“CLIMATE CHANGE AND NUCLEAR WEAPONS,”
published by Routledge as chapter in Falk, *(Re)Imagining Humane Global Governance* (2014)

*Situating the World Order Challenge*

The very character of world order, which served elites well during the modernizing and colonizing project initially in Europe, and then after decolonization stimulated hyper-development in Asia, is now dysfunctional so far as serving fundamental human needs are concerned.\(^1\) The problematic character of world order premised on the interplay of territorial sovereignty and hegemonic geopolitics (that is, its horizontal juridical aspect of the equality of states, and its vertical political aspect of control exerted by the leading state acts) is unable to address in satisfactory fashion any of humanity’s most urgent challenges: climate change, nuclear weaponry, global poverty, unregulated world economy, pandemics, genetic engineering, preserving biodiversity.

Reduced to fundamentals, the deficiencies of world order can be summarized as the fragmenting of a unified approach to problem solving by allowing unevenly situated states to pursue their distinct national interests at the expense of the overall human interest. Beyond this, the political life of the planet is preoccupied with short-term priorities, which are incapable of addressing concerns that require much longer term planning than is now possible, a reason to be pessimistic about the capacity of the inter-governmental system, including the United Nations, to provide solutions.\(^2\)

A further reason for concern arises from the seemingly unreformable character of the Westphalian world order system as those state actors favorably situated refuse to adjust to a shifting reality, and even the hegemonic actors continue to be selectively
deferential to sovereignty of otherwise subordinate states. There is a widening gap between what is feasible given these constraints on global problem-solving and what is necessary to safeguard the future health and wellbeing of the peoples of the world. Or as Winston Churchill expressed the same idea: “It’s not enough that we do our best; sometimes we have to do what is required.”

In the past, those kinds of entreaties were directed at distinct polities or, at most, aligned or threatened civilizations, but since the advent of nuclear weaponry the scope of what is required is systemic in character. The Westphalian political reality, having demonstrated an impressive degree of resilience in addressing intra-systemic challenges, shows a lemming-like refusal to acknowledge, must less adapt to systemic crises, even if threatening to human survival. At present, there is no prospect that the states, collectively or through benign hegemonic leadership, will manage to act responsibly on behalf of long-term human interests, or by relying on the normative guidance of human solidarity.

The best that can be hoped for is a marginally more enlightened pursuit of national interest as perceived by governmental representatives, and even this palliative is far from assured. The United States, still claiming hegemonic stature, hovers between the pursuit of greed and a posture of denial as to the need for drastic downward adjustments in both its wildly excessive claims on the world’s energy capacities, its overall per capita contribution to the build up of atmospheric greenhouse gases, and its self-destructive misplaced reliance on military adventurism in pursuit of twenty-first century security. Such an example set for the rest of the world is a spectacular illustration of irresponsible leadership that is likely to become standard operating procedure for many
less influential actors in the system unless offset by countervailing forces that seek systemic adjustments. It is reasonable to expect that as the severity of the multi-dimensional crisis impact on public awareness increases, there will arise some strong pressures from below that will alter the political calculus of elites representing states.

Such a possibility calls attention to the only hopeful scenario for humane governance in a post-Westphalian globalizing world—namely, the further awakening of global civil society to the dangers that lie on the road ahead. Only the mobilization of transnational forces, globalization-from-below as an initial expression of opposition to the policy and normative failures of an outmoded Westphalian framework, can create a new public consciousness that gradually infiltrates, and reconstitutes, elite thinking and action. It remains to be seen whether market forces that constitute capitalism are capable of self-interested long-term visions that exert pressures on governments to do more of what is required for the sake of stability, if not justice. But the main responsibility will need to be discharged by the organized transnational initiatives of civil society militants promoting human solidarity, and global public interests, even at the expense of certain national interests. It will be up to civil society to create a new equilibrium between the local, the regional, the global, and the universal, as well as between the immediate, the intermediate, and the long-term. In effect, the Westphalian world order logic of statist pluralism and fragmentation, privileging the part over the whole needs to give way to a post-Westphalian emergent framework that recognizes the urgency of fashioning policies that the promote the wellbeing of the whole. To explore these general issues, from the standpoint of the deepening global crisis, this chapter will pay particular attention to two salient dimensions: the seemingly futile struggle to abolish nuclear weaponry that has
gone on since 1945, and the newer equally futile struggle to take steps to reverse the disastrous global warming trend. As this introduction has argued, this futility is an expression of the anachronistic ineptitude of the entrenched world order system, and sets the stage for a revolutionary transformative eruption of societal energies as awareness grows of the onset of this world order emergency.

*Depicting the World Order Challenges*

The two greatest world order challenges of a structural character over the course of the past seventy-five years have been, first, nuclear weaponry and, more recently, global climate change. On nuclear weaponry it can be argued that the challenge has been successfully met (so far) because no nuclear weapons have been used against cities or hostile targets since the atomic bombs were dropped in 1945. This seems unconvincing over time as the possession, deployment, development, proliferation, and doctrinal readiness to use these weapons suggests a very precarious firewall protecting humanity from a war fought with nuclear weapons. The basic accommodation of nuclear weapons has been based on containing their spread to the extent possible through a regime that embodies a bargain in which non-nuclear weapons states give us their option to acquire the weaponry in exchange for assurances of beneficial access to nuclear energy for peaceful purposes and a pledge by the nuclear weapons states to pursue in good faith nuclear disarmament.

