

Breaking the Impasse: The possibilities and limitations of securitizing climate change

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This research paper will explore the dilemmas surrounding efforts to combat climate change within the short timeline that remains before the planet crosses the two degree Celsius threshold to dangerous climate change. Specifically, it will explore the utility of securitization as a political strategy to break the present international impasse on a mitigation agreement. The first section will outline the political barriers that have led the present deadlock over a legally-binding agreement on greenhouse gas reductions. The second section will present the Copenhagen School's securitization theory and explore instances of securitizing acts in relation to three referent objects: the individual, the state, and the international order. Furthermore, it will assess the difficulties associated with securitization in the environmental sector. Finally, the third section will explore the potential political outcomes of securitizing climate change. This evaluation will primarily build upon the political typologies of climate change as introduced by Joel Wainwright and Geoff Mann. Ultimately, securitization in any form cannot be counted upon to effectively mitigate climate change. Given humanity's fast-approaching ecological deadline this is not a terribly optimistic assessment. However, the dire consequences associated with climate change under business as usual scenarios, make it necessary to avoid clinging to illusions about the chances of its successful mitigation before time runs out. Indeed, a principle task for policymakers in the twenty-first century will be to make contingency plans to adapt to a warming planet. If worst-case predictions come to fruition, this may mean striving to preserve the most civilizing elements of modernity in the face of an increasingly volatile climate and the resulting political-economic world order it generates.

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1. Introduction

The international community has known about the risks of climate change for decades and yet progress towards and comprehensive agreement to curb greenhouse gas emissions remains a seemingly herculean task. Diplomatic efforts to build the necessary consensus to protect humanity from the effects of catastrophic climate change have repeatedly ended in miserable failure and have prompted some to question how political leaders could play such a dangerous game of chicken when the future of industrial civilization hangs in the balance. Time is beginning to run out before the world passes the threshold of two degrees Celsius to dangerous climate change, but political urgency is notably lacking among the world's largest emitters.¹ It has become a rhetorical cliché, but the questions of “If not us, who? And if not now, when?” remain directly relevant in the case of climate change mitigation.

In one of his rare moments of public insight, George W. Bush once observed that “America is addicted to oil”. However, this statement would have been more complete had the former president said that the global economy is hooked on fossil fuels. The metaphor of addiction is fitting in the case of fossil fuel consumption because, just as the addict can observe the physical and emotional destruction brought about by their dependence, so too can the international community understand the devastation that will surely result from unchecked emissions. Nevertheless, rationality does not guide the addict looking for one more fix before their body finally gives out. If history is any guide, the international community seems equally content to pollute the Earth's atmosphere without regard for the looming cataclysm that

¹ *Note:* Two degrees Celsius is the upper limit of average global temperature increase relative to pre-industrial levels considered to be the threshold to dangerous climate change. This paper will use the terms catastrophic climate change and dangerous climate change interchangeably. Countries agreed at the Copenhagen Climate Change Conference that warming must not exceed this target. There are also fears that warming beyond a currently unknown threshold could unlock feedback effects, such as releasing methane from melting permafrost, which would cause abrupt climactic changes that could not be mitigated by human action. For more information see: <http://www.nytimes.com/2013/01/22/opinion/global/the-climate-change-endgame.html>

unchecked climate change represents. Still, not every addict is doomed to succumb to their compulsion and human beings are by no means deterministically locked into a dystopian future. Indeed, there is truth in John F. Kennedy's observation that "Our problems are manmade -- therefore, they can be solved by man." Anthropogenic climate change is by definition a crisis of humanity's own making and can therefore still be solved by human intervention.² On the other hand, by virtue of its scale and complexity climate change also represents perhaps the greatest collective action problem that the world has ever confronted.

In the years following the tragedy of Hurricane Katrina, there was growing optimism that the risks associated with climate change had finally begun to permeate the political conscience of the world's largest per capita emitter of greenhouse gases. Although it is impossible to link any individual weather event to the broader trends of climate change, popular perception was undeniably impacted by images of the world's lone superpower being humbled by nature's overwhelming and unpredictable force. Indeed, after years of chasing a phantom enemy in distant quagmires, the Bush Administration had abandoned its own citizens to fend for themselves in the face of a very real danger. It seemed that this shift in public opinion could be leveraged into the political will to implement robust environmental policies. However, in the wake of the 2008 financial crisis, attempts to address the human causes of climate change have been largely unsuccessful in both the American and international context. The much anticipated 2009 United Nations Climate Change Conference in Copenhagen revealed significant and seemingly intractable cleavages among the world's largest emitters. Then in 2010, Barack Obama's cap-and-trade legislation failed to garner sufficient support to pass the American Congress, forcing the President to use executive orders to implement future climate policies.

² *Note:* Anthropogenic climate change refers to changes in the Earth's climate specifically induced by human activity, as opposed to natural changes brought on by factors such as changes in orbit pattern, solar activity, or volcanic eruptions.

Environmentalists and climate researchers know that there is a disjuncture between the strength of the evidence for human-induced climate change and sense of urgency displayed by both the public and the policymakers who represent them. This has led some to believe that applying the logic of security to environmental issues, and climate change in particular, could serve to prompt immediate and exceptional action in the name of climate change mitigation, since a security discourse would remove the issue of climate change from the irrationality of political contestation. Advocates have called for an environmental Winston Churchill to replace the world's Neville Chamberlains. After all, in the first half of the twentieth century emergency powers were used to rapidly restructure industrial economies in the name of combatting the threat of fascism. A security discourse would thus frame climate change as an existential threat, removed from the constraints of normal politics and severed from the manacles of public opinion. Furthermore, at the international level, moving climate change into the security realm could help bolster a sense of determination to break up the deadlock that two decades of negotiations has produced. On the one hand, securitization could allow policymakers from the old industrial economies to accept disproportionate abatement costs which would be seen as unacceptable by their home populations under normal circumstances. On the other hand, a security discourse could reframe climate change as a matter of collective security rather than a question of economic distribution. This could serve to delegitimize the principle of 'common but differentiated responsibilities' by shifting emphasis away from historical emissions towards the shared responsibilities of current major emitters, including China, Brazil, India, and South Africa.³ Finally, if climate change is seen as an existential threat to human civilization itself,

³ *Note:* 'Common but differentiated responsibilities' is a principle of international law which outlines all states' responsibility for addressing climate change, although dissimilar levels of historic culpability create discrete abatement obligations between states. The principle recognizes that differences in levels of development also result in differences in capacity to contribute to mitigation efforts.

such a threat could serve to legitimize the imposition of a mitigation strategy by some form of global hegemon.

This research paper will explore the dilemmas surrounding efforts to combat climate change within the short timeline that remains before the planet crosses the two degree Celsius threshold to dangerous climate change. Specifically, it will explore the utility of securitization as a political strategy to break the present international impasse on a mitigation agreement. The first section will outline the political barriers that have led the present deadlock over a legally-binding agreement on greenhouse gas reductions. The second section will present the Copenhagen School's securitization theory and explore instances of securitizing acts in relation to three referent objects: the individual, the state, and the international order. Furthermore, it will assess the difficulties associated with securitization in the environmental sector. Finally, the third section will explore the potential political outcomes of securitizing climate change. This evaluation will primarily build upon the political typologies of climate change as introduced by Joel Wainwright and Geoff Mann. Ultimately, securitization in any form cannot be counted upon to effectively mitigate climate change. Given humanity's fast-approaching ecological deadline, this is not a terribly optimistic assessment. However, the dire consequences associated with climate change under business as usual scenarios, make it necessary to avoid clinging to illusions about the chances of its successful mitigation before time runs out. Indeed, a principle task for policymakers in the twenty-first century will be to make contingency plans to adapt to a warming planet. If worst-case predictions come to fruition, this may mean striving to preserve the most civilizing elements of modernity in the face of an increasingly volatile climate and the resulting political-economic world order it generates.

2. International Climate Negotiations

International negotiations aimed at curbing greenhouse gas emissions have been ongoing for more than two decades following the Rio Summit in 1992.⁴ Although subsequent summits and agreements have been met with much anticipation and fanfare, negotiations have yet to produce anything resembling a solution to climate change. Despite initial optimism that the legally-binding commitments included in the 1997 Kyoto Protocol marked an irreversible stage of progress within the United Nations Framework Convention on Climate Change (UNFCCC), the agreement has failed to deliver direct reductions in emissions or to lay the groundwork for a more effective future agreement. Thus, as the world moves ever closer to the 2 degree Celsius point of no return, it has become increasingly necessary to ask if expending more time and energy on consensus-based regime formation will produce the required reductions in emissions.

Francis Fukuyama's 'End of History' thesis was the rather triumphalist view that liberal democracy represented the final form of human government because it is free from the internal contradictions and irrationalities that led to the collapse of previous structures of governance.⁵ What Fukuyama was really describing was the hegemony of the liberal capitalist international order at the end of the Cold War. Although the author has been forced to add layers of nuance to his argument, and in some cases recant aspects of his thesis, he was right to assume that liberal democracy would remain the ideological prism through which international relations would be conducted into the indefinite future. This lack of viable alternative structures for international engagement poses a dilemma in terms of addressing climate change. Specifically, liberal democracies appear particularly ill equipped to deal forthrightly with climate change because

⁴ *Note:* The Rio Earth Summit was the unprecedented culmination of a nearly three year process of negotiations among all Member States of the United Nations, leading to the adoption of a wide-ranging framework to achieve sustainable development, known as Agenda 21.

⁵ Francis Fukuyama, *The end of history and the last man*. (Riverside, NJ: Simon and Schuster, 2006), xi.

routine elections give policymakers a powerful incentive to avoid taking on significant immediate costs for ill-defined benefits in the distant future. Furthermore, the very structure of deliberative, consensus-based international regime formation has shown itself to be ineffective in addressing a global threat like climate change. As time begins to run out on humanity's ability to control and prevent the most apocalyptic climate change scenarios, it is vitally important to understand whether the established mechanisms for forging international agreement can possibly yield the necessary results. That is to say that, notwithstanding the hegemony of both Westphalian sovereignty and globalized capitalism, it would be misguided to continue relying on a negotiating process based within a structure that cannot solve the impending crisis. In the end, it may be better to change approaches than to live under the illusion that a global consensus can be reached if negotiations are given more time.

This section will begin by tracing the sources of failure to form an effective agreement from the Rio Summit to present. It will then examine these impasses in relation to the structures of both Westphalian sovereignty and globalized capitalism. Fundamentally, this analysis will serve to demonstrate that the massive reductions in greenhouse gas emissions necessary to avert catastrophic climate change cannot be reached in within the setting of contemporary 'normal' international politics. The gulf between the action required to curb emissions and the limitations imposed by the present international order cries out for a response that is exceptional to the rules and norms of contemporary international relations.

2.1 Sources of Failure in Climate Change Negotiations

Since the United Nations Framework Convention on Climate Change was adopted in Rio in 1992 there have been ongoing climate change negotiations, resulting in a number of notable agreements. This includes: the Kyoto Protocol (1997), the Marrakesh Accord (2009), the Bali

Road Map (2007), the Copenhagen Accord (2009), and the Durban Platform (2012).⁶ Given the circumstances under which they were negotiated, each agreement can be seen as a diplomatic achievement to varying degrees. However, every agreement has been an abject failure if measured by their effectiveness in reducing global greenhouse gas emissions. By 2010, global CO₂ emissions exceeded the 2000 level by 33 percent and the 1990 level by 45 percent.⁷ Without an effective agreement, humanity will not be able to avert the most catastrophic consequences of climate change and will likely trigger the feedback effects that will make future mitigation efforts impossible. If implemented, present pledges for emission reductions would only result in decreases of 12–19 percent in Annex I countries by 2020, while cuts between 25–40 percent are needed to limit the average temperature rise to below 2°C.⁸ Simply put, unilateral commitments will not address the problem and the history of climate negotiations does not provide much room for optimism.

Hovi et al. have argued that to reduce global emission substantially, an agreement must satisfy three conditions: participation must be both comprehensive and stable, participating countries must accept deep commitments, and the agreement must obtain high compliance rates.⁹ However, the authors maintain that the current UNFCCC rules hinder commitments for substantial emissions reductions. For example, common but differentiated responsibilities (CBDR) put responsibility primarily on annex I countries, which are only responsible for 40 percent of global emissions.¹⁰ Nevertheless, the stumbling block of CBDR cannot be simply glossed over. While it is true that the old industrial economies could not unilaterally mitigate climate change even if

⁶ Jon Hovi, Tora Skodvin, and Stine Aakre, "Can Climate Change Negotiations Succeed?" *Politics and Governance* 1, no.2 (2013): 139.

