbon emissions. Second, it makes the American middle-class consumer economy a spectacular force of violence in the world, one in which planned obsolescence, plastics, and petrochemical innovation have raised standards of living in North America at the expense of the collective environment as well as public health in the global south. Third, it makes climate crisis and nuclear crisis largely coterminous periods, raising important questions about perceptions of danger, the temporality of crisis itself, and the proper definition of "security." Today, the mid-twentieth century stands as the period in which people became an existential threat to themselves in two technologically mediated fashions: via the atomic bomb and via the cumulative force of a petrochemical-based consumer economy. These dual problems are embedded within a unique military-industrial economy in the United States and operate on different temporal scales: since 1950, there has literally been a crisis *inside* of crisis structuring American modernity, one that we are only now beginning to acknowledge in our mass media.

As a response to the oil crisis of the mid-1970s, President Jimmy Carter ordered the US national laboratories, historically devoted to national security science and the development of nuclear weapons, to convert to renewable energy research. By the end of his presidency in 1980, the US national laboratory system was spending over 50% if its funds on alternative energy research, promising Manhattan Projects across the renewable energy sector in the coming years. Carter also symbolically installed solar panels on the White House to demonstrate his commitment to finding a way out of a petrochemical-based energy economy. On arriving in the White House in 1981, President Ronald Reagan ordered the solar panels to be removed immediately and then initiated one of the largest military buildups in American history, redirecting the national laboratories to resume the nuclear arms race as their primary concern. The environment and public health were explicitly delinked from national security policy in the 1980s, allowing both unrestrained militarism and petrochemical extraction to structure American life well into the War on Terror.

Reagan was the first fully committed neoliberal, the first president to break the Cold War logic of balancing large defense budgets with welfare-state programs, the first to entrust the "market" with social engineering. He entertained the thought of winnable nuclear wars and sought ultimately to end the arms race not through disarmament but rather by installing a space-based shield against ballistic missiles. Known as the Strategic Defense Initiative, variants of this program remain active to this day, although it has not produced a reliable defense technology despite an over $200 billion investment since 1983

(Schwartz 2012). Thus, at a key structural moment in negotiating nuclear crisis and energy crisis, the United States moved from a Manhattan Project type of commitment to renewable energy research to a still fantastical quest for missile defense (one that sought to keep US nuclear weapons in place while eliminating the nuclear danger posed by Soviet arsenals). Imagine what an extra 30 years of dedicated research on renewable energy through the extensive national laboratory system might have contributed to mitigating the current climate crisis or a redirecting of military budgets to domestic infrastructures during these decades. Here, our contemporary crisis is revealed to be the outcome of explicit policies and economic priorities; not an infrastructure in collapse but a set of values and choices that have produced multigenerational negative outcomes.

This raises the question of how ideological commitments inform understandings of crisis in the United States and the way that crisis talk can work to maintain a status quo. Oreskes and Conway (2010) have examined the techniques certain industries have used to prevent action on environmental and health matters, documenting a variety of media tactics designed to confuse the public over the scientific standing of a collective problem (see also Ferrell 2016). The use of deception to defer regulation and maximize profits is often supported by more official acts as well. In 2014, the IPCC (2014) as well as the US Climate Assessment (Melillo, Richmond, and Yohe 2014) released major reports detailing a future of unprecedented ecological instability. In response, the US House of Representatives passed a bill prohibiting the Department of Defense from using any funds to respond to the wide range of security programs detailed in the reports (Koronowski 2014). What is at stake here is nothing less than the definition of "security" and the role of government in addressing the vulnerabilities, forms of violence, and uncertainties of a radically changing climate. One legacy of 70-plus years of nuclear crisis in the United States is the American tendency to believe that existential dangers can be deterred endlessly. But there are important material and temporal differences informing state-to-state confrontations mediated by nuclear weapons and the cumulative force of industrial carbon emissions across earth systems. Competing nation-states can achieve "stability" under a logic of mutually assured destruction, while global warming is a set of physical processes only gaining momentum across decades and centuries and that work on a planetary scale. The immediacy of the global nuclear crisis and the longevity of the planetary climate crisis are thus nested within one another (and have been since the mid-twentieth century), making the project of security at once one of protection, perception, and action—all terms that are in question in our current crisis in crisis moment.

Conclusion

The link between nuclear crisis and climate crisis is human industry: both of these existential dangers have been incrementally built over generations of labor in the pursuit of security. The nuclear complex is explicit in its goals, mobilizing the fear of mass destruction as the basis for US security in a world of competing nation-states. A changing climate is the collective effect of human industrial activity, an accumulation of a vast set of petrochemical practices dispersed across regions that have made the global economy over time. These "crises" are thus infrastructural achievements of an American modernity, modes of endangerment that are not necessary forms but rather effects of modern military and industrial systems. Following Roitman's (2014:94) suggestion that crisis constitutes a "blind spot" that restricts narrative explanations as well as limits the kind of actions that can be taken, we could interrogate here how crisis states have become lived infrastructures, linking imaginations, affects, and institutions in a kind of total social formation. The crisis in crisis from this point of view is the radical presentism of crisis talk, the focus on stabilizing a present condition rather than engaging the multiple temporalities at stake in a world of interlocking technological, financial, military, and ecological systems. As Jean-Luc Nancy (2015:30) argues in *After Fukushima*,

> Fukushima is a powerfully exemplary event because it shows the close and brutal connections between a seismic quake, a dense population, and a nuclear installation (under inadequate management). It is also exemplary of a node of complex relationships between public power and private management of the installation, not to mention all the other chains of correlation that extend out from that starting point.