The record of past decades also supports the conclusion that the challenge posed by the existence of nuclear weapons has not been met. There has been a slow, yet steady, increase in the number of states that possess nuclear weapons and that have the
knowledge and the technological capacity to produce nuclear weapons. The non-proliferation regime has not been able to prevent determined states from crossing the nuclear weapons threshold. Furthermore, the effort to restrict access to the weaponry or impose sanctions on proliferators has been selective and discriminatory, and driven more by geopolitical priorities than by counter-proliferation goals. The silent acquiescence by the West to Israel’s covert acquisition of nuclear weapons was one expression of double standards, while the 2003 invasion of Iraq was illustrative of the use of a counter-proliferation rhetoric to obscure other strategic motivations and to excuse an unlawful recourse to aggressive war making. Rewarding India with access to nuclear technology after it had crossed the weapons threshold is another regime-eroding expression of selective implementation of a non-proliferation ethos. Although proliferation of nuclear weapons is a derivative problem arising from the evident unwillingness of the nuclear weapons states to eliminate this weaponry of mass destruction, it nevertheless adds to the dangers embedded in present world order. Autocratic states, and those animated by extremist ideology, such as North Korea and Iran, seem likely to have the capabilities, and possibly the will under certain conditions, to ignite wars fought with nuclear weapons. Beyond this, a country such as Pakistan, which could easily become captive of extremist leadership—an eventuality frightening to its Indian neighbor—and could produce a regional nuclear war of great destructiveness, whose effects due to radioactive fallout and economic dislocation are felt far beyond the borders of the adversaries, and the release of huge quantities of smoke could damage agricultural productivity in many parts of the world for as long as a decade.

There is also a persisting, and many would argue, an increasing risk that the
existing restraints on use are fraying. Of particular concern are the apparent efforts of extremist political networks to acquire such weaponry. An organization such as al-Qaeda cannot be deterred by retaliatory threats, offering no suitable targets for large scale weaponry. Such a condition has given rise to both preemptive and preventive war claims and practice as the only means to safeguard against attack, but also to the revival of the visionary goal of a world without nuclear weaponry that had been quite prevalent immediately after the atomic attacks on Japanese cities and then during the early stages of the Cold War.

Yet the most revealing failure involves the reluctance of the nuclear weapons states to pursue in good faith agreed nuclear disarmament goals while weapons’ arsenals were still small. It seems in retrospect that the leading nuclear weapons states never were politically willing to disarm except possibly on terms that were clearly disadvantageous to their adversaries, although there was some initial willingness by the United States and the Soviet Union to express diplomatically their shared embrace of the goal of ‘general and complete disarmament.’ It was especially disheartening that after the end of the Cold War when the deterrence rationale for this weaponry evaporated, that there was no move whatsoever toward exploring abolitionist prospects. The triumphal celebrations of the fall of the Berlin Wall and the collapse of the Soviet Union were accompanied by a deplorable lack of American leadership with respect to long-term global stability and security. A definite window of opportunity for disarmament, as well as for a strengthened United Nations, existed between 1989 and 2001, and it was never lifted. Instead, American leadership during the 1990 s was focused on expanding the world economy, fostering a minimally regulated and predatory form of neo-liberal globalization.
On the contrary, these states, led by the United States, have continuously tested and developed new more sophisticated types of weaponry of mass destruction, and have recently explored a variety of battlefield uses for such weapons, as well as continuing to rely on their deterrent and retaliatory roles. In effect, the nuclear weapons states lack the political will to eliminate nuclear weapons from their military arsenals. This constitutes non-compliance with Article VI of the Non-Proliferation Treaty, but more fundamentally, interprets the world order challenge of nuclear weapons as not requiring their elimination, or in some versions, as making their elimination imprudent because of the risk of cheating or impossible because the knowledge of how to make the weaponry exists and therefore cannot be safely eliminated.\textsuperscript{14} It is important to treat these lines of argument as morally, legally, and politically unacceptable rationalizations for nuclearism. There are no compelling reasons to suppose that a phased, verified process of nuclear disarmament is not both attainable, and far safer, as well as less inhumane, in its implications for security policy than continuing to target the largest cities in the world for a potential omnicidal attack. What do we learn about world order from this failure to address the challenge of nuclear weaponry in a more satisfactory manner? Mainly, that there exists on the part of ruling elites a deep attachment to military power, reinforced by economic and bureaucratic interests, and accompanied by a strong reluctance to part with the most powerfully destructive weaponry ever developed.\textsuperscript{15} There is the closely related populist sentiment that having this weaponry is an important status symbol; after all, the first five members of the nuclear weapons club were also the five permanent members of the UN Security Council. Beyond this, in the nuclear weapons states, especially the United States, there are strong pro-nuclear establishments, an integral segment of the ‘military-
industrial complex’ that oppose moves toward denuclearization from deep within the governmental structures of sovereign states. Also, when it comes to war and the use of force, governments as a political actor are essentially amoral, seemingly ready to sacrifice the lives of millions of citizens while being prepared to launch genocidal, even omnicidal, attacks to avoid a strategic defeat or to reach some other strategic goal such as permanently disabling a global rival.

This assessment is particularly disturbing when it is recognized that global ethics, public reason, and long-term security reinforce the worry that without nuclear disarmament a humanitarian catastrophe will result at some point. It was this worry that led observers to assume immediately after Hiroshima and Nagasaki that governments would uniformly quickly understand that their survival would now be dependent on the total abolition and repudiation of this weaponry. There was nothing in the structure of international relations that prevented achieving complete nuclear disarmament. Governments representing states could have negotiated verifiable agreements, and established trustworthy compliance mechanisms if the political will had been present, which would have meant overriding the logic and habits of several centuries of statecraft.