⁷ Ibid., 139.

⁸ Radoslav S. Dimitrov, "Inside UN climate change negotiations: The Copenhagen conference," *Review of Policy Research* 27, no. 6 (2010): 819.

⁹ Ibid., 138.

¹⁰ Ibid., 139.

they went to zero carbon emissions, there is a fundamental normative principle underlying CBDR. That is to say that the question of historic responsibility hangs like a shadow over all international climate negotiations, and as a question concerning the just distribution of costs and benefits it does not have a simple political answer. Between 65% and 80% of CO₂ released into the air dissolves over a period of 20–200 years, while the rest can take up to several hundreds of thousands of years to dissipate.¹¹ That means that if the Earth's atmosphere were a bathtub on the verge of overflowing, and accumulated greenhouse gases were the water filling it, the old industrial economies would have been running the tap since the beginning of the industrial revolution. There are legitimate reasons for developing economies to question why they should be expected to slow their economic growth to atone for the pollution that generated capital over hundreds of years in the developed world and elevated their countries to positions of global economic dominance. It would seem unjust for historically low emitting countries to pay for the negative externalities generated by the wealthiest economies. This is why the discourse of an ecological debt owed to the global south has been salient among developing countries and why countries like China and India have been able to justify their unwillingness to accept binding emission reductions with reasonable success.

Furthermore, even Annex I countries that were willing to accept binding targets under the Kyoto Protocol have been unwilling to agree to robust enforcement mechanisms for compliance.¹² While the Kyoto Protocol's emissions reduction targets are binding, the enforcement provisions set out in the Marrakesh Accords are not.¹³ Additionally, there is no

¹¹ Duncan Clark, "How long do greenhouse gases stay in the air?" *The Guardian*, Jan. 16, 2012.

¹² Note: Annex I countries were either members of the Organisation for Economic Co-operation and Development in 1992 or countries with economies in transition, such as the Russian Federation. For more information, see: http://unfccc.int/parties_and_observers/items/2704.php

¹³ Stephanie Cousins, "UN Security Council: playing a role in the international climate change regime?." *Global Change, Peace & Security* 25, no. 2 (2013): 194-5.

procedure in the Marrakesh Accords to address failure of a non-compliant party to accept an enforcement penalty, as was demonstrated when Canada was able to simply withdraw from Kyoto after failing to achieve its emission reduction targets.¹⁴ Since countries will be unlikely to consent to strong enforcement mechanisms without some degree of certainty that they can actually meet binding targets, it is possible to conceive of an agreement with deep reduction targets and weak enforcement or inadequate emission cuts with robust enforcement— but not both deep cuts and strong enforcement.

Regrettably, an effective climate agreement will remain politically infeasible as long as any of the UNFCCC's 195 parties are unprepared to consent to deep commitments and potent enforcement.¹⁵ Given that China, India, and Brazil remain steadfastly against international verification for even voluntary actions in the developing world, this impasse does not show any immediate signs of abating.¹⁶ China has offered to cut carbon intensity by 40 to 45 percent from 2005 levels and India has pledged to cut intensity by 24 percent by 2020, but these measures would not be legally binding or internationally verified.¹⁷ Furthermore, China remains determined not to accept any restrictions on its emissions until the United States does so. But the division of powers within the American government makes it impossible for even an activist president to unilaterally commit to substantial emission reductions. Thus, a climate agreement with deep commitments and robust enforcement will almost certainly be politically unattainable within the necessary timeframe if negotiated within the UNFCCC framework.¹⁸ This

¹⁴ Cousins, Stephanie. "UN Security Council: playing a role in the international climate change regime?." *Global Change, Peace & Security* 25, no. 2 (2013):195.

¹⁵ Jon Hovi, Tora Skodvin, and Stine Aakre, "Can Climate Change Negotiations Succeed?" *Politics and Governance* 1, no.2 (2013): 139.

¹⁶ Radoslav S. Dimitrov, "Inside UN climate change negotiations: The Copenhagen conference," *Review of Policy Research* 27, no. 6 (2010): 817.

¹⁷ Gwynne Dyer, *Climate Wars*. (Toronto: Random House, 2009): 206.

¹⁸ Jon Hovi, Tora Skodvin, and Stine Aakre, "Can Climate Change Negotiations Succeed?" *Politics and Governance* 1, no.2 (2013):,145.

predicament appears tremendously irrational because the consequences of inaction are so dire. However, it is necessary to understand that governments are reacting within the particular logic of an international system that has never confronted a collective action problem like climate change.

It is important not to succumb to hasty generalizations about the behaviour of countries trapped within the political divide at international climate negotiations. Even governments seen as laggards are well aware of the costs of climate change and most certainly do not want their legacy to the future to be defined by lethargy in the face of catastrophe. However, governments face significant domestic pressures which have served to make international cooperation untenable under current circumstances. For the United States, Congressional approval would be necessary for any substantial mitigation efforts to be implemented. But since President Obama's cap-and-trade bill failed to pass the Senate in his first term, he has seen his bargaining position severely restricted at international negotiations. The diffusion of powers within the American legislative branch makes it difficult to build Congressional coalitions that will not crumble in the face of job losses in states and districts that are economically dependent on fossil fuel extraction. For China and other developing countries there is a genuine fear that accepting legally-binding targets would impede their economic growth and restrict their autonomy in setting development goals.¹⁹ China has made huge investments in wind and solar power, with the goal of using 15 percent renewable sources by 2020 and set among the world's highest requirements for fuel efficiency at 45mpg.²⁰ However, 69 percent of China's primary energy still comes from coal and it will depend on it as an inexpensive source of fuel for decades.²¹ This means that any deep cuts to emissions would have devastating economic consequences in a country where the majority of

¹⁹ Gwynne Dyer, *Climate Wars*. (Toronto: Random House, 2009), 210.

²⁰ *Ibid.*, 205.

²¹ *Ibid.*, 205.

citizens still live in poverty and would likely threaten the Chinese Communist Party's legitimacy as a consequence.

Like many other diplomatic stalemates, it is not impossible to imagine the type of political compromise that must be made to achieve an effective agreement on climate change mitigation; it is just difficult to envision the path to such an agreement. Developed countries must be willing to accept significant and binding reductions in greenhouse gas emissions, while also providing substantial adaptation funding and technology transfers to developing countries. In turn, developing countries would have to be exempt from binding reduction targets in the short-run, with a binding cap on emissions in the medium-term, and reductions in the long-term. This would mean that politicians and policy makers in the developed world would have to be able to convince their home populations that bearing immediate, massive, and disproportionate economic hardship is necessary in order to combat climate change and redress a historic ecological debt. In the end, the negotiating process for climate change mitigation has not suffered from a lack of expertise or diplomatic skill. Instead, it is political structures which have restricted the political possibilities of the process which have made consensus impossible.

2.2 Westphalia

Speaking at a press conference alongside his Australian counterpart, Canadian Prime Minister Stephen Harper once explained that his government's open reluctance to pass robust measures to reduce greenhouse gas emissions merely reflects a common understanding among all national governments. According Stephen Harper, "No matter what they say, no country is going to take actions that are going to deliberately destroy jobs and growth in their country. We are just a little more frank about that, but that is the approach that every country is seeking."²²

²² Terry Pedwell, "Canada just more 'frank' than rest of world on climate change, says Harper," *iPolitics*, June 9, 2014.

This statement is not particularly outrageous given that economic considerations remain a central stumbling block to international cooperation on mitigation efforts. However, the glib sense of resignation reflected in his comments should be a cause of grave concern for all of humanity. If it is true that no country is willing to incur any economic costs in the name of mitigating climate change, than any form of comprehensive agreement seems untenable within the current configuration of international relations. That is to say that the Westphalian system of sovereign, self-interested nation-states may not be equipped to confront the challenge of climate change. As Albert Einstein understood, the definition of insanity is doing the same thing over and over again, while expecting different results. Thus, a system that has shown itself incapable of dealing forthrightly with the causes and consequences of climate change must be changed or change will inevitably be thrust upon it by forces beyond its control.

The peace treaties of Westphalia and Osnabruck in 1648 lay the groundwork for the legal basis of modern statehood and the normative structure of modern world politics.²³ The central principle of Westphalia was territorial sovereignty and non-interference from outside powers. Over time, this principle was absorbed into the doctrine of sovereign statehood, although it did not become a universal norm until the collapse of the European empires throughout the twentieth century.²⁴ Following the Second World War, universal state sovereignty was codified as the central organizing structure of the post-war international order through the Charter of the United Nations (UN). The only exception to the impermeability of territorial borders resides in the United Nations Security Council (UNSC) powers outlined in Chapter VII of the UN Charter. Under these provisions, the UNSC is permitted to identify threats to the world's collective security and take both military and non-military actions to remedy them. Since the UNSC is the

²³ Anthony McGrew, "Globalization and global politics," *The globalization of world politics: An introduction to international relations*, ed. John Baylis et al. (Oxford: Oxford University Press, 2013), 23.

²⁴ Ibid.

only UN body capable of imposing legally-binding resolutions, it is the only entity that can legitimately determine a state of exception to the established structure of international politics.

Javier Solana, the former Secretary General of the North Atlantic Treaty Organization (NATO), has argued that the principle of sovereignty has produced the basis for rivalry rather than a community of states.²⁵ Ultimately, the stability of this system could only be maintained by “constantly shifting alliances, cordial and not-so-cordial ententes, and secret agreements.”²⁶

Furthermore, Solana went on to contend that notions of humanity and democracy are essentially irrelevant to the original Westphalian order.²⁷ This is not a terribly controversial statement given that Westphalian sovereignty was never meant to bring powers together to pursue positive ends; rather it was introduced after the first all-European war as a means to maintain the peace.

However, after the fall of the Soviet Union and the breakup of the Warsaw pact alliance, the international community began to grapple with this limitation of sovereignty in a unipolar world. As a response to NATO’s illegal intervention in the former Yugoslavia, the ‘responsibility to protect’ doctrine sought to place restrictions on absolute territorial sovereignty by establishing the norm that every sovereign government has a fundamental responsibility to safeguard the rights and wellbeing of their domestic population. In cases such as Kosovo, where the sovereign is either unwilling or unable to protect their citizens, this responsibility falls to the international community generally and invalidates the offending government’s claim to sovereignty. This norm has served to maintain the state as the primary actor within international relations and has linked its legitimacy to the ability to safeguard a population from both military and non-military threats.

²⁵ Javier Solana, “Securing Peace in Europe,” Speech, Lisbon, November 12, 1998. North Atlantic Treaty Organization.

²⁶ Ibid.

²⁷ Ibid.

In the case of climate change, Paul G. Harris has argued that territorial sovereignty has become a cancer to international negotiations. The author maintains that the “territorial trap” of Westphalian sovereignty greatly narrows the choice of frames for thinking about climate change and policy options available to remedy it.²⁸ For example, questions surrounding the distribution of costs and benefits resulting from reductions in greenhouse limitations have become an unambiguously a statist project, which reinforces the conception that states that have both rights and responsibilities in relation to the rest of the world.²⁹ In practice, this has encouraged the development of interest-based alliances among countries at climate negotiations. This division was probably most vividly displayed when, according to former Secretary of State Hillary Clinton, President Barack Obama was forced to ‘crash’ a secret meeting between China, Brazil, India, and South Africa in Copenhagen. The intention of the meeting was apparently to isolate the United States (US) in order to bolster the block’s position after the Chinese Premier Wen Jiabao has refused to meet directly with President Obama over American compliance monitoring demands.