Put differently, there are no "natural" disasters any more, as the imbrication of technology, economy, and nature creates ever-emerging conditions for catastrophe, making crisis seem a permanent condition when it is in fact the effect of financial, technological, militaristic, and political processes interacting with earth systems.

Crisis talk today seeks to stabilize an institution, practice, or reality rather than interrogate the historical conditions of possibility for that endangerment to occur. In our moment, crisis blocks thought by evoking the need for an emergency response to the potential loss of a status quo, emphasizing urgency and restoration over a review of first principles and historical ontologies. In an era of complex interlocking systems of finance, technology, militarism, and ecology, unanticipated effects are inevitable and often cascading processes. In light of a post-welfare-state attitude of crisis management, one that does not protect citizens but rather seeks to restore the conditions from which crisis emerged, there is much attention today to precarity as the very condition for living. Precarity and resilience are the twin logics of a neoliberal order that abandons populations in pursuit of profit and then seeks to naturalize those abandonments as the only possible course of action (see Evans and Reid 2014). Put directly, crisis talk without the commitment to revolution becomes counterrevolutionary.

With this in mind, how can we interrogate the "blind spots" informing nuclear crisis and climate crisis today? Despite the end of the Cold War and the widespread politicization of

"weapons of mass destruction" under the terms of the War on Terror (Masco 2014), the Department of Energy (DOE) is currently planning to rebuild the US nuclear complex over the next 30 years (US Department of Energy 2013). This plan involves the first entirely new weapons designs since the 1980s, part of a strategic effort to create a nuclear arsenal and production complex that can last through the twenty-first century. These planned weapon systems will be less complicated mechanically and more robust that the Cold War designs in the current arsenal (which have been painstaking maintained part by part now for over two decades). They will also employ a new generation of weapons scientists through midcentury. These new designs will not have to be detonated, as did all prior weapons systems, before being deployed into US military arsenals thanks to the last 20 years of nuclear weapons research involving component testing, supercomputing, and simulations (see Masco 2006:43–98). The promise of the virtual weapons laboratory now points to a permanent nuclear production capacity in the United States, one that can maintain a nuclear test ban while also introducing new nuclear weapons. As the DOE's (US Department of Energy 2013:1–6) programmatic report to Congress declares,

> by 2038, a new generation of weapons designers, code developers, experimentalists, and design and production engineers must demonstrate an understanding of nuclear weapons functionality using more predictive and more precisely calibrated computer-aided design and assessment tools than are possible today. High-fidelity experimental capabilities will produce quantitative data that preclude resumption of underground nuclear testing.

This commitment to building new nuclear weapons should place the recent US wars over weapons of mass destruction—both real and imagined—in a new light.

White House calls for a nuclear-free world are now linked to a projected $1 trillion investment over the coming decades in a new US nuclear complex (Wolfsthal, Lewis, and Quint 2014), which is being designed for a deep futurity. This makes current US policy a paradoxical program of pursuing global nuclear disarmament through rebuilding a state-of-the-art US nuclear production complex and arsenal. The crisis in crisis here is the automated renewal of an infrastructure that will necessarily encourage current and future nuclear powers to pursue their own nuclear programs and undercut the collective goal of creating a world incapable of nuclear war. This program also reinvigorates nuclear fear as the coordinating logic of American geopolitics. The DOE has turned aging nuclear weapons and experts into a "crisis" requiring immediate action rather than interrogating and building a new collective security for a post–Cold War, post–War on Terror world. Alongside a new generation of nuclear experts and weapons, future nuclear crises are being built into these programs.

The governance of a warming planet has also been thoroughly politicized in the United States, a victim of national security politics (see Masco 2010) and petroindustry propaganda (see Oreskes and Conway 2010). Not coincidentally, the George W. Bush administration loosened regulatory rules for domestic shale extraction in 2005 (exempting it from the Clean Air Act, the Clean Water Act, and the Safe Drinking Water Act), which, in combination with technological breakthroughs in drilling technology, opened up several large domestic shale formations for immediate exploitation. The Deepwater Horizon oil spill (2010) in the Gulf—alongside Hurricane Katrina (2005), the Fukushima Daiichi nuclear meltdown (2011), and superstorm Sandy (2012)—demonstrated the vulnerability of complex natural, technological, and social systems and the near impossibility of environmental remediation. The boom in hydraulic fracturing has allowed the United States to increase its oil production massively even as climate scientists describe in ever-greater detail the collective environmental costs of such extraction for ice caps, atmospheric chemistry, climate, and public health. In its "Saudi America: The Economics of Shale Oil" article, the *Economist* (2014) reveals that the United States has moved from producing 600,000 barrels of oil a day in 2008 to 3.5 million a day in 2014 because of shale extractions. The *Economist* focuses on the shifting geopolitics of renewed American oil power but does not mention the consequences for the global environment of abundant, inexpensive oil. If current patterns hold, the United States will become the world's leading oil producer in 2020—the number one petrostate—at precisely the moment when the damage of such an achievement has been scientifically documented across the earth sciences.

