Global Transboundary Problems and Potential Futures for the International System

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Senior Honors Thesis
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Abstract

A new set of problems are challenging the international system in unprecedented ways. These problems are the product of transboundary social and economic activities being amplified by globalization. Their increased scope and intensity have overwhelmed the contemporary structures designed to contain transboundary problems, and it has allowed them to manifest at the global level. Furthermore, while much scholarship has been dedicated to understanding transboundary issues through a transnational lens, little scholarship focuses on the uniqueness of issues at the global level and what they imply for governance in the world system. This paper explores how new global problems are different from their historical transboundary antecedents and considers how they could impact the future of the international system based on the possible scenarios in which they could be solved. Using the example of climate change as a case study, it is ultimately found that climate challenge is likely to be solved by states through non-binding coordination once the issue becomes more legible through manifestations of its negative effects. Furthermore, this would lead to an international system where state sovereignty is reaffirmed, but that is ill-equipped to address the proliferation of future global level problems due to its lack of institutional capacity to facilitate cooperation.

Introduction

The international system is destabilizing due to the proliferation of a particular set of new global level problems and a of lack meaningful collective action to manage them or adequate solutions to mitigate them. These issues exist in a broad number of fields from international trade to public health, and all of them share the characteristics of being highly complex, dynamic, and above all, transcendent of national and territorial borders to an unprecedented degree. While these issues are not impossible to address, they resist efforts to govern them. Just as substantial changes in scale are accompanied by changes in relational dynamics in material physics, so too are substantial changes in the scale of activities within social systems accompanied by subsequent changes in relational dynamics. The functional problem is that the ways in which issues are changing are making them increasingly difficult for the international system to manage and their negative effects are expanding due to globalization. Many of these current problems are ongoing iterations historical transboundary problems which have evolved as a result of their mixture with technology and industrialization. However, due to the ways in which mass communication and transportation technologies change human social and spatial relations, the mixture of historical problems with the fuel of modernity has also created entirely new transboundary problems as well. These new problems have commonly been referred to as "transnational" in nature, but as this paper demonstrates, that is a misnomer. While the term "transnational" was arguably the most appropriate for transboundary problems throughout recent history leading up to the industrial and digital revolutions, the term no longer appears to fit in a post-globalization world. Analyzing these problems through this narrow lens obscures the critical dimensions which make them different and would otherwise allow states to address them

effectively. Instead, a term which encompasses a larger more representative concept of the challenges that face the international system in relation to these problems has a greater capacity to illuminate understanding: "global". This delineation of historical transnational problems and new global problems, however, begs the question of whether any fundamental or effectual differences truly exist between the two. Would a difference between new and old transboundary problems even be important? And if so, what would the difference imply for the international system moving forward? Global climate change is one of the new transboundary problems that present precisely the kind of challenges to the international system that makes these questions relevant. Projections of global climate change show that the problem is severe enough that its effects could be felt on a scale that not even the richest countries would be able to insulate themselves from its repercussions (Collins, Et. al, 2013). Furthermore, the problem seems to be so complex that only an unprecedented level of cooperation between states can yield a solution. And since such binding cooperation is uncharacteristic of the present international system, it stands to reason that the international system will be faced with substantial change regardless of whether or not states mitigate climate change. Moreover, if projections are correct and the current state of mitigation efforts stay the same, climate change will likely be capable of causing the kind of crisis which can prompt fundamental systemic change. If global problems like climate change are significantly different from previous transnational problems, the anarchic system of independent sovereign states may well be subjected to irrevocable, structural and demographic change by the end of the century. And since the scenario for not solving climate change is equivalent to complete ruin for the world as we know it, the important question is no longer what happens if we do or do not solve this problem. Instead, the imperative question has

become: what are the implications for the international system based on how this problem solved, given that variables within any particular scenario would imply a different trajectory that the international system could go down? Furthermore, any scenario of the evolution of the international system would naturally imply a broad range of policy imperatives as well, and consequently, numerous questions related to the nature of international and global affairs in a world after a major transplanetary problem like climate change is solved.   To the end of providing insight on how the international system can address global problems, this paper explores three critical questions using global climate change as the reference case study: What, if any, are the differences between new global level problems and those the international system has successfully contended with throughout history? What would those differences imply for how the international system is addressing global problems? And finally, assuming major global problems like climate change are addressed, in what ways could the future of the international system change based on different scenarios in which they are solved?   This paper is organized as follows: Section one provides a literature review on transboundary problems, examples of both historical transnational and new global level problems, as well as an analysis of the critical disjunctures between the two. Section uses the case study of climate change to demonstrate how the international system is presently unable to address the current trajectory of global problems. And section three will consider the potential futures of the international system based on the scenarios in which climate change is solved. Finally, section four will consider policy implications and potential solutions.