When it comes to the other great world order challenge, accommodating global climate change, the prospects seem at once better and worse. They are worse because it is harder for the political imagination to comprehend the dangers posed by climate change and take appropriate action in a timely manner. The causation is more hidden and contested, and there exists no model of ecological catastrophe that is comparable to the charred urban landscapes of the two Japanese cities hit by atomic bombs. Beyond this,
most of the world’s governments will have to act collaboratively to meet this challenge, substituting policy guidance on the basis of the global public interest for a long practice of shaping global policy by reference only to narrowly conceived national interests. More difficult, governments accustomed to very short cycles of accountability, often equated with electoral intervals of three to six years, will have to construct policy, major resource allocations, and domestic regulation on the basis of far longer cycles of ten to fifty years or more. Also, difficult is the investment in future wellbeing in ways that impose considerable financial burdens on present government budgets, requiring added taxes, restrictions on market operations, and likely lead to increased budget deficits and lower corporate profits in some market sectors. The extent of the burdens will almost certainly grow as time passes, but at each point short of tangible effects on the health and wellbeing of powerful countries, the likelihood is that costs of adjustment for the sake of the future will not be deemed politically acceptable. This political resistance to paying now to avoid severe harm much later is accentuated by the current global economic crisis in which the combination of high unemployment and stagnant growth exert pressure on fiscal policy without taking into consideration adverse economic consequences of reducing rapidly the emission rates of greenhouse gasses. This pressure is heightened by the fact that competitiveness and growth in the global marketplace could be negatively affected by placing extra burdens on industrial and consumer activities.²⁰

At the same time, global climate change seems to have slightly better prospects than nuclear weapons for several reasons. Regulation involves constraints on industrial and societal activities, but it does not intrude directly upon the security domain that has remained resistant to public accountability even in the most democratic of sovereign
states. Furthermore, it is possible to calibrate adjustment responsibilities to negotiated levels taking account of differential capabilities, resources, and emission levels, that is, fixing and distributing obligations in a flexible manner. There is also the sense that reducing these emissions has no down side, nothing comparable to the alleged fear of cheating in the context of nuclear disarmament. International society has exhibited a strong commitment to act cooperatively in meeting the challenge as evidenced by the 1997 Kyoto Protocol, and by follow up conferences leading up to the much heralded 2009 sessions in Copenhagen that aim to put forward a global climate change framework treaty, which is supposed to set the stage for the unprecedented levels of future cooperation that will be needed to deal with such a fundamental threat to the global commons. It was also expected that a fund would be established by the developed industrial world to enable the less developed and more disadvantaged countries to reduce their carbon emissions, and although there is agreement on principle, there is much skepticism as to whether the contributions will produce a fund of sufficient size to accomplish its goals. The world community has in the past displayed such a cooperative capacity, despite differential interests and capabilities, in relation to the public law of the oceans, the governance and environmental protection of Antarctica, and meeting the threat to the ozone shield posed by reliance on chlorofluorocarbons (CFCs). These are positive and relevant precedents, but in each instance far less costly adjustments have been required of the parties.

In each of these two exemplary tests, the structure of world order seems incapable of generating a satisfactory solution, at least without the transforming impact of either a catastrophic event or of the rise of a global social movement that dramatically alters the
political climate. The failure to address the challenge of nuclear weapons in a satisfactory manner has gone on now since 1945, but because no weapons of mass destruction have been used in wartime the challenge is not currently perceived to be serious.\textsuperscript{22} Also, the absence of intense inter-state rivalry of the sort that existed during the Cold War appears to have reduced the perception of danger on the part of the public. In fact, this perception is misleading. More than previously there is a real possibility that nuclear weapons might be used in an Indo-Pakistan or Middle Eastern war. There are also anxieties that a nuclear weapons black market (‘loose nukes’) is operating in the world, and then there is the new threat of acquisition and use by an extremist network. The current global setting has given rise to some serious interest in exploring the possibilities of eliminating nuclear weaponry. President Obama’s identification such a goal has temporarily encouraged the belief that maybe for the first time a real push to achieve nuclear disarmament will take place in the second decade of this century.

From a certain perspective, the modern world order system based on sovereign territorial states has demonstrated extraordinary resilience. Until the challenge of nuclear weaponry global problems were either trivial or addressed through the mechanisms of common practice, agreed rules and regimes, and hegemonic self-discipline. The main deficiencies were war and oppression, but until nuclear weapons neither threatened the system as distinct from its parts, although the destructiveness of World War I gave rise in civil society to widespread systemic concerns, which were effectively deflected by sovereign states. In relation to oppression, the normative energies associated with human rights, including the right of self-determination scored many impressive victories: decolonization, anti-apartheid, and the liberation of East Europe. What is distinctive
Deficiencies of World Order to Address Global Climate Change

There are several structural obstacles to adaptive policies that depend on significant cooperative action on the part of a large number of governments. With respect to climate change there is a firm consensus on the part of the scientific community that dangerous levels of global warming have been reached as a result of human activity, and far worse is to come, as a result of human activities (especially, the burning of fossil fuels and deforestation). In effect, according to the scientific consensus ever higher temperatures will have increasingly severe adverse impacts on human wellbeing, including rising sea levels, ocean acidification, extreme weather events, increased incidence of drought and floods, desertification, and deforestation. Part of the consensus includes the recognition that the adaptation costs will be significantly lower if paid sooner rather than later, and also that the burden of these costs should be distributed equitably to take account of differential responsibilities for causing global warming and varying capabilities for addressing the challenge due to different stages of development,
degrees of wealth, and extent of vulnerability. The question then arises: why, in light of this level of consensus, has there been such difficulty in establishing a regime that is more responsive to the challenge? As mentioned above the international system has demonstrated the capacity to act collectively for the global common good in a number of different settings. It was also argued that the failure with respect to nuclear weaponry can be explained by the degree to which the realist consensus that has controlled governmental thinking of leading states since World War II is skeptical of constraints on military power, and this skepticism is reinforced strongly in leading states by a domestic military–industrial complex that would lose status and economic benefits if nuclear disarmament took place. Such resistance to disarmament is strongest in the United States, and is further inhibited by a refusal to embrace the moral argument in light of the American reliance on the weaponry in World War II, and throughout the Cold War. Undoubtedly, the largest obstacle in the somewhat different policy context governing climate change is the power and resolve of the huge fossil fuel industry worldwide, which seeks to prolong oil and gas dependence and profitability as long as possible with a seemingly minimal regard for adverse human consequences. In many respects, despite the absence of the security dimension, there are important similarities in our two test cases of world order capacity.