The Westphalian system has clear limits in fostering the global consensus necessary to address a collective action problem as complex as climate change. By drawing an arbitrary line around particular territories, state governments are essentially tasked as agents for the narrowly perceived economic, identity, and security interests of their particular population. Governments are only legitimate insofar as they are able to defend these interests and more often than not it is necessary for them to be seen to be doing so by their populations.³⁰ This is especially true when historical animosities and contemporary rivalries come into play. China’s adamant refusal to accept outside monitoring of even voluntary commitments and steadfast reaffirmation of the

²⁸ Paul G. Harris, *What's Wrong with Climate Politics and how to Fix it*. (John Wiley & Sons, 2013)

²⁹ *Ibid.*

³⁰ *Ibid.*

‘common but differentiated responsibilities’ principle may seem both self-serving and obstinate. However, their position is based on the deeply entrenched normative structure of Westphalian sovereignty. The notion that any other state, or alliance of states, should be able to dictate China’s development course is not only repugnant to the Chinese Communist Party, but also violates the sovereign’s right to self-determination. Thus, the political impasse surrounding questions of just distribution of costs and benefits may be irreconcilable within a system of competing sovereigns. Developing countries (and their populations) are not likely to absolve the old industrial states of their historic responsibility for emissions, while the compensation costs are intolerably high for developed countries to legitimately propose to their home populations.

2.3 Globalized Capitalism

David Levy and Daniel Egan’s global analysis of the power of capital in climate negotiations reveals that direct corporate influence over international fora is less pronounced than expected. Instead, businesses appear to prefer to engage at the level of the national political economy.³¹ However, the convergence between states’ negotiating stances and the economic interests of their domestic businesses serves to underline the hegemony of corporate influence over national policy.³² This essentially means that countries tend to act as ambassadors for domestic capital when engaging in negotiations that could benefit or hinder their own industries. Thus, although the authors find that international institutions are removed from the direct pressure caused by the potential economic dislocation brought on by restrictions on greenhouse gas emissions, national governments face significant structural pressure from business

³¹ David L. Levy and Daniel Egan, "Capital contests: National and transnational channels of corporate influence on the climate change negotiations," *Politics and Society* 26 (1998): 354.

³² *Ibid.*

interests— particularly those with national economies heavily dependent on fossil fuels.³³

Consequently, coupling the international political structure of Westphalian sovereignty with the economic system of globalized capitalism has created a power structure whereby national governments identify with and defend corporate interests without clearly demarking them from broader national interests. Therefore, an international consensus on climate change mitigation will not be possible until there is significant support from capital.

In the case of climate change, there has not been significant buy-in from affected industries because there are few comparable substitutes to fossil fuels. The energy necessary to drive roughly three centuries of industrialization has been almost exclusively provided by greenhouse gas emitting sources, which means that the contemporary global industrial economy has been built on a crumbling foundation. Therefore, a phase out of inexpensive polluting energy sources would lead to increases in the costs of production and the transportation of goods for nearly every industrial sector because they represent a principle and unrivaled energy input. This has led to significant opposition to binding emission reductions from both fossil fuel consuming and producing businesses, since the consequences of such as deal of are seen as profoundly threatening. For example, the atmosphere can absorb roughly another 565 more gigatons of carbon dioxide before the planet passes the threshold for catastrophic climate change.³⁴

However, energy companies currently have reserves that would result 2,795 gigatons of carbon dioxide emissions.³⁵ According to John Fullerton, a former managing director at JP Morgan, those 2,795 gigatons are worth about \$27 trillion at today's market value.³⁶ Thus, in order to keep average temperature increase below the two degree threshold, the energy industry would have to

³³ David L. Levy and Daniel Egan, "Capital contests: National and transnational channels of corporate influence on the climate change negotiations," *Politics and Society* 26 (1998): 354.

³⁴ Bill McKibben, "Global Warming's Terrifying New Math," *Rolling Stone*, July 19, 2012.

³⁵ *Ibid.*

³⁶ *Ibid.*

leave 80 percent of their reserves unexploited and write-off \$20 trillion in assets.³⁷ Some energy companies have highlighted their attempts to diversify their holdings away from fossil fuels, a trend that was perhaps best illustrated by British Petroleum's rebranding as 'Beyond Petroleum'. Unfortunately, these efforts have largely been public relations exercises since no other source of energy comes close to fossil fuels in terms of efficiency or price.

It is important remember, as Robert Falkner points out, that 'business community' is not monolithic and so-called 'business conflict' does exist in the case of climate change because some actors would benefit from an effective agreement meant to reduce greenhouse gas emissions. However, business lobbying during negotiations on the UNFCCC and the Kyoto Protocol was dominated by the oil and coal sectors, along with a diverse range of large industrial companies.³⁸ This coalition played an instrumental role in opposing mandatory greenhouse gas reductions and dissenting business voices were largely absent from the process. Divisions in corporate attitudes to climate change became more apparent after the adoption of the Kyoto Protocol. For example, industries such as insurance, carbon trading, and renewable energy have become more politically assertive since they all stand to gain from more a robust international climate policy framework.³⁹ However, the oil and gas industry continues to hold significant political and economic influence. While there may be increasing dissent among business voices, it seems improbable that any actor will be able to dislodge the power of fossil fuel dependent industries in the near future.

In the end, Brett Clark and Richard York are not hopeful that technological innovation could ever displace the central role of emitting industries because capitalism as a system depends

³⁷ Bill McKibben, "Global Warming's Terrifying New Math," *Rolling Stone*, July 19, 2012.

³⁸ Robert Falkner, "Business Power, Business Conflict: A neo-pluralist perspective on international environmental politics," in *Handbook of Global Environmental Politics*, ed. P. Dauvergne, Second Edition (Northampton: Peter Elgar Publishing, 2012), 324.

³⁹Ibid.

on the unsustainable pollution of the biosphere. According to the authors, due to capitalism's inherent expansionary tendencies, technological development serves to escalate commodity production, which necessitates the burning of fossil fuels to power the machinery of production.⁴⁰ This process has served to generate an accumulation of carbon dioxide in the atmosphere since the beginning of the industrial revolution, while technological innovation has actually increased total resources used, since expansion in production outstrips gains in efficiency.⁴¹ This tendency has become known as the Jevons paradox and capitalism cannot easily surmount such a contradiction as long as it is bound by the necessity of growth.⁴² Indeed, there is no naturally imposed limit for capitalism because natural limits are simply viewed as obstacles to transcend.⁴³ Thus, as Naomi Klein has long maintained, capitalism is a remarkably resilient system of natural exploitation and in many cases can be further entrenched by the obstacles imposed by ecological crisis.⁴⁴ Accordingly, addressing climate change will require a substantial transformation in both social and economic organization which transcends the currently intertwined structures of Westphalian sovereignty and global capitalism.

⁴⁰ Brett Clark and Richard York, "Carbon metabolism: Global capitalism, climate change, and the biospheric rift," *Theory and Society* 34, no. 4 (2005): 391.

⁴¹ *Ibid.*, 410.

⁴² *Note:* Jevons paradox describes the notion that improvements in energy efficiency to result in increases in overall consumption in the long-run.

⁴³ *Ibid.*, 418.

⁴⁴ Naomi Klein, *The shock doctrine: The rise of disaster capitalism*, (Macmillan, 2007): 9.

3. Securitizing Climate Change

Throughout much of the twentieth century, conceptions of international security tended to focus on power relations between state and military actors. However, after the fall of the Berlin wall and the ensuing dissolution of the Soviet Union, the narrative through which the field of security experts reproduced its identity disintegrated, and with it went previously implicit understandings of its expertise.⁴⁵ Absent the bipolar standoff between East and West, the security agenda was left with a void that could be filled by broadened understandings that included non-military threats. Proponents of realist international relations theory opined that this would inevitably dilute the concept of security by allowing practically any issue to be incorporated within the security agenda. On the other hand, constructivists and poststructuralists challenged the narrowness of the realist perspective by suggesting that security issues are socially constructed rather than objective conditions.⁴⁶ The most prolific explanation of this process of social construction was produced by the Copenhagen School and synthesized by Barry Buzan, Jaap DeWilde, Ole Waever in the theory of ‘securitization’.

Securitization theory is less concerned with understanding what constitutes a security threat than the political process by which an issue comes to be understood in security terms. The process of securitization is what in language theory is called a speech act, meaning that it is not a sign referring to something more real; it is the utterance itself that is the act.⁴⁷ According to Buzan et al., “the exact definition and criteria of securitization is constituted by the intersubjective establishment of an existential threat with a saliency sufficient to have substantial

⁴⁵ Jef Huysmans, *The Politics of Insecurity: Fear, Migration and Asylum in the EU*, (New York: Routledge, 2006), 17.

⁴⁶ Maria Julia Trombetta “Environmental security and climate change: analysing the discourse,” *Cambridge Review of International Affairs* 21 (2008): 587.

⁴⁷ *Note:* In linguistics, speech act theory posits that language is a mode of action, rather than simply a means of communicating information. For more information, see: http://www.library.utoronto.ca/utel/glossary/Speech_act_theory.html

political effects.”⁴⁸ Thus, for an issue to be considered securitized, a securitizing agent must perform a speech-act to present something as an existential threat to a referent object. By evoking “security,” the agent declares an emergency condition and thereby claims a right to bypass the normative and legal constraints of everyday politics and use whatever means are necessary to protect against the threat.⁴⁹ The logic being that an existential threat holds the possibility of undermining the entire structure in which normal politics operate, and thus, all other considerations become subordinate. Therefore, the existential threat can only be understood in its perceived relation to referent object in question.

It is vital to note that a discourse which presents an issue as an existential threat to a referent object does not, in and of itself, create the condition of securitization. Instead, securitization is a negotiated process between the agent and their intended audience. An issue is securitized only if and when the audience accepts it as such.⁵⁰ Consequently, for the purposes of the analysis below, the focus will be on the potential saliency of climate change as an existential threat to three distinct referent objects. The objective impacts of climate change are less important to this discussion than the existing discourses surrounding environmental and climate security. This section will begin by investigating the ways in which climate change can be securitized by examining ‘securitizing moves’ as applied to: the individual, the state, and the international order. This will frame a subsequent discussion of the difficulties of successfully securitizing a global environmental issue like climate change.

3.1 Climate Change as a Threat to Human Security: The individual as referent object

The emerging concept of human security takes the individual as the referent object of security. Much like other broad terms such as sustainability, liberty, or happiness; human

⁴⁸ Buzan et al., “Security: A New Framework for Analysis,” (Boulder, CO: Lynne Rienner, 1998), 21.

⁴⁹ Ibid., 22.

⁵⁰ Ibid., 25.

security is difficult to define and is generally more easily grasped by its negation. In essence, the human security discourse seeks to reframe discussions concerning security threats and responses to encompass a broad range of detriments to individual wellbeing. The term first appeared in the United Nations Development Programme's 1994 *Human Development Report*, a document commissioned annually which attempts to focus international debate towards key development issues. According to the report, human security can be explained as follows:

It means, first, safety from such chronic threats as hunger, disease and repression. And second, it means protection from sudden and hurtful disruptions in the patterns of daily life-whether in homes, in jobs or in communities. Such threats can exist at all levels of national income and development. The loss of human security can be a slow, silent process--Or an abrupt, loud emergency. It can be human-made--due to wrong policy choices. It can stem from the forces of nature. Or it can be a combination of both--as is often the case when environmental degradation leads to a natural disaster, followed by human tragedy.⁵¹

The report also cautions that human security must not be equated with human development. Human development is the process of widening an individual's range of choices, whereas human security refers to an individual's ability to exercise these choices freely and to have relative confidence in the continuity of their outcomes.⁵² Accordingly, there have been a number of attempts to associate climate change with the human security paradigm. For example, as the 2007-2008 chair of the United Nations Human Security Council, Greece announced its central priority was highlighting the relationship between climate change and international human security.⁵³ Furthermore, the Intergovernmental Panel on Climate Change's (IPCC) Fifth Assessment report marked a water-shed, in that it was the first time the panel performed a

⁵¹ United Nations Development Programme, *Human Development Report, 1994* (New York: Oxford University Press, 1994), 23.

⁵² *Ibid.*, 25.

⁵³ Tasos Karafoulidis, "Audience: A Weak Link in the Securitization of the Environment?," In *Climate Change, Human Security and Violent Conflict*, (Springer Berlin Heidelberg, 2012): 266.

systematic analysis of the human security implications of climate change.⁵⁴ However, the question remains whether or not these moves can be viewed as part of a successful securitizing act.

Ronald Paris has identified two central problems with the concept of human security. First, according to the author, because definitions of human security can encompass everything from physical security to psychological well-being, the term is too vague to provide meaningful guidance in the prioritization of competing policy priorities.⁵⁵ Second, Paris argues that the term's ambiguity serves a useful purpose for its strongest proponents in that it can be used as a rallying-cry to unite diverse coalitions of states and organizations that wish to capture the more substantial political interest and financial resources associated with security.⁵⁶ In practical terms, this means that the concept of human security has been most useful as a rhetorical tool. However, if the paradigm is so broad and vague that it can apply to nearly any form of human misery, then the prioritizing effect of identifying an existential threat becomes lost.