Section 1: Global Level Problems

Literature Review

The scholarship on transboundary problems has largely focused on their role and function in relation to states. Fundamental scholarship in the field of political science has produced the impression that the world system is the exclusive domain of states insofar as the authority to govern and that therefore all transboundary issues are merely international (Bull 2002). And while transboundary issues by definition involve an international element, the predominant perspective on transboundary issues has become an obstruction to insight into new challenges facing the international system. The term "transnational" has often been ascribed to transboundary problems throughout history and has been carried over being applied to new problems. Further, many scholars who study these issues do so from the perspective a country's foreign policy and more likely to use the term transnational to describe transboundary problems like climate change as transnational problems (Patrick, 2018). And while the analysis of transboundary problems may rightly be studied through the transnational lens, this can also obscure critical elements of these problems. To be sure, scholars who have invoked the term transnational to conceptualize the important and defining characteristics of current transboundary challenges, have done so with the intention of adding nuance to both the socioeconomic and sociopolitical relations which characterize globalization (Keohane and Nye, 1977). However, due to the fact that new problems are characterized by their amplification by globalization, it is more useful to define them in terms of globalization.   Scholars like Jan Aart Scholte have identified many definitions for the transboundary elements of globalization to be redundant and therefore unusable to further develop our understanding of new transboundary issues and their policy

implications. To Scholte, transnational does not encompass enough of what global transboundary challenges entail. Instead, Scholte offers a definition of globalization which is derived specifically from the root term "globe" and contains two distinct elements that he contends encompass the reality of what is happening to the world as a result of globalization. For the first element, he argues that the condition of globality is defined by the spread of two types of connections: Transplanetary (across the planet) and supraterritorial (transcendent of geographical territory). From this, the second part of his definition holds that the spread of these types of connections changes social geography of the globe by allowing for social relations to transpire across the planet both and instantaneously, and simultaneously throughout the world anywhere connections are made. In this way, the globe is transformed into a single distinct place. Thus, globalization constitutes a respatialization of social geography, and this is why there are so many fluid-like nonlinear changes in various issue areas and processes; because people can affect one another more quickly and in greater numbers and change policy and consumption in the process. In this way, the term global can denote at minimum transplanetarity (the condition of being spread across the entire planet), but also supraterritoriality —the condition of being transcendent of territory (Scholte, 2009).   This is the definition of global which this paper will build off of due to the fact that when one considers how these characteristics of transplanetarity and supraterritoriality characterize new transboundary problems, it reveals new insight on gaps in the international system's response to new challenges at the global level. In using a global lens of analysis, we can avoid the mistake of ignoring how non-state dimensions of world affairs affect the international system.

Categories of Transboundary Problems

There are many issues that qualify as a transboundary problem, however, the problems which this paper will focus on can be grouped under the following eight categories: First, there are resource-based problems that revolve around the allocation of or access to a limited resource such as the water used for irrigation derived from a river that flows through multiple countries. The second is migration or movement of people across borders such as in a conflict which displaces people from one country forcing them to move to and across others. The third category is related to economic flows such as those that arise when a network of integrated markets suffer from the destabilization one of the member markets. The fourth category deals with pathogens and how they can spread as pandemics across countries after originating from a single place. The fifth set of problems emerges from the proliferation of weaponized nuclear technology and its trafficking or acquisition by "rogue" or non-state actors. The sixth category is organized crime and terrorism, particularly the recent development of "lone wolf" terrorism which is typically the radicalization of local actors by foreign actors through mass media technology, as well as the growth of transboundary organized crime. The seventh category is related to cyber networks and infrastructure and the vulnerabilities that are associated with connecting systems manifest in transboundary cyber-terrorism.   Finally, the eighth category is related to climate change. This is arguably the most distinct example of how new transboundary problems are actually transplanetary. While it is driven by human activity, the worst effects of climate change manifest indirectly to those activities without a legible connection. Furthermore, this category, in particular, is notable in that its effects often exacerbate other transboundary problems.