I. United States

In both circumstances it is impossible to contemplate a solution that does not rest upon US leadership. And in both instances the US government, despite espousing lofty rhetorical commitments from time to time, has blocked progress toward more ambitious
goals. The United States is not a party to the Kyoto Protocol, and even if the Bush presidency had submitted the agreement to the U.S. Senate for ratification, it is almost certain that it would never have been ratified or respected. Similarly at the Copenhagen conference, the US government opted for the lowest common denominator rather than pressing forward toward the sorts of policies that might give hope that obligatory reductions in greenhouse gas emissions will stabilize the global climate over the course of the next two decades. Aside from the usual reluctance to devote major resources to risks that are deemed to fall mainly well beyond the electoral cycle of accountability, there are ideological and normative inhibitions that push American leaders toward a regressive posture on climate change.

There exists strong ideological opposition in the United States to increased government regulation and spending designed to influence market behavior. With respect to climate change, there was a legislative effort of questionable value to adopt a ‘cap and trade’ approach, which is insufficient even if it had been accepted, rather than rejected. It is doubtful that if it had been adopted it would have been fully implemented in such a way to avoid ‘the worst impacts of climate change’. According to calculations, parties to the Kyoto Protocol must agree to pledge steps that ‘are expected to result in aggregate emissions reductions of 16–23% below 1990 levels by 2020.’ The inclusion of the American legislative commitment means ‘the aggregate reductions would fall to 10–23% in one estimate, and 11–18% in another.’ This is not an encouraging prospect, as it is widely believed that ‘[i]f the worst impacts of climate change are to be avoided, stabilization levels of 450 ppm\textsuperscript{26} of CO\textsubscript{2} and a reduction target of 25–45%’ would need to be adopted by the developed countries.\textsuperscript{27} A growing number of climate change specialists
regard the figure of 350 ppm as the appropriate threshold, noting that the current level of carbon density in the atmosphere is already at 390 ppm of CO₂, the best that can be hoped for at present is that the US government can be pulled along to uphold a Copenhagen consensus, but that will only be possible if the consensus scales back its approach to emission reductions to a point where what is required falls well below stabilization requirements as defined by 1990 emission levels, and even then are not imposed as obligations as distinguished from voluntarily pledged targets. And then, assuming the American government seeks to fulfill its pledge, there is still a high risk that Congress will resist even these informal commitments, and the public will support such a regressive reaction.

This ideological opposition to managing the market for the public good expresses, in part, a lingering societal optimism that all genuine risks can be addressed down the line by technological fixes that obviate any need for economic sacrifices. Indeed, the approach preferred by far is reliance on market-based solutions that actually create opportunities to turn carbon reductions into either a source of profits or as a cost passed on to consumers. It is an opposite turn of mind to that embodied in ‘the precautionary principle’, which argues that it is dangerous to defer responses because of faith in technological rescues. The rejection of the precautionary principle goes along with a corresponding distrust of calls for burdensome action now that is based on pessimistic trend analysis. The state of the American economy will also work against a positive role for the United States in the climate change policymaking dynamic—high unemployment, trade and budgetary deficits, a falling dollar, and faltering competitiveness all add to the pressure to minimize any kind of regulatory burden on the American economy. These
elements are present in other developed countries but with somewhat less ideological reinforcement, although the rightwards drift in Europe suggests that despite European positive leadership at Kyoto, and later at Durban, there appears to be a growing readiness to allow American minimalist leadership to set the pace of adaptation at Copenhagen. There exists during this period an enormous set of missed opportunities to facilitate a transition to reliance on greener technologies, for example, in relation to the troubled American auto industry or by investing in mass transit in the cities of the world.  

II. Statism

In distinct ways, the persistence of the Westphalian system of sovereign states greatly complicates the formation of effective responses to global policy challenges requiring large scale adjustments in thought, action, and allocation of resources. An essential feature of this world order arrangement is the dominance of the part in relation to the whole, which privileges state-centric attitudes toward problem solving. Such circumstances are aggravated by an unwillingness to govern external behavior relating to vital security and economic interests by deference to either considerations of law or ethics. That is, there is little confidence in legal constraints and an extremely limited willingness to subordinate national interests to the wider claims of international law or international morality. This posture is exhibited in part by the prevalence of the realist consensus in governmental circles, which is identified by its skepticism about the relevance of ethical and legal perspectives in the formation of foreign policy. This skepticism is heightened in the American case by its hegemonic status and a tradition of ‘exceptionalism’ that has been extended since 1945, and even more so since 1989, by its
imperial or hegemonic role. The problems associated with seeking a normatively acceptable approach to climate change is rendered far more difficult by the multiple dimensions of unevenness that characterizes the 195 or so states that currently exist. This unevenness relates to both objective conditions and to perceptions, and helps explain a variety of views as to what course of action is rational, equitable, and responsible.