Conversely, Des Gasper has contended that the human security paradigm can justify policy priority based on normative thresholds which understand the nature of individual humans as the referent for security.⁵⁷ Unlike the abstraction of nation states, human beings have corporal bodies and a variety of basic requirements to live a meaningful life. These include partly socially-specific normative thresholds, across a range of needs with minimum levels required for normative acceptability.⁵⁸ Thus, human security issues concern the risk of falling below minimum normative thresholds and security refers primarily to the defence of core values.

⁵⁴ Goldenberg, Suzanne. "Climate change a threat to security, food and humankind - IPCC report." *The Guardian*, March 21, 2014.

⁵⁵ Roland Paris, "Human Security: Paradigm Shift or Hot Air?" *International Security* 26 (2001): 88.

⁵⁶ *Ibid.*, 102.

⁵⁷ Des Gasper, "The idea of human security," in *Climate Change, Ethics and Human Security*, ed. Karen O'Brien, Asunción Lera St. Clair, and Berit Kristoffersen (New York: Cambridge University Press, 2010), 26.

⁵⁸ *Ibid.*, 26.

Nevertheless, if human security is to be understood as the defence of inherently subjective values, then it is not clear how it can be applied to a securitizing act. The very nature of securitization's exceptional politics is that it places a particular issue beyond the realm of democratic contestation, leaving little room to parse out the normative thresholds.

Rita Floyd has argued that human security's principle utility is normative, but finds the concept to be flawed in that it does not lend well to analysis of collective actors both as the main agents of security provision and as possessors of a claim to survival in their own right.⁵⁹ In the case of human security, the insecure individual is in no position to provide for their own security, meaning that the provision of human security can only be guaranteed by a larger entity such as society, the state, or a global institution.⁶⁰ This means that even in cases where existential threats to human security can be identified, it is not clear what entity can legitimately respond. Scott Watson contends that this has left the use of the 'human' as referent object open to abuse and manipulation. According to the author, such representations reinforce the role of certain actors who are privileged in the identification of both human insecurity and the appropriate measures for 'restoring' affected humans to a condition of security.⁶¹ In general this leads to economically advantaged populations being imbued with agency, while the structural factors which contribute to human insecurity are rarely examined.⁶² In this sense, human security would be a very reactionary approach to climate change because it would seek to address the indirect human consequences of climate change, rather than the underlying causes.

⁵⁹ Rita Floyd, "Human Security and the Copenhagen School's Securitization Approach," *Human Security Journal* 5, no. 37 (2007): 40.

⁶⁰ Ibid.

⁶¹ Scott Watson, "The 'human' as referent object? Humanitarianism as securitization," *Security Dialogue* 42, no. 1 (2011): 15-16.

⁶² Ibid., 16.

Conversely, according to O'Brien et al., although human security does not specifically address environmental matters, it holds the potential to reframe the issue of climate change in a way that promotes the goals of global justice.⁶³ The authors argue that human security can open a space for discussion of the ways in which climate change mitigation “goes hand in hand with an open and reflexive critique of ideas about modernisation, development and quality of life that have led to the climate crisis in the first place, and to discussions of the role of alternative visions about the meaning of development.”⁶⁴ Furthermore, by framing climate change within the paradigm of human security, it can be shifted from its narrow category of ‘environment issues’ to occupy a much broader space on the policy agenda.⁶⁵ While it is true that climate change cannot be effectively mitigated without addressing the complex web of political, social, and economic relationships which created the problem in the first place, the logic of security serves to limit discussion and emphasize urgency of action. Applying a security frame to climate change would likely constrict the variety of possible approaches for responding to climate change, rather than expanding the policy space in which the issue is discussed.

Conservative predictions estimate that by 2080 climate change will lead to an additional 600 million people being malnourished, an additional 400 million at risk of malaria, and an additional 1.8 billion people will be without sufficient water.⁶⁶ These are real and pressing threats to the human security of individuals. However, these costs will not be equally felt across the globe, despite the transnational impacts of climate change. According to Adger and Barnett, an individual’s vulnerability to climate change depends on the extent to which they

⁶³ O'Brien et al., “The framing of climate change: why it matters,” in *Climate Change, Ethics and Human Security*, ed. Karen O'Brien, Asunción Lera St. Clair, and Berit Kristoffersen (New York: Cambridge University Press, 2010), 13.

⁶⁴ Ibid., 13.

⁶⁵ Ibid., 14.

⁶⁶ Saleemul Huq and Catherine Pettengell, “An Introduction to Human Security and Climate Change,” in *The Impact of Climate Change on Human Security* (London: International Institute for Environment and Development, 2008), 70.

are directly dependent on natural resources, the extent to which the resources and services they rely on are sensitive to climate change, and their capacity to adapt to changes in natural capital stocks.⁶⁷ Thus, the degree to which climate change undermines human security will vary across the world because access to natural resources and the provision of basic services varies across jurisdictions.⁶⁸ This means that the individuals who are most vulnerable to the human security threats of climate change are not necessarily those who live in regions with the most climatic impacts; it is those who are already most exposed to human security threats and possess the least political and economic leverage. Tragically, such individuals also tend to be the smallest contributors to anthropogenic climate change.⁶⁹ In order to effectively mitigate climate change, the largest emitters must be willing to implement the most drastic cuts to emissions and bear the brunt of the cost of transition. However, if climate change is addressed through a human security frame, it is unlikely to be seen as an existential threat among citizens of industrialized democracies. Instead, climate change could very well be cast as threat to the distant ‘other’ residing in the developing world. Thus, the process of securitizing climate change with the individual as the referent object is unlikely to be successful.

3.2 Climate Change as a Threat to National Security: The state as referent object

The United States’ security establishment appears to represent somewhat of a vanguard in terms of securitizing climate change with the state as the referent object. Indeed, the U.S. Department of Defense had accepted the national security frame with regards to the threat of climate change, even as the Bush administration began applying securitizing moves to the

⁶⁷ Jon Barnett and W. Neil Adger, “Climate change, human security and violence conflict,” *Political Geography* 26 (2007): 641.

⁶⁸ *Ibid.*, 642.

⁶⁹ Saleemul Huq and Catherine Pettengell, “An Introduction to Human Security and Climate Change,” in *The Impact of Climate Change on Human Security* (London: International Institute for Environment and Development, 2008), 70.

existential threat posed by terrorism and Saddam Hussein's alleged weapons of mass destruction. In 2003, the Pentagon commissioned a report by Peter Schwartz and Doug Randall on the potential threat posed by climate change. The authors found that,

As global and local carrying capacities are reduced, tensions could mount around the world, leading to two fundamental strategies: defensive and offensive. Nations with the resources to do so may build virtual fortresses around their countries, preserving resources for themselves. Less fortunate nations especially those with ancient enmities with their neighbors, may initiate in struggles for access to food, clean water, or energy. Unlikely alliances could be formed as defense priorities shift and the goal is resources for survival rather than religion, ideology, or national honor.⁷⁰

This report was only made public when it was leaked to the press, which understandably upset the executive branch. The Bush administration had no interest in securitizing climate change because to do so would require an extraordinary response to a problem which the White House adamantly refused to acknowledge or address. Compounding this embarrassment was the fact that the report seemed to anticipate the catastrophe caused by hurricane Katrina by warning that the U.S. would not be able to protect its own citizens or provide effective disaster relief in the face of extreme weather events within increasingly unstable climate.⁷¹ It is difficult to argue that an issue has not been securitized if the U.S. military anticipates that it is serious enough to make contingency plans to address.

In addition, the 2003 report by Schwartz and Randall has been bolstered by the subsequent release of reports in 2007 and 2014 by the CNA Corporation, an influential non-profit research institute with close ties to the US Navy.⁷² The CNA concludes that projected climate change poses a serious threat to America's national security, with the potential to disrupt

⁷⁰ Peter Schwartz and Doug Randall, "An Abrupt Climate Change Scenario and its Implications for United States National Security," in *Global Business Network Report*. (Emeryville, CA: Global Business Network, 2003), 2.

⁷¹ Maria Julia Trombetta "Environmental security and climate change: analysing the discourse," *Cambridge Review of International Affairs* 21 (2008): 594.

⁷² Amy Lynn Fletcher, "Clearing the air: the contribution of frame analysis to understanding climate policy in the United States," *Environmental Politics* 18, no. 5 (2009): 808.

the American way of life.⁷³ In addition, various American organisations with links to the national security establishment have contributed to the construction of the climate security frame, including the Centre for Strategic and International Studies, George C. Marshall Institute, US Army War College and Triangle Institute for Security Studies, the Woodrow Wilson International Centre Environmental Change and Security Program, Council on Foreign Relations, and National Resources Defence Council.⁷⁴ Similar research has also been published by both the German and British militaries, which seems to indicate that this phenomenon is not simply the product of the central role that the national security frame plays within America's political and bureaucratic cultures. Although the secrecy with which militaries operate makes it impossible to fully assess the degree to which all the world's militaries have accepted the securitization of climate change, it seems reasonable to assume that a similar process is happening beyond Europe and North America. After all, it seems inconceivable that countries like China, Russia, or India could afford to allow for such a strategic gap to be opened.

Although climate change has been effectively securitized within military organizations, securitization attempts with the state as a referent object have not been terribly salient among other audiences. Some small island states have also applied the national security frame to climate change, with Palau likening the threat to an 'invading army' and Papua New Guinea comparing the effects of climate change to 'bullets and bombs'.⁷⁵ However, these cases have been exceptional among civilian leaders. Unlike other social, political, and economic institutions, a military's principle role in peacetime is to identify short, medium, and long-term threats to the

⁷³ Amy Lynn Fletcher, "Clearing the air: the contribution of frame analysis to understanding climate policy in the United States," *Environmental Politics* 18, no. 5 (2009): 808.

⁷⁴ *Ibid.*, 808.

⁷⁵ Gerrit Kurtz, "Securitization of Climate Change in the United Nations 2007–2010," In *Climate Change, Human Security and Violent Conflict*, (Springer Berlin Heidelberg, 2012), 677.

state and to develop contingency plans to address them. In a sense, any issue becomes securitized once a military begins to examine it.

However, objective scientific analysis drawing a causal link between climate change and national security concerns continues to represent an underdeveloped field of inquiry among researchers not affiliated with security institutions. This is not terribly surprising since the precise weather effects of climate change are challenging to predict and their social consequences are even more difficult to discern. However, by examining some of the key studies on the connection between environmental degradation and armed conflict, it is possible to understand the saliency of applying the security frame to climate change within the scientific community. Predictably, there remains tremendous disagreement among researchers regarding the possibility and degree to which climate change will pose a threat to states. One would indeed expect a high threshold for an issue to be successfully securitized within an audience defined by its commitment to rational and evidence-based inquiry.

Thomas Homer-Dixon's study of the links between environmental degradation and violent conflict remains among the most prolific in the field. The author argues that climate change will likely represent a challenge to international security as dangerous as the nuclear arms race during the Cold War or the wider proliferation of nuclear weapons today.⁷⁶ Furthermore, Dixon predicts that, "climate change will help produce the kind of military challenges that are difficult for today's conventional forces to handle: insurgencies, genocide, guerrilla attacks, gang warfare and global terrorism."⁷⁷ These dire forecasts were echoed by a study by Zhang et al., which demonstrated that long-term fluctuations of war frequency and population changes have

⁷⁶ Thomas F. Homer-Dixon, "Terror in the Weather Forecast", *New York Times*, April, 24 2007.