Examples of Historical Transboundary (Transnational) Problems

Resource-Based

The Danube river, which flows across Europe from Germany to the Romanian and Ukrainian shores, is one example of a historical resource-based transnational problem (TNP). Water from this river is a critical resource used primarily for agriculture and hydroelectric power. It flows through 19 countries, all of whom want to use its water for navigation and many other industrial purposes. As such, it has been a source of geopolitical contention between states for many years (Linnerooth 1990). The river's transnational nature became problematized with growing ecological issues including the spillage of toxic chemicals into the Rhine river and the overall ecological degradation of the river. In order to ensure sustainable access to the water throughout the length of the Danube, countries needed to agree upon conditions for its use. This problem in comparison to others is only mildly complex given the small number of countries involved and two considerations: First, it was predominantly states involved in the negotiations that culminated in the body of law that now governs the Danube —however, environmental organizations and other political bodies were involved as well. Second, the nature of the problem has not changed. To this day, the primary issue of importance with respect governance of this transboundary problem is access to and maintenance of a single geographical feature shared by a set of countries that can be degraded if not used responsibly (Linnerooth 1990). The complexity of the issue is also limited because the solution is one of management of ongoing activity as opposed to coercion to take action.

How it Was Solved

Prior to the 1850s, the solutions this issue were typically bilateral treaties related to navigation of the Danube as well as flood control, hydropower, and commerce along its waterways. Since 1856, the Danube has been governed by multilateral agreements and different types of international administrative bodies (Linnerooth-Bayer 1996). During the 1990s, several multilateral treaties were signed which culminated in the creation of the International Commission for the Protection of the Danube River (ICPDR) which is an international organization created to implement a multilateral agreement focused on the ecological management of the Danube river basin (Linnerooth-Bayer 1996). Its signatories accepted a host of responsibilities related to monitoring and taking measures to ensure sustainable use of the waters. A large part of the success of this solution was due to three factors. First, the fact that the transnational element itself —in this case the Danube river— flows across borders but is largely stationary as a geographical feature. Second, at the time this transnational solution was being negotiated there were no existing major international conventions related to transnational governance of the Danube and consequently, states party to the negotiations had no solid reference points to go by. This made it easier for the countries involved to reach an agreement since there was less international law to navigate around.

Migration-Based

Chinese immigration to the United States in the 1880s was encouraged and increasing due to demand for unskilled labor and growing economic relations with between China. The foreign-born Chinese population in the United States was marginal at the time, severely racist sentiment began to stir around labor issues and the possibility of Chinese nationals becoming

U.S. citizens. As a result, political pressure began to grow in opposition to Chinese immigration. However, the matter of immigration was tied to economic relations with China through treaties like the Burlingame-Seward Treaty of 1868 which noted free travel for Chinese immigrants throughout the United States in exchange China tailoring its trade policies to favor American Interests (Schrecker 1992). The scope of the issue was narrow in terms of the actors involved — only China and the United States— and the complexity of the issue was mild due to the fact that the issue of immigration had only become tied to one other issue area; economics. Furthermore, the imperatives —for those in opposition to Chinese immigration— were easy to identify because they required the government to stop something, and thus, there was no complexity added from questions of how much immigration or under what conditions citizenship would be granted.

How it Was Solved

The primary "solution" in this instance was the Chinese Exclusion Act of 1882 but the reason this was an important instance to pay attention to, is because leading up to the Chinese Exclusion Act, another piece of legislation called the Fifteen Passengers Bill was passed by the United States Congress in 1879. It was vetoed by President Rutherford B. Hayes on the grounds that it violated the Bilateral Burlingame-Seward Treaty by limiting the free immigration clause which had been granted to Chinese nationals as a part of the treaty's establishment of China as a Most Favored Nation (MacClain 1994). Hayes was not opposed to limiting immigration from China, therefore, the veto was more about separation of powers but also the recognition of importance in bilateral relations. The act of Vetoing the bill in an effort to retain the integrity of the Burlingame-Seward Treaty was a sign that the United States. had some recognition of the

growing complexity of international relations. The United States ultimately conducted negotiations in the with China through the Treaty Regulating Immigration From China to limit immigration without violating the "spirit" of the agreement (Tsai 1986). Ultimately this was a bilateral agreement used to address the problem of unwanted immigration.

Economic-Based

In the latter half of the19th Century and the early half of the 20th, international trade liberalization was struggling to navigate the transition from economic policies which were more protectionist in nature to ones that were more open and conducive to liberalization (Baldwin 1969). Furthermore, protectionist policies such as tariffs were credited with a great deal of the economic suffering experienced around the world. One particular example was the Smoot-Hawley Tariff imposed by the United States, which was so poorly received by countries around the world that it prompted retaliatory tariffs from many other countries. International trade consequently decreased by more than 60% (Bown 2009). Many countries wanted to gain access to foreign markets given the anticipated benefits, however, politically contrived tariffs and other protectionist policy tools stifled the creation of economic ties (WTO 2001). Thus, this was an issue where the scope was broad due to the larger number of potential countries which were involved, not to mention the variety of actors from commercial sectors. The imperative was clearly to reduce tariffs, however, hurdles were inherently political and therefore often required a great deal of negation that was often slow-moving.