Unevenness inevitably raises problems of both distributive and corrective justice, involving differentiating between present capabilities and emission levels, and vastly unequal past responsibilities for the global buildup of CO₂. How should this unevenness be reflected in global arrangements? Who decides? There is much discussion of stakeholder democracy to ensure representation and participation by those affected by environmental policy-making, but the dynamics of decision continue to be dominated by governments, hobbled by special interests heavily weighted to benefit corporate and financial power at the expense of the wellbeing of society, future generations, and the global human public interest. One way to understand this deplorable situation is to treat it as a symptom of a deepening crisis of global governance, another is to emphasize the global democratic deficit, and still another is to pin the blame on neoliberal capitalism. These issues were at the core of the dissatisfaction with the Copenhagen process for shaping global policy on climate change, and call attention to the potential opportunities for non-governmental organizations (NGOs) and a worldwide social movement for achieving an equitable and effective regime to regulate carbon emissions under circumstances of ecological emergency.

This unevenness is probably greatest in relation to the least developed low lying island states and several African countries that are confronted by near term survival
threats. From their perspective, there is an immediate condition of urgency that would justify a far higher level of worldwide reduction of emission levels than seems rational and politically feasible for many of the richer and larger states, including especially the United States and much of Europe. The countries less immediately and seriously threatened are more tempted to postpone large-scale adjustment burdens in the rather vain hope that technological innovations will lower the costs of or need for accommodation, or that in any event they will not be around when the increased damage of current inaction is experienced. If there existed a more centralized form of global governance then adjustments could be made on a priority basis to take far more account of those most vulnerable geographic and economically disadvantaged spaces in the world. The Washington response to Hurricane Katrina in 2005 revealed that even centralized national governments in a fully developed country may fail to protect those harmed by environmental disasters, failures that appeared in New Orleans to be aggravated by the race and class identities of the principal victims. Such an experience dramatized for many the racial and class dimensions of what can aptly be described as ‘climate change injustice.’

Of course, states do cooperate to promote common interests, and have displayed some willingness in certain situations to accommodate various aspects of unevenness. The Law of the Seas Treaty made special provisions for landlocked countries to ensure outlets to the ocean. The Montreal Protocol on Ozone subsidized the phasing out of CFCs by developing countries. The Antarctica Treaty overlooked different degrees of territorial occupation and suspended sovereign claims by states through the negotiation of an overarching agreement establishing a protective regime. In all of these instances, national
interests were compromised to a limited extent to serve wider collective interests, but in each instance there was no encroachment on the security role of the state or any economic burden imposed that would diminish the standard of living in richer countries.

III. Presentism

A predisposition in favor of the present as over against the future in deeply embedded in the cultural outlook of the developed countries. This outlook reflects partly the belief deeply embedded in the modern psyche that technological innovations have often in the past emerged to reduce the seemingly menacing prospects of present trends. Perhaps the most relevant example is the dire Malthusian predictions associated with the alleged negative interplay of a projected arithmetic growth in food supply as compared to an anticipated geometric growth in the population. More recently, in the 1970s, a wave of neo-Malthusian alarmism swept across modern industrial society.31 There remain a variety of climate change skeptics who contend that the climate change challenge is being similarly exaggerated, and that accommodation efforts should be moderated.32 This presentist bias is neglectful of the prospects of future generations.33 It does not, with very few exceptions, view the present as having responsibilities toward the future except rhetorically. As a result, the short time horizons associated with political accountability are not offset in situations such as exist for climate change where periods of twenty to one hundred years should be treated as relevant for the formation of global public policy. In other words, deficient recognition of human solidarity relate to time as a result of presentism as well as pertain to space due to political fragmentation (that is, statism).
IV. Ideology

There are certain reinforcing elements embedded in the dominant ideological outlook, especially associated with market driven economic globalization and state-centric nationalism. The ascendancy of historically contingent neo-liberal economic policy means that governmental policy is guided by special interest groups and by degrees of profitability rather than by global public interests or by taking into account the perspectives of human solidarity. Only if a very long-run perspective informs policy and decisions would it be possible to take due account of global warming pressures. This is not likely to happen until tangible harm for richer countries occurs on a massive scale. One effect of this type of globalization is to outsource production and investment to minimize costs and maximize profits, which again places a premium on keeping wages low and on avoiding expensive regulation for the public good. That is, other things being equal the primacy of market criteria for policy-makers works against serving the global public interest in the manner that will address the challenge of global climate change. Similarly, the strength of nationalism implies a reluctance to bear burdens for the wellbeing of those situated outside of territorial boundaries. It provides an emotive reinforcement to statism, which could according to idealistic projections produce an inclusive political culture informed by a Buddhist ethos of universal compassion. Statism (conjoined with secularism, a modernist sequel to religion as the source of societal cohesion) historically has nurtured nationalism as an exclusivist basis of loyalty, and has viewed the outsider as an ‘alien’, if not an ‘enemy’. The kind of political culture most conducive to meeting global scale challenges of large magnitude would produce a
far better balance between the selfish pursuit of nationalist goals and the more empathetic embrace premised on both human solidarity and taking the suffering (present, past, and future) of all humans seriously.  