⁷⁷ Ibid.

followed historical cycles of temperature change.⁷⁸ The study's findings suggest that worldwide cycles of violence, population, and price in recent centuries have been driven principally by changes in the climate. The findings also imply that social mechanisms that might mitigate the impact of climate change were not significantly effective during the study period.⁷⁹

Barnett and Adger suggest that climate change could increase the risk of violence conflict through direct effects on livelihoods and indirect effects on state functions. Furthermore, conflict could come about through changes in the political economy of energy resources due to mitigative action or from changes in social systems driven by actual or perceived climate impact.⁸⁰ Hauge and Ellingston have found that factors like deforestation, land degradation, and scarce supply of freshwater, increase the risk of domestic armed conflict, especially low-level conflict.⁸¹ This remains true even when controlling for economic and political factors, such as level of economic development and type of political regime.⁸² However, variables such as economic development and democratic governance have shown to be more decisive in predicting intra-state conflict than environmental scarcity and the severity of conflicts is best accounted for by military expenditure.⁸³

Finally, a study by Raleigh and Urdal suggests that environmental and demographic factors are secondary to other drivers of armed conflict. The authors argue that political instability is a strong driver of internal conflict in underdeveloped states, but this variable does

⁷⁸ Brecke et al., "Global climate change, war, and population decline in recent human history," *Proceedings of the National Academy of Sciences* 104 (2007): 19214.

⁷⁹ *Ibid.*, 19214.

⁸⁰ Jon Barnett and W. Neil Adger, "Climate change, human security and violence conflict," *Political Geography* 26 (2007): 640.

⁸¹ Wenche Hauge and Tanja Ellingsen, "Beyond environmental scarcity: causal pathways to conflict," *Journal of Peace Research* 35 (1998): 299.

⁸² *Ibid.*

⁸³ *Ibid.*

not seem to interact environmental factors to increase the risk of conflict.⁸⁴ However, the authors do concede that weak states are more likely to experience environmental conflicts because they are less capable of mitigating the effects of resource scarcity and because they more likely to be militarily challenged by opposition groups.⁸⁵ Finally, Idean Salehyan rejects what he calls the ‘deterministic view’ of climate change and national security. According to the author, “this view downplays the role of governments, political institutions, and social actors in mitigating resource pressures and conflict.”⁸⁶ Salehyan’s research finds that the effect of climate change on armed conflict is contingent on a diverse set of social and political variables, which cannot be ignored if one wishes to make sound predictions regarding the long-term possibility of climate induced conflict.⁸⁷

3.3 Climate Change as a Threat to Collective Security: The international order as the referent object

In his Nobel Prize Speech, former Vice President Al Gore evoked memories of the Cold War by stating that, “We and the earth’s climate are locked in a relationship familiar to war planners: mutually assured destruction.”⁸⁸ Not to be outdone, in his 2009 acceptance speech for the Nobel Peace Barack Obama cautioned the audience that:

There is little scientific dispute that if we do nothing, we will face more drought, more famine, more mass displacement, all of which will fuel more conflict for decades. For this reason, it is not merely scientists and environmental activists who call for swift and

⁸⁴ Clionadh Raleigh and Henrik Urdal, “Climate change, environmental degradation and armed conflict” *Political Geography* 26 (2007): 679.

⁸⁵ *Ibid.*, 679.

⁸⁶ Idean Salehyan, “From Climate Change to Conflict? No Consensus Yet,” *Journal of Peace Research* 45 (2008): 318.

⁸⁷ *Ibid.*, 318.

⁸⁸ Amy Lynn Fletcher, “Clearing the air: the contribution of frame analysis to understanding climate policy in the United States,” *Environmental Politics* 18, no. 5 (2009):811.

forceful action, its military leaders in my own country and others who understand our common security hangs in the balance.⁸⁹

These statements were a marked departure from the belligerent denials which defined the Bush administration's approach to the very existence of anthropogenic climate change. Indeed, Vice President Gore and President Obama's speeches can clearly be understood as securitizing speech acts, with collective security as the referent object. Unlike the human security frame, this understanding of the threat posed by climate change aligns closely with traditional understandings of post-World War Two security. However, it remains somewhat unclear who precisely constituted the intended audience of these securitizing moves. If these statements were meant to be consumed by a domestic constituency, then it was arguably a failed securitization attempt given the political backlash that climate policies continue to face in the United States. Moreover, if policymakers within the international community were the intended audience of these speech acts then these securitizing moves were even less successful.

In 2007, the British Labour government pushed for a Security Council debate on the potential international security implications of climate change and what role the Council could play in mitigating such threats.⁹⁰ Those opposed to a role for the Security Council, such as China and South Africa, were reluctant to concede that climate change constitutes a security issue because of the Council's unique mandate to exercise coercive force under Chapter VII of the United Nations Charter.⁹¹ Subsequently, a coalition of the small island developing states (SIDS) attempted to address these concerns, while still applying a security frame to climate change, by

⁸⁹ Barack H. Obama, "Acceptance Speech for the Nobel Peace Prize," Oslo, (10 December 2009), <http://www.whitehouse.gov/the-press-office/remarks-president-acceptance-nobel-peace-prize>

⁹⁰ Shirley V. Scott, "The Securitization of Climate Change in World Politics: How close have we come and would full securitization enhance the efficacy of global climate change policy?" *Review of European Community & International Environmental Law* 21 (2012): 225.

⁹¹ *Ibid.*, 256.

lobbying for the passage of resolution 63/281 at the General Assembly.⁹² The resolution acknowledged that the potential security impacts of climate change, while also reaffirming the United Nations Framework Convention on Climate Change as the key instrument for addressing the issue.⁹³ Palau did break ranks with other small island developing states by using its speaking time at the General Assembly to call on the Security Council to use its Section VII powers to impose binding measures on all member states.⁹⁴ However, this proposition seemed to “lie outside the realm of possible arguments circumscribed by the climate security discourse of the SIDS.”⁹⁵ Finally, in July 2011 the German government pushed for a second debate at the Security Council. With the help of America’s active participation, the Security Council was able to agree on a non-binding document adopted by consensus which expressed concern over the possible deleterious effects that climate change may have in exacerbating existing threats to international peace and security.⁹⁶ These vigorous discussions of the security implications of climate change indicate that the issue has not been securitized at the international level of elite policymaking. While there is certainly an appetite among some members of the Security Council and General Assembly to view the issue through a collective security frame, there remains intractable opposition to the use of extraordinary measures to remedy the causes and consequences of climate change. Indeed, it appears that the same divisions between major emitting powers, which have hampered the adoption of a post-Kyoto framework, will continue to be replicated at the Security Council into the indefinite future. Furthermore, given the pervasive

⁹² Shirley V. Scott, “The Securitization of Climate Change in World Politics: How close have we come and would full securitization enhance the efficacy of global climate change policy?” *Review of European Community & International Environmental Law* 21 (2012): 225.

⁹³ *Ibid.*, 225.

⁹⁴ Gerrit Kurtz, “Securitization of Climate Change in the United Nations 2007–2010,” In *Climate Change, Human Security and Violent Conflict*, (Springer Berlin Heidelberg, 2012), 677.

⁹⁵ *Ibid.*, 677.

⁹⁶ Shirley V. Scott, “The Securitization of Climate Change in World Politics: How close have we come and would full securitization enhance the efficacy of global climate change policy?” *Review of European Community & International Environmental Law* 21 (2012): 225.

concern among states that climate change could be used to justify outside intervention in the name of enforcing mitigation obligations, it seems unlikely that the Security Council will ever garner sufficient legitimacy to take decisive action on climate change mitigation.

3.4 Why is Climate Change Difficult to Securitize?

Presently, it is impossible to say that climate change has been successfully securitized. Although the above analysis has outlined securitizing moves by various actors, directed at referent objects at the individual, states, and international levels, the discourse of climate change as an existential threat has not achieved a sufficient level of acceptance to allow for normal rules to be suspended or for extraordinary measures to be taken. Additionally, the gap between military, scientific, and the popular perceptions of threat serves to reinforce the notion that issues can be partially securitized at varying degrees among discrete audiences. Mark Salter argues that there are multiple settings of securitizing moves and audiences should be parsed out within a model of at least four distinct types: popular, elite, technocratic, and scientific.⁹⁷ Thus, given that audience consent is ultimately necessary for the securitization process to be complete, audience fragmentation may be the principle hindrance to the securitization of climate change.⁹⁸ This section will analyse the scientific and political agendas at play in the securitization of climate change in order to understand why securitizing moves directed at the issue have had little success.

According to Buzan et al., one of the most striking features of the environmental sector is the existence of two different agenda: the scientific and the political.⁹⁹ Ultimately, the scientific

⁹⁷ Mark B. Salter, "Securitization and desecuritization: a dramaturgical analysis of the Canadian Air Transport Security Authority," *Journal of International Relations and Development* 11 (2008): 321-49.

⁹⁸ Tasos Karafoulidis, "Audience: A Weak Link in the Securitization of the Environment?," In *Climate Change, Human Security and Violent Conflict*, (Springer Berlin Heidelberg, 2012): 267.

⁹⁹ Barry Buzan, Ole Wæver, and Jaap De Wilde, *Security: a new framework for analysis*. (Lynne Rienner Publishers, 1998), 71.

agenda underpins securitizing moves, whereas the political agenda is about three areas: state and public awareness of scientific issues, the acceptance of political responsibility to resolving such issues, and the potential management issues that arise: problems of international cooperation and institutionalization.¹⁰⁰ The scientific agenda is about the authoritative assessment of threat, whereas the political agenda deals with the formation of public concern.¹⁰¹ In the case of climate change, the creation of the IPCC has allowed credible scientific messages on the issue to reach a global audience. However, the panel has only offered tepid indications that climate change could represent a security threat. Although this may be a consequence of the conservative nature of consensus-based research, the hesitancy of the scientific community as a whole to discuss climate change in security terms may have much more to do with the production of authority.¹⁰² Scientific objectivation can have the opposite effect of securitization, by depoliticizing an issue and moving it into the realm of technocratic rationality.¹⁰³ For example, the area of nuclear deterrence was heavily depoliticized by scientific objectivation, making it next to impossible to talk about as anything but a logic of necessity.¹⁰⁴ Scientific expertise itself can have a mobilizing effect, however, scientists are acutely aware that the political field has a tendency to gloss over controversies still active in the field.¹⁰⁵ This means that the scientific community as a whole will be reluctant to support the securitization of an issue, when securitization risks both diminishing their authority to influence the discourse and allowing their work to be misappropriated to unrelated political ends.

¹⁰⁰ Barry Buzan, Ole Wæver, and Jaap De Wilde, *Security: a new framework for analysis*. (Lynne Rienner Publishers, 1998), 72.

¹⁰¹ *Ibid.*, 72.

¹⁰² Trine Villumsen Berling, "Science and securitization: Objectivation, the authority of the speaker and mobilization of scientific facts," *Security Dialogue* 42, no. 4-5 (2011): 387.

¹⁰³ *Note*: Objectivation is a concept developed by sociologist Pierre Bourdieu describing a process in which "human practice – unintentionally or intentionally – was categorized and rationalized in order to form systematic categories and solid conclusions."

¹⁰⁴ *Ibid.*, 387.

¹⁰⁵ *Ibid.*, 394.

The difficulty of securitizing climate change within popular and elite audiences is the scale and nature of the problem. Buzan and Weaver have addressed the question of scale by developing the concepts of security constellations macrosecuritizations within securitization theory.¹⁰⁶ The concept of security constellations refers to the linking security threats across all levels and sectors in which securitizations occur.¹⁰⁷ Thus, according to the authors, these constellations can coalesce to form higher level macrosecuritizations, with the most powerful macrosecuritizations imposing a hierarchy on lower scale securitizations or bundling them together without necessarily ranking them.¹⁰⁸ For, example, the Cold War brought a number of small scale securitizations under the umbrella of threat represented by the two sides of the bipolar tensions.¹⁰⁹ However, it is important to note that even in the case of the Cold War, global scale macrosecuritizations were not tremendously successful. For example, the Atomic Scientists' so-called doomsday clock attempted to securitize the issue of nuclear proliferation with human civilization as the referent object.¹¹⁰ This project spanned decades but, by and large, represented a failed securitizing move because it was unable to displace the competing security constellations produced by NATO and the Warsaw pact. The difficulty in developing a macrosecuritization with all human beings as the referent object lies in the necessity of enmity. The Cold War macrosecuritization was principally based upon the reproduction mutually exclusive identities. The so-called free world understood itself in relation to the tyranny of the so-called 'evil empire'. Conversely, the Warsaw pact understood itself as a liberating force in the

¹⁰⁶ *Note:* According to Buzan and Weaver, macrosecuritization refers to securitisations that speak to referent objects higher than those at the middle level (for example, 'universal' religions or political ideologies) and aim to incorporate multiple lower level securitisations.