How it Was Solved

In terms of how international issues of trade were first addressed, it was primarily through Preferential Trade Agreements (PTAs). PTAs were the most common solution given that

they were relatively simple to establish and were effectively a narrow commitment that countries could make on a bilateral basis (WTO 2001). As international trade became even more prominent, so too did the recognition that transnational governance of trade would have to be addressed through larger, more inclusive negotiating episodes. Thus, in the wake of the Bretton Woods meetings, a smaller group of countries worked to create the General Agreements on Tariffs and Trade (GATT) in 1947. The general purpose of the GATT was to reduce tariffs and it did this by setting a new template of rules to regulate international trade between members (Bown 2009). The success of this particular solution is shown in the fact that the GATT would evolve to become an important foundational element of the later World Trade Organization (WTO) (Bown 2009). Ultimately, bilateral agreements allowed states to engage in international trade which led to transnational political cooperation on trade rules.

Pandemic-Based

Prior to the first half of the 19th century, diseases like cholera, the plague, and yellow fever swept across Europe as a result of technological advances in transportation such as the railroad that allowed diseases to spread easily. Hundreds of thousands of people died and this issue, in particular, was one of the first TNPs which challenged the state system and because pandemics spread semi-autonomously, irrespective of political boundaries or constraints (Baldwin 2005). Consequently, this particular problem was potentially the most severe even if not the broadest in scope compared to the other problems that the historical international system experienced. Transboundary diseases represented the first translational problem which itself could spread to involve any countries which experienced movement across its borders, which was any major economy. Due to the ease with which diseases could spread and the fact that their

effects often ended in death, countries were also much more distinctly galvanized to cooperate in order to mitigate these issues (Huber 2006). The number of countries affected by these diseases also contributed to the breadth of the problem. The fact that these were infectious diseases made the imperatives highly salient but also complex in that the old method of implementing quarantine policies would not work simultaneously with imperatives in international trade (Mumford 2002).

How it Was Solved

Beginning in 1851, a number of International Sanitary Conferences took place over the course of a century for the purpose of coordinating between countries on health and infectious diseases management. These conferences yielded many bilateral and multilateral treaties however their most prominent contribution to the governance of pandemics and other serious public health issues was the creation of four international health organizations which were designed to help facilitate cooperation between states on infectious diseases (Stern and Merkel 2004). These international organizations were the Pan American Sanitary Bureau in 1902, the Office International de l'Hygiène Publique (OIHP) in 1907, the Health Organization of the League of Nations in 1923, and World Health Organization (WHO) in 1948 (Rosen 1993). The WHO was arguably the most prominent outcome of the conferences demonstrated by its continued relevance and effectiveness. Thus, the transnational problem of Pandemics was solved through political cooperation between states that culminated in an institution capable of continually managing transboundary health issues.

Examples of Contemporary Global Problems and Attempts to Solve Them

Resource-Based Problems

New resource-based issues that become problematized at the global level are typically those which are deeply ingrained in the global economy in terms of the amount of infrastructure that is dependent upon those resources. The best example of this today is fossil fuels given that 82% of the world still derives its energy from them (IEA 2107). As a result of this dependence on oil, the continuity of access to it has become a heavily contentious issue, especially given its salience to end consumers. To the ends of securing the free flow of oil, agencies like the International Energy Agency (IEA) have been created under the auspices of the Organization for Economic Co-operation and Development (OECD). As a result, there have been no major shocks to oil markets such as those which prompted (OECD 2004). However, the interests of consumers reflected in the IEA and those of producers reflected in OECD often conflict, rendering the international infrastructure for coordinating energy markets ineffectual, thereby subjecting the global economy to potential instability.   Energy is also tightly connected to many other issues, in particular, climate change. Thus, solving problems related to energy is a matter of effectual coordination between energy markets, the energy policies of states, and environmental imperatives. Many countries, specifically in Europe have committed to making drastic cuts to their carbon emissions by mid-century and this indicates a shift in domestic politics around the world towards a more environmentally conscious approach to economics and in particular energy policy (IEA 2014). However, the level of cooperation needed to address this global issue in such a way that countries both have support and are kept accountable to emissions goals does not yet exist.   Furthermore, resource issues like this will likely continue even after the world transitions

to primarily renewable energy sources. This is because the infrastructure for renewable energy will heavily rely on certain rare earth minerals which are likely subject to the same kinds of contestation.   Furthermore, while there is mention of conflict mineral supply chain issues in the OECD framework, represented in its "Due Diligence Guide," there are no enforcement mechanisms to keep companies accountable for using mineral resources which perpetuate violent conflict (OECD 2016).