V. Reform and Transformation in Response to Global Scale Challenges

Part of the world order dilemma posed by global scale challenges of large magnitude can be expressed as a gap between what is feasible and what is necessary. For reasons set forth in the prior section the limits of feasible reform to take account of regional and global public interests preclude adaptive responses within the Westphalian framework of global policy-making and problem-solving, especially when the proposed adjustments encroach on the militarist domain of national security, on the consumptive habits of society, and on the profit margins of corporations and financial institutions. There are no exceptions to this generalization about the potentialities of reform through collaborative behavior by states in the Westphalia era of world order. It is the case that wartime alliances are the most impressive instances of inter-governmental collaboration for shared goals, but rarely with reformist motivations in mind. It might appear that the establishment of the United Nations, and before it the League of Nations, were exceptions, but the lofty goals set for such innovations were never matched by appropriate transfers of power, authority, and resources or public expectations in major states that would have been required if a serious challenge was to be mounted to the control exercised by sovereign states over the use of force as legally mandated by the UN Charter. Indeed, the grant of a veto power to the permanent members of the Security Council and the geopolitical insulation of the dominant states from international
accountability confirms the substantial continuity of this inability to institute global scale reforms that go beyond the horizons of feasibility as set by the realist consensus. This inter-governmental inability to promote and protect adequately global human public interests is a complex compound of statism, neoliberal capitalism, hegemonic geopolitics, presentism, militarism, and nationalism. To be sure, a modest reformist potentiality does exist. It involves pragmatic and small-scale global adjustments that can be managed, reflecting a genuine, if weak, relevance of global public interests and human solidarity. For instance, the responses to natural disasters caused by tsunamis, hurricanes, and earthquakes elicit tangible empathetic responses from rich and powerful countries. Managing the war system by prohibitions on certain weapons systems (biological and chemical weapons) or by restricting the size of nuclear weapons arsenals are illustrative of feasible undertakings that prevent matters from getting worse for the world as a whole. When President Obama articulated a vision of a world without nuclear weapons in 2009, he signaled its utopian (that is, non-feasible) character by situating the attainment of such goals as likely beyond his lifetime, but still generated some angry realist backlash sentiments on the part of those who thought, perhaps, that he might be seriously (and in their view dangerously), embracing a transformative political project that was responsive to his understanding of what was necessary (and desirable). In the environmental area, certain regional anti-pollution and conservation regimes have been effective because the economic costs have been either isolated to specific sectors of the economy without sufficient leverage (e.g. commercial whaling) or not so burdensome as to generate a strong political backlash (e.g. phasing out of CFCs).

Climate change resembles nuclear weaponry to the extent that it is difficult to
deny that risks of severe harm to the wellbeing of all peoples and societies, including those that are rich and powerful, are at stake. These risks are already responsible for significant harm, and worse is certain to come in the future unless drastic action is taken that is dismissed as not feasible by political leaders and the media. In this regard, there currently exists a raised consciousness about this challenge that exerts some pressure on governments to act more constructively in response. The governments challenged are doing their best to manage this pressure given their belief that the adjustments needed are not politically palatable to their main constituencies. This pressure is augmented, and will be further intensified in the future, by transnational civil society actors motivated by considerations of necessity, and to varying degrees, of desire, as well as by their adherence to universally shared values.\textsuperscript{40} The present degree of mobilization of societal pressure seems now unable to push the inter-governmental framework sufficiently hard to produce policies that exceed prevailing ideas as to the limits of feasibility, including what the citizenry in rich countries, especially the United States, is prepared to accept. Sadly, George H.W. Bush was probably accurately reflecting political constraints, at least back in 1992, when he on the eve of the Rio Earth Summit he declared that ‘the American way of life is not negotiable’.

There is some basis for believing that 2012 is not 1992, and that the publics of many states, are far more willing than in the past to make material sacrifices for the sake of avoiding catastrophic global warming. This encouraging development is not matched by a comparable willingness on the part of an array of economic special interests or market forces generally (and their many governmental allies). Politicians are wary of pushing the climate change agenda too hard if large burdens are to be placed on
the national economy. Political leaders continue to worry about their capacity to govern, and do seem highly unlikely to survive in the present political atmosphere if they ignore these limits by favoring large carbon emission cuts or imposing taxes on activities with high emissions. The outer limit on regulation is set by these elite perceptions of feasibility, which are, at best, likely to slow down somewhat the global warming trends deferring the days of reckoning somewhat further into the future. Almost certainly, the Copenhagen outcome fell far short of reduction restrictions and funding arrangements that correspond to even the lower end of the scientific consensus that pertains to doing what is necessary to stabilize CO2 levels by 2030 or so. It is true that there are subjective variations as to the identification of the spectrum of feasibility that accounts for debates among reformers, and as to the spectrum of necessity, which explains the lack of uniformity with respect to degrees of disappointment with governmental responses. The Copenhagen results were treated by the mainstream media as modest steps forward despite their extremely unsatisfactory achievements as measured by the mounting seriousness of climate change or the news of environmental NGOs.

What can be anticipated, then, is a certain reformist satisfaction if Copenhagen produces agreements that seem too little and too late. As often happens in the setting of dramatic gatherings of the governments of the world, more is claimed than achieved, and even what little is achieved, is not fully implemented with compliance being treated as an essentially voluntary matter. Failure with respect to climate change is ascertained by moving far too slowly toward imposing adequate emission reductions on countries differentiated by wealth and stage of development, by not establishing a sufficient fund to subsidize efforts to slow the rate of deforestation and mitigation in developing countries,
and by not creating a sufficient fund to provide the poorest and least developed countries with assistance in their efforts to deal with the most immediate challenges associated with climate change. At the same time, depending on whether these reformist efforts are regarded as falling at the upper or lower end of the spectrum of feasibility, there is likely to be constructive expressions of disappointment and even anger among civil society actors convinced that what has been agreed upon falls alarmingly short of what it is necessary to do. Hopefully, this disappointment will generate a new cycle of environmental activism rather than take refuge in passive enclaves of despair.