¹⁰⁷ Barry Buzan and Ole Wæver, "Macrosecuritisation and security constellations: reconsidering scale in securitisation theory," *Review of international studies* 35, no. 02 (2009): 256.

¹⁰⁸ *Ibid.*, 257.

¹⁰⁹ *Ibid.*, 257.

¹¹⁰ Juha A. Vuori, "A timely prophet? The doomsday clock as a visualization of securitization moves with a global referent object," *Security Dialogue* 41, no. 3 (2010): 274.

face of Western capitalist imperialism. In the case of climate change, the referent object and the source of threat are one and the same. That is to say that human civilization is threatened by the self-defeating structure of global human civilization. Without an 'other' to define the referent object and provide a source of existential threat, it is unlikely that securitizing moves associated with climate change can be successful. Buzan and Waever argue that, notwithstanding the limits of a global referent object, the environment is different from other sectors because there is always the possibility of fast and dramatic change.¹¹¹ For example, a rapid rise in sea-levels could mean that a macrosecuritization of climate change would trump all others. However, for the immediate future it appears that global environmental threats will fall within the hierarchy of other more traditional macrosecuritizations for the time being.

¹¹¹ Barry Buzan and Ole Wæver, "Macrosecuritisation and security constellations: reconsidering scale in securitisation theory," *Review of international studies* 35, no. 02 (2009): 271.

4. The Potential Political Outcomes of ‘Climate Securitization’

Buzan et al. have cautioned that securitization should not be taken lightly, because the logical of security holds many potential pitfalls. The authors contend that “when considering securitizing moves such as ‘environmental security’ or a ‘war on crime’ one has to weigh the always problematic side effects of applying a mind-set of security against the possible advantages of focus, attention, and mobilization.”¹¹² The security frame works to quell dissent and opens up numerous avenues for abuse among leaders no longer bound by democratic control. Fundamentally, Buzan et al. see securitization as a failure to deal with issues within the constraints of normal politics. However, the authors do concede that securitization may be necessary in response when there are barbarians at the gate. Hence, having explored whether the securitization of climate change is possible beyond the limited degree to which it has already occurred, it is necessary to assess whether securitization could be a successful and desirable political strategy to overcome the issues which have made mitigation efforts unsuccessful thus far. The previous section concluded that, while it is unlikely that securitizing moves directed towards climate change will be successful under present circumstances, a major mobilizing event could allow for the rapid securitization of climate change. Therefore, this section will seek to understand precisely what the securitization of climate change might look like in practice in order to determine both the effectiveness and normative desirability of climate securitization. That is to say that this section will address climate securitization’s potential effects on the international order to assess whether or not it could actually mitigate climate change. This analysis will employ Joel Wainwright and Geoff Mann’s examination of the political formations that could arise from struggles over climate.

¹¹² Barry Buzan and Ole Wæver, "Macrosecritisation and security constellations: reconsidering scale in securitisation theory," *Review of international studies* 35, no. 02 (2009): 29.

The political typologies of climate change developed by Wainwright and Mann are useful for understanding climate securitization because they seek to outline possible futures based on the relationship between the sovereignty and capitalism. The authors speculate that the interplay between these two variables will chiefly shape the coming political-economic order by creating four potential global political responses to climate change.¹¹³ Climate Leviathan is defined by emergence of a capitalist planetary sovereign, whereas climate Mao describes the formation of a non-capitalist planetary sovereign. Conversely, climate Behemoth typifies the reactionary forces which flock to capital in opposition to the perceived threat of a global sovereign and climate X represents a non-sovereign and non-capitalist democratic mass movement for ecological justice.

The conception of a ‘planetary sovereign’ employed by Wainwright and Mann stems directly from Hobbes’ Leviathan and Schmitt’s sovereign. That means that the sovereign is constituted precisely in the act of decision and the ability to declare a state of exception.¹¹⁴ Thus, the emergence of truly planetary sovereign is a precondition for the securitization of a global phenomenon like climate change because without a sovereign to make a securitizing move and act on the subsequent state of exception, the securitization process cannot possibly be complete. However, according to Michael Williams, “when Schmitt posited the necessity of the sovereign exception, he explicitly denied the possibility of global sovereignty, because, for him, a state (or any properly political entity) is constituted in enmity.”¹¹⁵ However, while securitization is usually understood as a process which occurs within an imagined community framed by the nation-state, global climate change that has produced the conditions in which security can be solicited at a scale and scope that was previously unimaginable.¹¹⁶ Furthermore, Wainwright and

¹¹³ Joel Wainwright and Geoff Mann. "Climate leviathan," *Antipode* 45, no. 1 (2013): 16.

¹¹⁴ *Ibid.*, 5.

¹¹⁵ *Ibid.*, 5.

¹¹⁶ *Ibid.*, 2-3.

Mann are clear that they are not absolutely faithful Schmitt's conception of sovereignty. Indeed, the authors stress that planetary sovereignty need not be consolidated or uncontested, and that climate change poses political problems for which the current order has no answer.¹¹⁷ This reasoning is underpinned by the Gramscian argument that humanity is living through a period where the hegemonic conception of the world desires and presumes the existence of an unrealized planetary sovereign.¹¹⁸ This section will therefore seek to outline, in broad terms, the possible outcomes of successful securitizing moves directed at global climate change and the potential reactions to them.

4.1 Climate Leviathan

Climate Leviathan refers to an international order that somewhat resembles an environmental Washington Consensus. It is defined by the emergence of a planetary sovereign capable of acting at the scale of the Earth's atmosphere and maintaining legitimacy to manage the biosphere. The climate Leviathan exists insofar as some entity can decide on an exception to normal politics, declare a state of emergency, and decide who may emit greenhouse gases and who cannot. According to Wainwright and Mann,

It [climate Leviathan] is a regulatory authority armed with popular legitimacy, a panopticon-like capacity to monitor and discipline carbon production, consumption, and exchange, and binding technical authority on scientific issues.¹¹⁹

Furthermore, climate Leviathan accepts the hegemony of capitalism and does not seek to fundamentally alter the foundations of the global industrial economy. Indeed, for this typology, capitalism is treated as the solution to climate change. This logic has featured prominently in negotiations based within the UNFCCC framework and has been employed repeatedly within the

¹¹⁷ Joel Wainwright and Geoff Mann. "Climate leviathan," *Antipode* 45, no. 1 (2013): 4.

¹¹⁸ Joel Wainwright and Geoff Mann. "Solving for X: A reply to our critics." In *symposium on Wainwright and Mann's "Climate Leviathan"* *Antipode* (2012): 4-5.

¹¹⁹ *Ibid.*, 6.

governing structures of the old industrial powers. For example, the British government commissioned Stern Review on the economics of climate change concludes that “action on climate change will also create significant business opportunities,” and “tackling climate change is the pro-growth strategy for the longer term.”¹²⁰ This perspective seeks to redefine the apparent conflict between economic growth and climate change mitigation by relying on market-based emission reduction mechanisms such as: carbon trading, discount rate analysis, corporate innovation, green finance, and ultimately, geoengineering.¹²¹ Such measures take the hegemony of capitalism for granted by incorporating new elements into status quo rather than pursuing a dramatic reconfiguration of the global economy. Indeed, a greener form of capitalism could be the most effective and immediate means to mitigate climate change, provided that the so-called market failure of greenhouse gas emissions can be adequately addressed by simply nudging market rationality in the right direction.

Nevertheless, according to Wainwright and Mann, it is almost impossible to imagine that climate Leviathan could actually reverse climate change.¹²² The authors argue that climate change is a symptom of capitalism running up against its planetary limits, “given the drive for incessantly expanded accumulation without which capital ceases to be, the constant conversion of the planet into means of production, and the material throughput and energy intensity through which it is operated.” Moreover, the authors contend that capitalism’s tendency to magnify inequalities of wealth and power is a central impediment to confronting the instability wrought by climate change.¹²³ This assertion is borne out by the Human and Nature Dynamics (HANDY) model of inequality and use of resources in the collapse or sustainability of societies. HANDY

¹²⁰ Nicholas Stern, ed. *The economics of climate change: the Stern review*. (Cambridge University press, 2007):xvii.

¹²¹ Joel Wainwright and Geoff Mann. "Climate leviathan," *Antipode* 45, no. 1 (2013): 6.

¹²² *Ibid.*, 8.

¹²³ *Ibid.*, 8.

was developed as a simple mathematical model to explore the interaction between population and natural resources—it found that the two features which appear across societies and civilizations that collapse are: the stretching of resources beyond ecological carry capacity and economic stratification.¹²⁴ There does not appear to be a clear solution to conflict between the need for expanding accumulation and the physical limitations of the biosphere. The Earth cannot accommodate perpetual and exponential growth, which makes it difficult to imagine how sustainable capitalism could ever be more than a contradiction in terms or how climate Leviathan could avoid indulging in imperialism under the guise of environmental protection.

Paul Driessen would likely understand climate Leviathan as the manifestation of the trend towards what he calls eco-imperialism. The author sees ominous parallels between the last decades of the Nineteenth century and much of the Twentieth century, because in both periods it appeared that the interdependence brought on by global trade and capital flows would serve to build lasting peace and prosperity.¹²⁵ However, while the imperialism of the Nineteenth century was fueled by imperial competition over foreign colonies, the real threat of eco-imperialism lies in the unraveling of national sovereignty in favor of the growth of environmental non-governmental organizations and transnational bodies.¹²⁶ Furthermore, since eco-imperialism is based on an almost fundamentalist devotion to ‘deep ecology’, the author argues that “it is modeled less on the model of the 19th Century scramble for Africa than on the Crusades.”¹²⁷ However, Driessen’s assessment grossly oversimplifies the motivations behind eco-imperialism. A climate Leviathan will not emerge due to the force of ‘deep ecology’, indeed a planetary sovereign would likely have very little concern for the intrinsic value of nature. Instead, climate

¹²⁴ Joel Wainwright and Geoff Mann. "Climate leviathan," *Antipode* 45, no. 1 (2013): 22.

¹²⁵ Paul Driessen, *Eco-Imperialism Green Power, Black Death*, (Academic Foundation, 2005):16.

¹²⁶ *Ibid.*,17.

¹²⁷ *Ibid.*, 17.

Leviathan would principally strive to preserve the current economic order and the power relations it produces. That is why the principle danger of climate Leviathan is not that it could empower an international vanguard of environmentalists, but that environmental concern could be used by a planetary sovereign to justify their self-serving, hegemonic authority.

In addition, Joshua Barkan argues that Schmitt's critique of capitalism would preclude the emergence of a planetary sovereign. Schmitt argued that global capital, and its need for expansion, was incapable of founding a political and territorial order defined by relations of inclusion and exclusion.¹²⁸ In this respect, the central challenge to the emergence of a capitalist global sovereign is the absence of enmity. Enmity allows group identity to be defined in the negative, meaning that it is possible to understand oneself in relation to a foil 'other'. However, global capitalism makes every human being responsible for greenhouse gas emissions to at least some degree. Institutions, economic structures, and ideas do not have the same utility in constructing identity. Thus, even if market-based solutions could effectively curb greenhouse gas emissions, it seems impossible to a capitalist planetary sovereign to ever fully consolidate its authority to manage the Earth's biosphere.

4.2 Climate Mao

When the leader of Canada's Liberal Party, Justin Trudeau, voiced admiration for the China's 'basic dictatorship' at a question and answer session, the comment was roundly denounced as a vapid political gaffe. However, given that this admiration was expressed in the context of China's ability to rapidly restructure its economy to combat climate change, there was certainly more to the statement than one might initially observe. Specifically, Trudeau's comments echoed the frustrations of many others concerned with the glacial pace and perceived

¹²⁸ Joshua Barkan, "Liberalism, Sovereignty, and Politics," In *symposium on Wainwright and Mann's "Climate Leviathan"* *Antipode* (2012): 3.

ineffectiveness of market and consensus-based approaches to climate change mitigation. Indeed, the concept of climate Mao encapsulates a very similar sentiment. As stated by Wainwright and Mann, climate Mao is founded on the logic that “only revolutionary state power based upon mass mobilization would be sufficient to transform the world’s productive forces and thus resolve our planetary ‘contradiction between society and nature’”.¹²⁹ Though this concept may not be precisely what Trudeau had envisioned through his caricature of the Chinese state, he is certainly not alone in calling for non-market and anti-democratic solutions to climate change.