Migration and Forced Displacement

Migration as a result of forced displacement from conflict and environmental issues, as well as voluntary migration spurred by a lack of economic opportunity is a quintessential example of new global transboundary problems. 65.7 million people are refugees from a variety of causes and 244 million more have left their homes in search of better livelihood (UNHCR 2016; Connor 2016). And while there is ample evidence that host countries which integrate migrants derive substantial benefits from their inclusion, there is a transitional period of adjustment in which the welfare apparatus of a state typically sustains a larger burden in order to support new migrants in getting on their feet (Boyer 2009). Furthermore, because states often have their own economic challenges, welfare expenditures on migrants and refugees can often become the subject of political controversy. However, while the issue of immigration throughout history has remained within states' abilities to manage, current trends of global migration have not been so easily managed. According to the United Nations High Council on Refugees, there are more refugees today than it has ever recorded and the rate of forced displacement is not slowing down. In 2015, 24 human beings were forced to flee their homes every 60 seconds and it was this rate of displacement that caused the number of refugees to surpass the unprecedented 60

million person threshold (UNHCR 2016). In terms of international migrants, the numbers are even more staggering. One study found that if all international migrants were placed in their own country, it would be the fifth largest in the world (Connor 2016). Global migration, whether for economic interests or matters of survival, is a profound challenge for the international system because states have not taken adequate measures to resettle current resettle people and help them integrate. Furthermore, a growing number of people are projected to be forcibly displaced by climate change (Biermann 2008).

Economic-Based Problems

Due to the ease with which money can transfer across the world, markets are now immeasurably interconnected. This profound level of connection also brings with it a high degree of mutual vulnerability because markets affect one another in relative terms (Crotty 2009). For example, a high degree of foreign direct investment in real estate holdings in the U.S. followed by the collapse of the American housing market allowed financial market instability to spill over into other countries which culminated in a global recession. In the wake of the crisis, the World Bank, International Monetary Fund (IMF), World Trade Organization, and various other entities did push for the implementation of surveillance mechanisms at the international level and policy reforms at the national level in countries around the world with active global banks. However, there are presently still few international legal regimes to guarantee that another financial crisis will not happen (Lamdany, Et. al 2014).

Pandemics

While transboundary diseases are nothing new, when mixed with the forces globalization —in particular its supraterritorial element— they pose a profound challenge to the international

system. In 2017 international tourism around the world reached a record high with over 1.235 billion people crossing national borders and arriving in different countries in 2017 (UNWTO 2017). 550 million of those instances were in emerging economies, many of which have substantially less public health infrastructure to contain an epidemic. Were it not for the WHO working to include NGOs and Multinational Corporations, the infrastructure to govern this problem would be severely limited and almost completely ineffectual given the extent of global transboundary flows of people and goods. One case that exemplifies this problem is the spread of the Zika virus. This was a relatively discrete virus that was previously isolated to small pockets throughout the world, yet it was able to spread to an exponentially high number of hosts during an outbreak in 2015. This was caused by a combination of the El Niño climate phenomenon as well as higher temperatures tied to climate change (Caminade et. al 2017). By 2016, the Zika Virus had spread to 61 countries and territories (WHO 2016).   The mitigation response to Zika was primarily conducted by the WTO which helped monitor and coordinate with governments and NGOs to contain the virus. Moving forward, there is definitive evidence that climate-sensitive diseases like Zika can precipitate health epidemics at a global level which could overwhelm international public health infrastructure (Nealon 2015).

Nuclear Proliferation

The threat of nuclear weapon proliferation remains a distinct global problem even though the Cold War and its tensions would seem to have faded. With hostile states such as Russia, Iran, and North Korea, the possibility of a nuclear weapon being launched, whether intentional, accidental, from a misperception of an incoming attack, is still very real (Sagan 1993). The public health ramifications of nuclear weapons testing also remain a problem, as nuclear fallout

from a single detonation can be carried potentially thousands of miles away and cause health problems associated with radiation (Lyon 1979). Additionally, the acquisition of a nuclear weapon by terrorists remains an ongoing threat.   Despite decades of negotiations and a great deal of work by a whole host of actors both governmental and non-state alike, there are still enough nuclear weapons in existence to destroy the world many times over. And even with a well-developed body of international law regarding nuclear weapons embodied in the Treaty on the Nonproliferation of Nuclear Weapons as well as the International Atomic Energy Agency (IAEA), the nonproliferation regime has struggled to prevent states like India, North Korea and Pakistan from developing weapons of mass destruction and states like Iran from furthering their nuclear program. Moving forward, any solution towards the disarmament and regulation of nuclear technology must be multilateral but also inclusive of NGOs (CFR 2018).