Since 2005, a vast new infrastructure of wells, pipes, and ponds as well as truck and train lines carrying oil and natural gas has been built to exploit shale formations from Texas to North Dakota to Pennsylvania. In addition to greenhouse gas emissions, these infrastructures require vast amounts of water, create waste ponds, and also leak, raising important questions about the environmental safety of these areas over the projected life of each well. New York State recently banned hydraulic fracturing because of the long list of unknown effects on water, air, and public health (New York Department of Public Health 2014), while in Texas and North Dakota there are boom and bust towns devoted entirely to the enterprise and vast landscapes now covered with industrial infrastructures that produce both energy and radically uncertain environmental futures.

The deregulation of hydraulic fracturing has made petrochemical energy inexpensive and abundant by historical standards at precisely the moment when it would be most socially and environmentally sound to make it ever more expensive. If the neoliberal logics of market determinism were good at engineering a sustainable collective future, the United States would not be embracing shale with such unrestrained enthusiasm. The ever-shorter profit cycle of corporate review, in other words, is diametrically opposed to the long-term investments in renewable energy, installing the perfect terms for ongoing environmental and health crises for as far into the future as anyone can imagine. Thus, one aspect of the crisis in crisis today is a notion of "profit" that has been so narrowly defined that a loss of the

collective environment is easier to imagine than a shift in the nature of petrocapitalism.

Instead of reenergizing a collective imaginary that can engage alternative modes of living and apply resources and agency to collective problems, governance today recommitments to exactly those existentially dangerous projects that should be formally disavowed for the public good: nuclear weapons and oil. This creates a public feeling of "permanent crisis" as well as increasing vulnerabilities across a range of domestic and global issues. One perverse effect of this twenty-first-century circuit is that it encourages social theorists to focus narrowly on the endless modes of precarity that are emerging rather than articulating the alternative futures that are needed, reinforcing a generational gestalt of political gridlock and decline. It is vitally important to understand how cumulative and asymmetrically distributed industrial toxins (from carbon to plastic to nuclear materials) affect communities and individual bodies and to articulate the ways that planetary-scale flows are now remaking local conditions. The age of neoliberal calculation is one that naturalizes the abandonment of populations that are not immediately useful to the quarterly bottom line and renders invisible those many others affected remotely by financial, military, or industrial policies (see Lorey 2015). It is also important to interrogate the affective recruitments to existential crisis and the political work such recruitments do in supporting existing political structures (Masco 2014). However, it is equally important to recover the capacity to generate positive futurities—what, following Berlant (2011), we might call the not yet cruel optimisms—that can affectively charge collective action, particularly on those issues (e.g., nuclear danger and climate danger) that have been constructed by generations of human agency and thus are immediately available to reform.

At the end of World War II, the United States embraced a new kind of technological utopianism, believing that science would solve the problems of health, welfare, and security. Designing the future for both security and prosperity was the role of the state, allowing significant investments in education, welfare-state systems, and the establishment of a variety of environmental protection laws. Indeed, this mid-twentieth-century period of "crisis" is the moment when many of the key infrastructures—and generational investments in education and environmental protections—were established that inform our world today. Thus, the most dangerous moment in American history was, from this point of view, also one of the most productive, creating important commitments to civil rights, education, and the environment while establishing the precedents for international law and treaties to manage existential dangers.

Since the 1980s neoliberal turn in the United States, militarism has remained the project of the state, but the collective future has been assigned to the marketplace, which elevates short-term profitability above all other concerns. What happened to the once vibrant social debate about alternative futures and the commitment to making long-term investments in improving the terms of collective life? The force of global capital has absorbed the power of crisis talk to shock, and thus mobilize, requiring a different call to action. The crisis in crisis today is the inability to both witness the accumulating damage of this system and imagine another politics. A fundamental challenge in our moment is that the key existential dangers of today—nuclear weapons and climate change—operate on different scales, creating friction between the global and the planetary while demanding different kinds of governance (Masco 2015). Because we do not yet have planetary-scale institutions that can govern these collective problems, it is easy to focus on the emerging and amplifying forms of precarity. Instead of a more aggressive media space devoted to detailing the current and projected crises, then, perhaps what our specific historical moment requires is an explicit commitment—a critical theory commitment—to generating the nonutopian but nonetheless positive futurities that can reactivate the world-making powers of society.

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