A global order defined by a climate Mao would result from the emergence of a non-capitalist, revolutionary planetary sovereign along Maoist lines.¹³⁰ Such a sovereign could impose mitigation requirements and a non-market based distribution of costs. Wainwright and Mann explain this order as a just terror in the interests of the future collective, wielded against capital.¹³¹ Thus, the state of exception brought about by securitization would allow a planetary sovereign to determine who may emit greenhouse gases “at the expense of unjust wastefulness, unnecessary emissions, and conspicuous consumption.”¹³² Moreover, the authors describe the principle utility of climate Mao relative to the capitalist liberal democracy model is that it would have the capacity to coordinate a massive and comprehensive political economic reconfiguration within a relatively short timeframe.¹³³ Furthermore, unlike climate Leviathan, climate Mao would meet Schmitt’s requirement for enmity. Whereas climate Leviathan’s capitalist economic structure would prohibit a closed political and territorial order, climate Mao would draw a distinction between those who benefited from the plunder of the Earth’s atmosphere and those who suffered the consequences.

¹²⁹ Joel Wainwright and Geoff Mann. "Climate leviathan," *Antipode* 45, no. 1 (2013): 13.

¹³⁰ *Ibid.*, 9.

¹³¹ *Ibid.*, 9.

¹³² *Ibid.*, 9.

¹³³ *Ibid.*, 9.

Wainwright and Mann do not suggest that climate Mao will emerge from ecological concerns of peasants, but rather, as a reaction to state failures to respond to the effects of climate change such as shortages of food and water, as well as to elite expropriation in the face of climate induced instabilities.¹³⁴ Moreover, the authors emphasize that the Chinese state is presently building climate Leviathan and cannot be counted on to become the hegemonic force behind an emerging planetary sovereign. Consequently, the path to climate Mao depends on the proletariat and peasantry's ability to mobilize on mass to conquer the levers of state authority.¹³⁵ It is on this point that a logical contradiction is exposed within the concept of climate Mao. For if the principle value of climate Mao is the ability to impose expeditious and comprehensive mitigative measures, but can only emerge as a revolutionary reaction to the effects of climate change, than it seems impossible that such an order could ever be put in place in time to keep global average temperature increases below 2 degrees Celsius.

In addition, Patrick Bigger has indicated a preference for climate Mao for two central reasons. First, the author notes that climate change is a global-scale governance problem that requires an unprecedented and broadly orchestrated effort.¹³⁶ Climate Mao is well equipped in this regard since socialist movements have typically aspired to be globally transformative and have frequently adopted an internationalist perspective.¹³⁷ Second, according to Bigger, climate Mao's capacity for flexible action within a coherent political program makes it the most actionable potential future. However, there is also a question of whether such a revolutionary force could ever produce an ecologically conscious planetary authority. The war and bloodshed that would inevitably be produced by a 'red terror on the atmosphere' would most certainly have

¹³⁴ Joel Wainwright and Geoff Mann. "Climate leviathan," *Antipode* 45, no. 1 (2013): 11.

¹³⁵ *Ibid.*, 11.

¹³⁶ Patrick Bigger, "Red Terror on the Atmosphere," In *symposium on Wainwright and Mann's "Climate Leviathan"* (2012): 2.

¹³⁷ *Ibid.*, 2.

disastrous consequences for the environment and would likely produce a sovereign more concerned with vengeance based on historic culpability than restructuring the global industrial economy. Finally, it is hard to imagine that the effects of unmitigated climate change could be any worse than the consequences of the large-scale war that would surely be necessary to install a climate Mao.

4.3 Climate Behemoth

In its reactionary form, climate Behemoth is a mass-based populist response to climate change which rallies to capital in opposition to Leviathan.¹³⁸ Accordingly, the Wainwright and Mann argue that its specific political form remains unclear because it substitutes free-market, nationalist, and evangelical rhetoric for explanation.¹³⁹ This form of populism has been clearly visible in the arguments of climate change deniers and skeptics. While often shrouding their arguments in pseudo-scientific jargon, deniers shamelessly reject the overwhelming scientific consensus on anthropogenic climate change without presenting sound evidence to substantiate their claims. Indeed, the reactionary Behemoth is by definition anti-rational because it views mitigative action as a threat in and of itself. For example, financed by American industrialists like the Koch brothers, the Tea Party movement was instrumental in defeating Barack Obama's cap and trade legislation.¹⁴⁰ According to a survey by the Pew Research Center, only 25 percent of Tea Party Republicans agree that climate change is a real phenomenon.¹⁴¹ Furthermore, research from the Carsey Institute at the University of New Hampshire found that only 28 percent of New Hampshire Tea Party members trust scientists as a source of information on the

¹³⁸ Joel Wainwright and Geoff Mann. "Climate leviathan," *Antipode* 45, no. 1 (2013): 13.

¹³⁹ *Ibid.*, 13.

¹⁴⁰ James Pethokoukis, "Tea Party's other big win: death of cap-and-trade." *Reuters*, November 5, 2010.

¹⁴¹ Juliet Eilperin and Scott Clement, "Tea party Republicans are biggest climate change deniers, new Pew poll finds," *The Washington Post*, November 1, 2013.

environment.¹⁴² This anti-rational constituency has served to pervert the political debate surrounding climate change in the US by taking reason-based argument off the table. Moreover, the influence wielded by the Tea Party and other American reactionaries has ultimately worked to constrain the US' ability to act as a planetary sovereign.

Wainwright and Mann argue that, to the extent that US hegemony continues to depend on inexpensive fossil fuels, the emergence of climate Leviathan will continue to pose a perceived threat to American interests and serve to fuel the reactionary Behemoth.¹⁴³ However, Larry Lohmann has argued that it can be misleading to imagine climate Leviathan and Behemoth as two discrete political formations. According to the author, the capitalist species of Behemoth will always aspire to planetary sovereignty, while climate Leviathan was designed from the very outset to satisfy Behemoth by delaying action directed at keeping coal, oil and gas in the ground.¹⁴⁴ Thus, the hostility that Behemoth's representatives like the Tea Party display towards attempts to build a planetary sovereign may be more a defense of a North American postwar symbolism linking fossil fuels, laissez faire economics, and individual liberty, than it is an a reaction to 'green' capitalism.¹⁴⁵ In this sense, capitalist Behemoth and climate Leviathan are no more than two mutually reinforcing sides of the same coin.

4.4 Climate X

Wainwright and Mann's preferred political outcome is the emergence of a climate X. The authors define this typology as "a world which has defeated the emerging climate Leviathan and its compulsion for planetary sovereignty, while also transcending capitalism."¹⁴⁶ In other words,

¹⁴² Lindsay Abrams, "Poll: The Tea Party is driving distrust of science." *Salon*, May 20, 2014.

¹⁴³ Joel Wainwright and Geoff Mann. "Climate leviathan," *Antipode* 45, no. 1 (2013): 14.

¹⁴⁴ Larry Lohmann, "Commentary on 'Climate Leviathan,'" In *symposium on Wainwright and Mann's "Climate Leviathan"* *Antipode* (2012): 2.

¹⁴⁵ *Ibid.*, 2.

¹⁴⁶ Joel Wainwright and Geoff Mann. "Climate leviathan," *Antipode* 45, no. 1 (2013): 15.

a just response to climate change will only be possible when economies are no longer organized by the value form and the political cannot be organized by the sovereign exception.¹⁴⁷ Although time is running short on such an ambitious and seemingly insurmountable task, the present challenge is one of cultivating the material and ideological ground in which a democratic mass movements can emerge rapidly.¹⁴⁸ However, the authors do admit that such cultivation requires a radical struggle that proves history wrong.¹⁴⁹ In this respect, climate X seems to indulge in fantasy. Climate X is not an answer, but merely the acknowledgement that there are no immediate solutions to a collective action problem like climate change. The mere rejection of capitalism and sovereignty does not provide sufficient material or ideological ground on which to build a cohesive mass movement. Furthermore, it seems wholly implausible that a disaggregated mass movement could possibly launch the coordinated action necessary to fundamentally reshape the global economy without causing dramatic shortages of essential goods like food.

Mazen Labben criticizes climate X for being too ill-defined to be useful in the fight against climate change. The author questions whether climate X is the revolutionary movement that defeats the planetary sovereign or the outcome of such a struggle.¹⁵⁰ Furthermore, if climate X is a means rather than an end, it should logically expire once the sovereign has been defeated.¹⁵¹ However, Wainwright and Mann reject this argument as a false dichotomy and affirm that climate X is “at once a means toward, a regulative ideal of, and a necessary condition

¹⁴⁷Note: Value form is a concept from Marxist economics which contrasts the social attributed status of a commodity, or market value, with its concrete utility. Sovereign exception refers to Carl Schmitt's definition of sovereignty, whereby a sovereign is constituted by the ability to declare state of exception to a legal order.

¹⁴⁸ Joel Wainwright and Geoff Mann. "Climate leviathan," *Antipode* 45, no. 1 (2013): 16.

¹⁴⁹ *Ibid.*, 16.

¹⁵⁰ Mazen Labban, "Beyond Behemoth," In *symposium on Wainwright and Mann's "Climate Leviathan"* (2012): 9-10.

¹⁵¹ *Ibid.* 10.

for climate justice.”¹⁵² Climate X is thus a deliberately ambiguous concept as the logical result of circumstances which demand the “politicization of the present and an incessant questioning of the future- neither nostalgia for a lost past, nor utopian blueprints.”¹⁵³ In the end, this line of reasoning validates the notion that there simply are no alternatives to the current political-economic order. The very fact that the authors suggest that imagining new political formations is the principle prerequisite for a just response to climate change demonstrates how elusive such an outcome remains. Humanity is running up against a rapidly approaching ecological deadline, and yet, there is no clear path towards averting catastrophe. An ambiguous concept like climate X may be useful for understanding which features of the present order are unworkable in the face of climate change, but it does not illuminate any other direction to follow.

¹⁵² Joel Wainwright and Geoff Mann. "Solving for X: A reply to our critics." In *symposium on Wainwright and Mann's "Climate Leviathan"* Antipode (2012): 6.

¹⁵³ *Ibid.*, 6.

5. Conclusion

This research paper sought to explore the utility of securitization as a political strategy to break the present international stalemate over a climate change mitigation agreement. The first section outlined the sources of failure to form an effective agreement from the Rio Summit to present, in relation to the structures of both Westphalian sovereignty and globalized capitalism. This analysis served to demonstrate that the massive reductions in greenhouse gas emissions needed to avert catastrophic climate change cannot be reached in within the setting of contemporary ‘normal’ international politics. The second section defined the Copenhagen School’s securitization theory and explored instances of securitizing acts as applied to three referent objects: the individual, the state, and the international order. The subsequent discussion regarding the difficulties of successfully securitizing a global environmental issue like climate change concluded that, while it is unlikely that securitizing moves directed towards climate change will be successful under present circumstances, a major mobilizing event could allow for the rapid securitization of climate change. Finally, the third section analysed the potential political outcomes of climate securitization based on the political typologies of climate change as introduced by Joel Wainwright and Geoff Mann. This investigation found that both capitalist and non-capitalist planetary sovereigns would fail to mitigate climate change before the two degree ecological deadline has passed. Furthermore, the reactionary political formations that could result from a planetary sovereign would either exacerbate emissions or would prove insufficient in the face of a collective action problem like climate change.

Ultimately, a security discourse that frames climate change as an existential threat, removed from the constraints of normal politics, will not help to foster the social and economic cooperation necessary to protect the natural ecology on which all life depends. Consequently,

humanity must confront overwhelming constraints in order to find a way to compromise and coexist before we scorch the Earth that sustains us. This may seem to paint a rather pessimistic picture of the planet's future. However, terms like optimism and pessimism have little value in understanding the challenges presented by climate change. As former New Yorker Times war correspondent Chris Hedges has recounted from his experience in the field, members of his profession did not use words like pessimism or optimism. Instead, they made a very sober assessment of the surrounding weapons systems and their capacity to do harm, and then acted accordingly.¹⁵⁴ Likewise, policymakers must not live in hopeful illusions about the prospect of successfully mitigating catastrophic climate change. If securitization is neither likely nor desirable, there is no obvious escape hatch from the present deadlock. Policymakers must therefore adopt an approach which aspires to the best possible outcome, but makes realistic plans anticipating that worst-case scenarios could come to fruition. Therefore, the primary task of policymakers must be to plan for adaptation under the assumption that the world will warm beyond two degrees Celsius.