Organized Crime and Terrorism

In the wake of the terrorist attacks on September 11th, 2001, transnational terrorism became a visceral reality. And while the response by the international community has been unprecedented compared to many other transboundary problems, there remain a number of issues that frustrate the international system. This is in part because the problem of terrorism is itself changing (Von Behr 2013). What was once a problem limited to the domain of physical territory has now been unleashed by the power of digital communication transforming terrorism from a transnational to a global problem. The Islamic state, (IS or ISIS), was one of the most prominent terrorist organizations to utilize social media and other online networks to ensnare disillusioned youth and recruit them to their causes (Greenberg 2016). There have already been several instances in the United States where people have committed atrocities in the name of

organizations that have radicalized them from afar such as the mass shooting carried out by a married couple in San Bernardino, California, who was inspired by propaganda from ISIS. They carried out this attack without any direct contact or support from a known terrorist group. Instead, they were inspired by the content dispersed by Groups like ISIS through the Internet (Greenberg 2016). Organized crime has also been empowered by globalization in that cross border flows involving illicit narcotics, arms, human trafficking, and many other criminal enterprises have benefitted from globalization and its implements. And while the United Nations Convention on Transnational Organized Crime has been established to address transnational crime, it has had limited success in influencing policy change and due to its narrow focus on transnational dimensions of crime, it is unable to contend with the increasing interconnectivity of global networks of organized crime (CFR, 2018; Galeotti 2011).

Cyber Threats

The interconnection of networks, societies, processes, and infrastructure can easily be seen as global networks. And while these interlinkages imply a great number of beneficial possibilities, there is also a distinct level of vulnerability that accompanies aggregated networks (Fish 2017). One new dimension of terrorism which have developed from this fusion with technology is the growing issue of cyberterrorism. The world is already profoundly vulnerable to numerous types of cyber-related crime. And as the world transitions to renewable energies and begins moving towards digital forms of administration, larger networks of things such as energy grids and similar aggregated systems in public administration could be vulnerable to cyberterrorism (Moslemzadeh 2013). Furthermore, in the wake of the 2016 United States Presidential election, where Russia was able to engineer sociopolitical discord within American

politics through social media, it can be seen that there is also a growing threat of state-sponsored cyber-based disruptions (Fontana 2017). This example in particular highlights how the respatialization of social space can easily fuel very real sociopolitical and national security problems.

Disjunctures Between Historical TNPs and New Global Problems

Scope: Global problems are substantially broader in scope than their predecessors in that some iterations affect a much greater number of factors in a more severe way. A single iteration of a problem can have ramifications capable of fracturing processes and norms at the local, national, regional, and increasingly global level. The best example is climate change given the sheer number of people and additional issues affected by environmental changes and the number of factors that would need to be addressed in order to fully mitigate the problem (Scholte 2009).

Actors: The number and diversity of actors involved global problems are well beyond those involved in previous TNPs which generally only involved states. In addition to involving several times as many actors, some iterations of new global problems involve a number of different kinds of actors such as nongovernmental organizations (NGOs), intergovernmental organizations (IGOs), and private multinational enterprises (MNEs) (Van Asselt 2016;).   *Complexity*: Both in terms of subject matter and structure, new global problems are, in general, far more complex than previous TNPs. They involve a striking number of factors that would previously have been disregarded in the calculus of international affairs. Moreover, the factors that are now relevant are highly interconnected and their "relational physics" make new global problems difficult to predict and respond with policy solutions. There is also a profoundly large body of law which has developed in international affairs which any new policy solution to global

problems must navigate. However, even with scientific evidence, these issues are often too complex to develop the kind of gut urgency which prompts political action (Alter and Meunier 2009). *Speed:* Due to the fact that many of the new global problems are comparatively orders of magnitude larger in scale than their predecessors, the perceived speed of some new problems presents a particular challenge. Iterations of various issues are either too fast to see coming or too slow to see as important. The critical problem with the scale of an issue warping the perception of its actual speed and therefore importance is that a problem may evolve past a tipping point before states are able to mitigate it. This is one of the critical problems which is highlighted by Scholte's definition of global as a scale which holds the entire planet as its own distinct space. Previously, the international system has not had to track the development of issues across the entire planet at once, and consequently, there are no common analytical tools to aid policymakers in perceiving the speed of issues at this scale (UNFCCC 2012).   *Nonlinear Progression:* One of the most important disjunctures between historical TNPs and new global problems is that the progression of new problems is nonlinear in that they the way the issues develop in ways that prevent linear models from predicting their progression. Many global problems progress exponentially, are subject to forces from different processes due to economic interlinkages, and finally, are closely related to nonlinear social patterns due to the interconnectedness of social and mass media technology. As a result, these issues are very fluid and when consensus is occasionally reached, the policy solutions are often inadequate and no longer address the full scope of the issue (Burke 2015).   *Uncertainty:* A consequence of the increased scope and complexity is the unprecedented amount of uncertainty that surrounds new global problems when efforts to govern them are underway. Older transnational issues involved much less