There is an opportunity for a radicalization of transnational efforts that can build on the realization that waiting any longer for governments to do what is necessary will produce human tragedy. This realization can encourage citizens throughout the world to appreciate their own responsibilities to participate in the struggle for a robust and equitable set of responses to the challenge of global climate change. Such a populist movement is also more likely to focus attention on the complicated issues of environmental justice that underlie the distribution of duties relating to a comprehensive, holistic, and planetary approach to climate change that is people-centered, rather than state-centric and market-oriented. There is also the question of what is desirable in the sense of being intrinsically beneficial. The desirable merges with the politics of feasibility and necessity, and also raises distinct additional issues. The merger results from the need for global or near global participation to achieve the managerial control that feasible reform entails. This was evident in the attempted structuring of emission reduction obligations contained in the Kyoto Protocol based on a generalized idea of ‘differentiated equality’. This quest for a political consensus on the allocation of emission
duties will again be evident in the arrangements discussed at Copenhagen. Putting this in world order terms, it means that statism and nationalism gives way to considerations of equity so as to secure voluntary participation; without differentiating degrees of burden poorer and less developed countries would not participate. The perspectives of necessity are not directly responsive to considerations of global justice so much as preoccupied with building support for solutions that address the underlying problem at a level of appropriate commitment, which may or may not rely on adding incentives for the poorer societies to participate more fully, and could be prepared to adopt coercive or even authoritarian and hegemonic approaches to implementation as the pressure mounts.41

As earlier, the nuclear weapons analogy seems illuminating, given the control choice shifting from disarmament to nonproliferation thereby accepting a coercive approach to risk management, conceding agency to hegemonic governments as in the US reliance on military interventions and threats to control the spread of nuclear weapons to states deemed hostile (for example, Iran and North Korea). This view of necessity in the nuclear weapons context overlaps with considerations of feasibility. For climate change at some future point, the managerial imperatives of feasibility might merge with the transformative claims of necessity, leading to centrally mandated and enforced emission limits that may or may not be sensitive to considerations of equity. One of the features of adaptive dynamics within a Westphalian framework is the degree to which considerations of equity are understood in statist terms. Whether the particular state allocates internal burdens equitably is treated as totally a matter for national policy. Past experience with respect to environmental regulation suggests that the poor and marginal are made to bear disproportionate burdens and risks as, for example, with respect to the location of
toxic waste disposal sites. The protection of such human security interests will depend mainly on societal vigilance and local grassroots activism.

Conclusions

The world order argument of this article has been that the challenge of global climate change will not be effectively addressed by the response of governments seeking to negotiate an agreement that will stabilize the levels of greenhouse gasses in the atmosphere at sustainable levels. As a result, human societies around the world will suffer intensifying harmful effects from continuing emissions, and the various consequences of global warming. Inter-governmental efforts to fashion a response have been continuing for more than a decade, and have been abetted by citizen and NGO activism. This degree of raised consciousness has already produced some encouraging extensions of the horizon of feasibility with respect to controlling emissions, subsidizing forest maintenance, and financing climate change initiatives in the poorest countries, but it will not approach the minimal goal as specified by considerations of necessity—minimum stabilization levels of 350–400 ppm CO$_2$ and reduction targets of between 25–40% of 1990s levels for the thirty-seven most developed countries reached by 2030, or a complete phase-out of carbon emissions by 2050.

In the past, most major social adjustments within and between societies have been a result of sustained struggles against the established order arising from societal mobilization taking a variety of forms. The long struggles against slavery and racism as well as on behalf of the rights of women are emblematic. Reflecting on the period since World War II, decolonization, the anti-apartheid movement, the civil rights movement,
and the rise of human rights have succeeded against the odds because of mounting symbolic pressures based on law and morality exerted on governmental actors. I would regard these various struggles as ‘legitimacy wars’ in which the social movement is politically strengthened by seizing the high moral ground. Over time these commanding moral heights expose the limits of coercive dominance, demonstrating that nonviolence and resistance, even if weaker in terms of military capabilities, can often, but not always, prevail. Unfortunately, the anti-nuclear movement has been winning the legitimacy war for decades without being able to attain its primary goal of eliminating these weapons from military arsenals. Similarly, Tibet has prevailed in its legitimacy war with China, and yet seems unlikely to achieve its objectives of self-determination, or even autonomy within the Chinese state. At present, the Palestinians are winning the legitimacy war being waged against Israel, but it remains unclear as to when, or even whether, such a victory will yield corresponding political results in terms of Palestinian self-determination in either one state or two.

When it comes to climate change this background is certainly relevant, but there are additional considerations at stake as well. A series of pressing immediate societal problems make it difficult to focus sufficient mass attention on the climate change agenda either from the perspective of necessity or justice. Presentism, statism, and nationalism pose obstacles when seeking to form a transnational consensus in global civil society as to how best to proceed. Also the forces of market, geopolitical, and class opposition, strengthened by a generally supportive mainstream media, further complicate activist efforts to overcome current dispositions to limit adjustments to the realm of the feasible. And yet these difficulties are not meant to offer a rationalization for resignation in the
face of such ominous trends and political tendencies. Even within the gridlocked world order system there are possibilities for reform from below, abetted by collaborators from above. Consider, for instance, the global coalition of hundreds of NGOs and moderate governments (non-players in the great games of geopolitics) that led to the surprising establishment of the International Criminal Court in 2002. Before it happened, such an undertaking could easily have been written off as utopian, challenging the most precious prerogative of sovereign states to confer impunity on their leadership. Such an uncertainty as to outcomes should encourage a suspension of disbelief by responsible citizens throughout the world and a willingness to engage in a struggle for a sustainable and healthy climate despite the absence of an assurance in advance that the outcome will be favorable.45

In short, as far ahead as can be envisaged, it seems highly unlikely that the existing world order system will find an acceptable response to the global climate change challenge even if pushed hard by the growing militancy of civil society activism. Perhaps, a populist dynamic reform, especially if abetted by some governmental collaboration (as helped bring the International Criminal Court into being) will lengthen the time interval available for necessary adjustments. One daunting element in the climate change context is ignorance as to the precise location of thresholds of irreversibility, which once crossed, make stabilization of carbon levels either impossible or significantly more burdensome. At the same time, the many unexpected happy endings of legitimacy wars over the course of the last seventy-five years makes it rational to lend maximal support to the struggle for a global climate insulated from damage caused by human activities. It is also important to think beyond substantive
reform, and consider the case for the transformation of world order so as to achieve a just, democratic, and effective form of global governance.  