With few exceptions, governments in developed countries do not appear to take the enormity of the adaptation challenge seriously at present. For example, a recent report from Natural Resources Canada highlighted the federal government's inaction on climate change adaptation and named limited resources, limited motivation, and issues related to governance as the central barriers to addressing the economic, health, and environmental threats posed by climate change.¹⁵⁵ In addition, the report found that there are relatively few examples of concrete adaptation measures being implemented specifically to reduce vulnerability to projected changes

¹⁵⁴ Chris Hedges, "Chris Hedges Interviewed by Rob Kall, on the dying media, the Middle East, Rebellion in America and more," *OpEd News*. Sept. 13, 2010.

¹⁵⁵ Canada. Natural Resources Canada. *Canada in a Changing Climate: Sector Perspectives on Impacts and Adaptation*. (Ottawa, 2014): 14.

in climate.¹⁵⁶ This indicates that, similar to other developed countries, “adaptation in Canada is still in its early stages overall.”¹⁵⁷ While the pressing need for adaptation planning should not excuse policymakers from the moral responsibility to at least try to mitigate greenhouse gas emissions, it would be recklessness to ignore the increasing likelihood that humanity will fail to forge an agreement to prevent dangerous levels of climate change.

Furthermore, while some planetary warming can be managed without apocalyptic consequences, it will be impossible for industrial civilization to adapt if the planet reaches the highest projected levels of warming.¹⁵⁸ The Earth’s climate has been stable for the past 12,000 years, and this has been a necessary precondition for the emergence of modern civilization.¹⁵⁹ Moreover, there is strong evidence linking forms of climate change the rise and fall of many ancient civilizations.¹⁶⁰ It would be arrogant to believe that modern industrial civilization has become so vast and complex that it is immune from the deficiencies which lead to these previous collapses. Indeed, given the global scale of modern civilization, a collapse would not spare a single region of the planet and should therefore be understood as a real and serious risk. As Ronald Wright has noted, although there remain different cultures and political systems, at the economic level there is only one civilization and “the twentyfold growth in world trade since the 1970s has meant that hardly anywhere is self-sufficient. Every Eldorado has been looted, every Shangri-La equipped with a Holiday Inn.”¹⁶¹ Thus, there may come a day when the principle task of policymakers will be to preserve the most scared values of modernity against levels of

¹⁵⁶ Canada. Natural Resources Canada. *Canada in a Changing Climate: Sector Perspectives on Impacts and Adaptation*. (Ottawa, 2014): 14.

¹⁵⁷ Ibid.14.

¹⁵⁸ Rachel Warren, "The role of interactions in a world implementing adaptation and mitigation solutions to climate change." *Philosophical Transactions of the Royal Society A: Mathematical, Physical and Engineering Sciences* 369, no. 1934 (2011): 217.

¹⁵⁹ Emily Sohn, “Climate change and the rise and fall of civilizations,” *National Aeronautics and Space Administration*, January 21, 2014.

¹⁶⁰ Ibid.

¹⁶¹ Ronald Wright, *A short history of progress*. (House of Anansi, 2004):125.

resource scarcity, environmental degradation, and climatic instability that have never been experienced in human history. Respect for life, individual liberty, the rule of law, human rights, and democracy must not become casualties of runaway climate change. Unfortunately, the Copenhagen School would seem to indicate that these ideals will be the first to be jettisoned in a time of perceived existential crisis.

Bibliography

- Abrams, Lindsay. "Poll: The Tea Party is driving distrust of science." *Salon*, May 20, 2014.
- Barkan, Joshua. "Liberalism, Sovereignty, and Politics." In *symposium on Wainwright and Mann's "Climate Leviathan"* *Antipode*, 2012.
- Barnett, J. "Security and climate change," *Global Environmental Change* 13 (2003): 7–17.
- Berling, Trine Villumsen. "Science and securitization: Objectivation, the authority of the speaker and mobilization of scientific facts." *Security Dialogue* 42, no. 4-5 (2011): 385-397.
- Bigger, Patrick. "Red Terror on the Atmosphere." In *symposium on Wainwright and Mann's "Climate Leviathan"* *Antipode*, 2012.
- Brecke, P., He, Y.Q., Lee, H.F., Zhang, D.D., and Zhang, J. "Global climate change, war, and population decline in recent human history," *Proceedings of the National Academy of Sciences* 104 (2007): 19214–19219.
- Buzan, Barry, and Ole Wæver. "Macrosecuritisation and security constellations: reconsidering scale in securitisation theory." *Review of international studies* 35, no. 02 (2009): 253-276.
- Buzan, Barry, Ole Wæver, and Jaap De Wilde. *Security: a new framework for analysis*. Lynne Rienner Publishers, 1998.
- Canada. Natural Resources Canada. *Canada in a Changing Climate: Sector Perspectives on Impacts and Adaptation*. [Ottawa], 2014.
- Clark, Brett, and Richard York. "Carbon metabolism: Global capitalism, climate change, and the biospheric rift." *Theory and Society* 34, no. 4 (2005): 391-428.
- Clark, Duncan "How long do greenhouse gases stay in the air?" *The Guardian*, Jan. 16, 2012.
- Cousins, Stephanie. "UN Security Council: playing a role in the international climate change regime?." *Global Change, Peace & Security* 25, no. 2 (2013): 191-210.
- Des Gasper, "The idea of human security," in *Climate Change, Ethics and Human Security*, edited by Karen O'Brien, Asunción Lera St. Clair, and Berit Kristoffersen, New York: Cambridge University Press, 2010.
- Dimitrov, Radoslav S. "Inside UN climate change negotiations: The Copenhagen conference." *Review of Policy Research* 27, no. 6 (2010): 795-821.
- Driessen, Paul. *Eco-Imperialism Green Power, Black Death*. Academic Foundation, 2005.
- Dyer, Gwynne. *Climate Wars*. Toronto: Random House, 2009.

Eilperin, Juliet and Scott Clement, "Tea party Republicans are biggest climate change deniers, new Pew poll finds," *The Washington Post*, November 1, 2013.

Falkner, Robert. "Business Power, Business Conflict: A neo-pluralist perspective on international environmental politics." in *Handbook of Global Environmental Politics*, edited by P. Dauvergne, 319-328. Northampton: Peter Elgar Publishing, 2012.

Fletcher, Amy Lynn. "Clearing the air: the contribution of frame analysis to understanding climate policy in the United States." *Environmental Politics* 18, no. 5 (2009): 800-816.

Floyd, Rita. "Human Security and the Copenhagen School's Securitization Approach." *Human Security Journal* 5, no. 37 (2007): 38-49.

Fukuyama, Francis. *The end of history and the last man*. Simon and Schuster, 2006.

Harris, Paul G. *What's Wrong with Climate Politics and how to Fix it*. John Wiley & Sons, 2013.

Hauge, W. and Ellingsen, T. "Beyond environmental scarcity: causal pathways to conflict," *Journal of Peace Research* 35 (1998): 299–317.

Hedges, Chris. "Chris Hedges Interviewed by Rob Kall, on the dying media, the Middle East, Rebellion in America and more." *OpEd News*. Sept. 13, 2010.

Homer-Dixon, T. F. "Terror in the Weather Forecast", *New York Times*, April, 24 2007.

Hovi, Jon, Tora Skodvin, and Stine Aakre. "Can Climate Change Negotiations Succeed?." *Politics and Governance* 1, no.2 (2013): 138-150.

Huq, Saleemul and Catherine Pettengell, "An Introduction to Human Security and Climate Change," in *The Impact of Climate Change on Human Security* (London: International Institute for Environment and Development, 2008).

Huysmans, J. *The Politics of Insecurity: Fear, Migration and Asylum in the EU*. New York: Routledge, 2006.

Karafoulidis, Tasos. "Audience: A Weak Link in the Securitization of the Environment?." In *Climate Change, Human Security and Violent Conflict*, pp. 259-272. Springer Berlin Heidelberg, 2012.

Klein, Naomi. *The shock doctrine: The rise of disaster capitalism*. Macmillan, 2007.

Kurtz, Gerrit. "Securitization of Climate Change in the United Nations 2007–2010." In *Climate Change, Human Security and Violent Conflict*, pp. 669-684. Springer Berlin Heidelberg, 2012.

Labban, Mazen. "Beyond Behemoth." In *symposium on Wainwright and Mann's "Climate Leviathan"* *Antipode*, 2012.

Levy, David L., and Daniel Egan. "Capital contests: National and transnational channels of corporate influence on the climate change negotiations." *Politics and Society* 26 (1998): 337-362.

Lohmann, Larry. "Commentary on 'Climate Leviathan.'" In *symposium on Wainwright and Mann's "Climate Leviathan"* *Antipode*, 2012.

McGrew, Anthony. "Globalization and global politics." In *The globalization of world politics: An introduction to international relations*, edited by Baylis, John, Steve Smith, and Patricia Owens, 14-33. Oxford University Press, 2013.

McKibben, Bill. "Global Warming's Terrifying New Math." *Rolling Stone*, July 19, 2012.

O'Brien, K., St.Clair, L.A., and Kristoffersen, B. "The framing of climate change: why it matters," in *Climate Change, Ethics and Human Security*, ed. Karen O'Brien, Asunción Lera St. Clair, and Berit Kristoffersen (New York: Cambridge University Press, 2010)

Obama, B.H. "Acceptance Speech for the Nobel Peace Prize," Oslo, (10 December 2009), <http://www.whitehouse.gov/the-press-office/remarks-president-acceptance-nobel-peace-prize>

Paris, R. "Human Security: Paradigm Shift or Hot Air?" *International Security* 26 (2001): 87-102.

Pedwell, Terry. "Canada just more 'frank' than rest of world on climate change, says Harper." *iPolitics*, June 9, 2014.

Pethokoukis, James. "Tea Party's other big win: death of cap-and-trade." *Reuters*, November 5, 2010.

Raleigh, Clionadh and Henrik Urdal, "Climate change, environmental degradation and armed conflict" *Political Geography* 26 (2007): 674-694.

Randall, D. and Schwartz, P. "An Abrupt Climate Change Scenario and its Implications for United States National Security," in *Global Business Network Report*. (Emeryville, CA: Global Business Network, 2003).

Salter, Mark B. "Securitization and desecuritization: a dramaturgical analysis of the Canadian Air Transport Security Authority." *Journal of International Relations and Development* 11, no. 4 (2008): 321-349.

Scott, S.V. (2008) "Securitizing climate change: international legal implications and obstacles," *Cambridge Review of International Affairs* 21 (2008): 603-619.

Scott, S.V. "The Securitization of Climate Change in World Politics: How close have we come and would full securitization enhance the efficacy of global climate change policy?" *Review of European Community & International Environmental Law* 21 (2012): 220-230.

Sohn, Emily. "Climate change and the rise and fall of civilizations." *National Aeronautics and Space Administration*, January 21, 2014.

Solana, Javier. "Securing Peace in Europe." Speech, Lisbon, November 12, 1998. North Atlantic Treaty Organization. <http://www.nato.int/docu/speech/1998/s981112a.html>

Stern, Nicholas, ed. *The economics of climate change: the Stern review*. Cambridge University press, 2007.

Trombetta, M.J. "Environmental security and climate change: analysing the discourse," *Cambridge Review of International Affairs*, 21 (2008): 585-602.

United Nations Development Programme, *Human Development Report, 1994*, New York: Oxford University Press, 1994.

Vuori, Juha A. "A timely prophet? The doomsday clock as a visualization of securitization moves with a global referent object." *Security Dialogue* 41, no. 3 (2010): 255-277.

Watson, Scott. "The 'human' as referent object? Humanitarianism as securitization." *Security Dialogue* 42, no. 1 (2011): 3-20.

Wainwright, Joel, and Geoff Mann. "Climate leviathan." *Antipode* 45, no. 1 (2013): 1-22.

Wainwright, Joel, and Geoff Mann. "Solving for X: A reply to our critics." In *symposium on Wainwright and Mann's "Climate Leviathan"* *Antipode*, 2012.

Warren, Rachel. "The role of interactions in a world implementing adaptation and mitigation solutions to climate change." *Philosophical Transactions of the Royal Society A: Mathematical, Physical and Engineering Sciences* 369, no. 1934 (2011): 217-241

Wright, Ronald. *A short history of progress*. House of Anansi, 2004.