uncertainty because they involved fewer issue areas, actors, as well as generally static factors of the problems themselves meant that just a small number of states would be able to address the issue and only state governments had to be involved in crafting the solution. Moreover, that small group of states would be able to define a solution more quickly because the terms of the issue were not changing. Most issues were well within the domain and capabilities of states to address thus consensus was the primary objective of negotiations. Due to the increased scale I which these global problems manifest, their complexity is often too overwhelming for states to deal with alone. This problem also hinders the context of negotiations in that there are too many unknowns, too little clarity about the which states could become involved, and how the problem itself could change for states to reach a consensus in a timely or effective manner (Whitmarsh 2011). ***Means of Solution:*** Another critical disjuncture is that the means of solving new transnational problems are far more diffuse compared to historical TNPs. Many transboundary problems were previously addressed exclusively by states, however, new iterations can be distinctly more complex in that the expertise needed to create an effective solution must be partially derived from non-state actors in addition to broad and engaged consensus from state governments. Moreover, as a result of the complexity, the imperatives to address these issues are much less legible and this is compounded when states want to "go it alone" since not being actively engaged means being less actively informed about the dynamics of the issue and the factors for its mitigation (Avant 2017).

Analysis of Disjunctures

Given that global level problems diverge from historical transnational problems in such critical ways, it stands to reason they deserve their own unique policy and academic approach. If

we limit our analysis of these problems to the dimensions in which they interact with states, critically important dimensions of the problem will be missed and solutions will never be adequate or legitimate, as they would lack the legitimacy of an authentic approach (Benjamin 2010). Thus, it is inappropriate for the international system to attempt to govern global problems using strategies —along with their assumptions— which have coalesced for the governance of substantially less complex, dynamic, and widespread problems. Applying these disjunctures to understand the case of climate change, it can be shown how such a massive issue would be insurmountable by the current state-centric, non-binding approach. Thus, an effective systemic structure for mitigating global problems will be centralized enough to contend with the breadth, complexity, and scope of issues, inclusive enough to account for the broad number of actors of whom experience the problems and hold elements of the solution, and finally, legitimate enough to implement binding global level solutions.

Section 2: The Case of Global Climate Change

Summary of the Issue

One purpose of this paper is to provide insight on the unique problems presented by global level issues by virtue of their unprecedented transplanetary nature. Climate change is a quintessential global problem in this respect not just because of the globality of its causes but because it will effect both the ecosystem and numerous other social systems. An example of this is the relationship between temperatures around the world and economic production. One study found that the two are nonlinearly correlated in that a certain range of warm temperatures are conducive to economic development, but any rises in temperature beyond that range are associated with substantial declines in economic production and increases in economic

inequality. If global temperature rise continues unmitigated, global incomes are projected to decline by 23% by the end of the century (Burke, Et al., 2015).   In terms of the effects we are already seeing, the primary driver has been the high concentrations of atmospheric Co2 , which have reached 407 parts per million (PPM). This level of atmospheric carbon has never before recorded in human history. And consequently, this rise in Co2 has increased global temperatures which have been linked to numerous other ecological problems (IPCC, 2015). First is the intensification of droughts and heatwaves which are projected to worsen as global temperatures rise. Both glacial melt and rising temperatures themselves have caused a rise in sea level (IPCC, 2015). Climate variability has also altered microclimates around the world which as harmed biodiversity. And finally, higher temperatures have been linked to more frequent and severe weather events.   Rises in temperatures have also been linked to increases in violent conflict around the world, and indirectly through draughts which harm agriculture and food production especially in emerging economies. Droughts have subsequently been linked to forced human displacement such as in the example of Syrian farmers being displaced and pushed into urban centers which would later erupt into violent conflict (Gleick 2014). On top of this, extreme weather events and rising sea levels have also contributed to the displacement of hundreds of thousands of people who are now designated as climate refugees (Biermann, 2008). By mid-century, some estimates project that hundreds of millions of people could be displaced their homes due to climate change by 2050 (Biermann, 2008). Droughts are projected to affect between 700 million and 1.5 billion people if the global temperature rises by 1-2 degrees, even by conservative estimates (Biermann, 2008).   In terms of the multilateral response by states, the most prominent instances of cooperation are the UN Framework Convention on Climate