The argument for paradigm change results from three intersecting proposition. First, the state system, even if pushed toward its maximal capacity for reform seems unlikely to make the adjustments necessary to avoid carbon levels that produce global warming above twenty-eight degrees centigrade, which are projected by scientific consensus to cause several varieties of severe harm to human and societal wellbeing, and catastrophic damage to particularly exposed communities (for instance, low-lying habitation on shores and islands). As argued, it needs to be understood that current carbon levels, especially as abetted by the lag between use and atmospheric effect, is already responsible for a variety of serious planetary harmful developments, including polar and glacial melting, rising sea levels, drought, desertification, human displacement, environmental refugees. Secondly, even if such restraint were to be achieved by concerted inter-governmental collaboration, it would not be in a form that was fair to the more vulnerable societies or to various marginalized human communities within states. Thirdly, the possibility of a humane form of global governance is dependent on democratizing participation and accountability, as well on transcending nationalism and statism, which means a form of global governance that is post-Westphalian, privileging people over market and state, which is to say, the emergence of a new structure and normative mandate for world order. This visionary future seems increasingly embodied in the hopes, actions, and dreams of civil society activists throughout the world.  

1 Whether it ever served the masses well is far more doubtful. For thoughtful explorations of this theme from a contemporary political economy perspective see the final two books of the trilogy authored by M.
The reliance on exterminist weaponry for security may reflect the amorality of realist policy advisors, but its implications for use are flagrantly immoral. See Thompson 1982; Lifton and Markusen 1988; Lifton and Falk 1982.
For one projected ‘solution’ that depends on an ideational paradigm shift from realism to ‘global republicanism’ see the pioneering book by D. Deudney, *Bounding Power: Republican Security Theory from the Polis to the Global Village*, Princeton: Princeton University Press, 2007, pp. 244–277. See also Rydell 2009 for a consideration of various moves toward nuclear disarmament, which were in all instances undercut by nuclearist domestic forces. For a trenchant assessment, see Barnett 1960.

Recent futurist films have treated these possibilities, including *The Day After Tomorrow*, *The Road*, 2012, and a whole range of documentaries of which the most widely known was *An Inconvenient Truth*, narrated by Al Gore, and winner of an Academy Award. There is also a book version (Gore 2008).

There are several contested issues. First, the economic costs of delay. Second, the divergence between states as to the appropriate allocation of emission reduction targets. Third, domestic resistance in democratic states to agreed emission reductions.

See the Montreal Protocol on Substances that Deplete the Ozone Layer (1987).

But there have recently been some renewal of concern, especially associated with worries about the erosion of the nonproliferation regime (see Note 10), but also flowing from President Obama’s Prague speech (Note 8). The Nuclear Age Peace Foundation has maintained a steady focus on the menace of nuclear weaponry in all of its manifestations.


Many recent assessments suggest that even 450 ppm is far too high to avoid severe dislocations from global warming, and the maximum tolerable level is 350 ppm, which could only be achieved if more rigorous constraints on emissions were imposed to reduce GHG levels below their current level estimated to be at 390 ppm. See McKibben 2009.

Rajanani 2009.

Kurtzman 2009.

These issues of transition are provocatively discussed, as are the severe adverse consequences of deferral, in Kunstler 2005.

A public forum with this focus was organized at the 2010 annual meeting of the International Studies Association, appropriately in New Orleans.

Meadows et al. 1974; Commoner 1971; Falk 1972.

For example, see Lomborg 2002; and the sensationalist bestselling fictionalized account by Crichton 2004.


An influential example of this tendency to overlook the obstacles to such universalism is found in the work of H. Ku¨ng, for example, *A Global Ethic for Global Politics and Economics*, 1998.

For a valuable inquiry, see Sen 2009; Moellendorf 2002; Falk; Pogge 2002.

But see Ikenberry 2001 for a valuable analysis of post-war efforts in the twentieth century to restore stability to liberal international order.

The Nuremberg experiment of holding political leaders and military commanders legally accountable for recourse to war as well as for its conduct seemed to be a gesture in the direction of establishing a regime of law that transcended the geopolitical regime of exception. But with the benefit of further experience, encompassing even the establishment in 2002 of the International Criminal Court, it is clear that such a regime of law is meant to be applied only to subordinate states and leaders, or to the losers in a war. For a classic justification for acknowledging a modest role for international law, as essentially a mode of cooperation, while upholding the primacy of the geopolitical regime and repudiating advocates of a more ambitious role for international law in a war/peace setting, see Bull 1966.

For explanation of the distinctions between horizons of feasibility, necessity, and desire in the context of proposed reforms of the United Nations, see Falk 2008.

See illuminating profile of James Hansen, prominent NASA official, who initially believed that the same rationality that led to a solution of the ozone depletion problem would serve to address the climate change challenge, and his subsequent disillusionment (Kolbert 2009: 40–41).
See Garvey 2008.


See Ebbesson and Okawa 2009; also Shiva 2005; and Garvey 2008.

See Gore 2008, and range of NGO activism, including Greenpeace, Friends of the Earth, Climate Chaos, Climate Justice Coalition, World Social Forum, and demonstrations associated with the 2009 Copenhagen Climate Change Conference. For valuable overview of the role of activism in the context of resistance to inequitable globalization, see Broad 2002.

See important argument along these lines in Jonathan Schell’s (2003) important book drawing heavily on the inspirational writing and practice of Henry David Thoreau and Mahatma Gandhi.


See, among others, books cited in Note 23; Held 2004; also Camilleri and Falk 2009.