Change and its accompanying Kyoto Protocol, the Copenhagen Accord, the Durban Platform for Enhanced Action, and the most recent Paris Agreement (CFR, 2018). However, with developments such as Canada withdrawing from the Kiyoko Protocol and most recently the United States withdrawing from the Paris Agreement, progress has been sporadic and multilateral fora have been unable to yield the kinds of binding agreements that can actually mitigate climate change under the current system. Furthermore, the response to adaptation is also insufficient for present levels of forced displacement, let alone the current rate of displacement and future projections (Biermann, 2008) Furthermore, the international regime complex currently in place to address climate change likely too loosely constructed to manage the issue effectively (Keohane and Victor 2011).

Climate Model Projections

The IPCC predicts that the top range for the projected increase in global temperatures is between 3.2 to 5.9 degrees Celsius by 2100. However, some of the newest, most accurate models are projecting that temperatures will likely rise even higher than the IPCC projections (Brown, 2017). Ultimately, this means that the solutions being negotiated through multinational fora are once again, only solving part of the problem. On top of this, the most likely scenario holds that there is a 93% chance that temperatures will rise more than 4 degrees Celsius by the end of the century which would overwhelm measures taken under the Paris Agreement's target of 2 degrees. Previous models only claimed a 62% chance of this happening (Brown, 2017). Furthermore, there is a lack of ability to determine a precise amount of warming which could be considered a "point of no return" —beyond which, irrevocable damage to both the Earth's environment and international political system are inevitable. However, there is broad agreement

that unless substantial action is taken to both slow the rate of carbon emissions and reduce the overall levels of atmospheric Co2, the year 2100 could be one in which the world is substantially different from an ecological standpoint (Van Zalinge, 2017).

Why States Have Not Addressed The Problem

There are many reasons to explain how states negotiate on different issues under a variety of circumstances, however, transboundary problems which deal with the global commons like climate change could easily be considered the most complicated. Regarding the characteristics of negotiation in the post-globalization world which hinder collective action, the first is that the nature of political bodies are generally reactionary, in that they do not actively seek to resolve the problems yet to expose themselves. And while it is not impossible for political bodies to look into the future, it is less common for them to begin designing solutions for issues that have yet to become problematized. This hinders collective action because global problems are in a state of constant evolution, and thus, difficult to track due to a lack of legibility. Furthermore, to address this lack of legibility, states must develop a longer-term orientation which requires a high degree of self-reflection that can be difficult for states as this would likely call into question deeply rooted issues related to national purpose and identity.   Another problematic characteristic of political bodies is that the issues like global problems are often subject to politicization at the domestic level. This is particularly the case with any kind of transboundary problem but especially the kind of global problems which imply a measure of subjugation to the rest of the world. In the United States, the issue of collective action has unfortunately become one sharply divided by partisan lines (Patrick 2018). As a consequence, political bodies like the U.S. Senate are often insurmountable barriers for multilateral agreements that commit the United States to

binding collective action because no matter how beneficial an agreement might be for the international system and the United States it is often rejected by many politicians on the grounds that it is not in their party's platform and compromising could upset one's political base. Another problem —which is primarily a function of the increasing prevalence of digital mass media but also symptomatic of the ever-evolving nature of global problems— is that the public discourse around climate change mitigation has trouble moving from the surface of the issue to its depth where policy solutions reside. This is increasingly a problem of the globalizing world in which the inundation of information in the public discourse has effectively rendered people numb and uninterested in doing the work to sort through an issue. As a result, political figures at the domestic level seldom feel the pressure to act in favor of collective action until something is able to galvanize the public such as a crisis or other substantial event.

One key issue with the international system which has constituted one of the main challenges to collective action is the concept of sovereignty and its associated norm of nonintervention. This is a problem because the concept of sovereignty is territorially grounded and yet, as Richard Haass has argued, what happens locally does not stay local anymore (2018). While the activities of countries spill over borders whether as a result of some financial, economic, ecological, or other interlinkage, the perpetrators of any negative outcomes hide behind their sovereignty to the detriment of societies around the world and the international system writ large. At the domestic level, issues of collective action often become co-opted by a polarized debate in which the idea of sovereignty becomes a political shield behind which a countries obligations are held hostage. In the United States, for example, on one hand, collective action is seen as ceding sovereignty, and on the other, it is seen as its expression (Patrick, 2018). It is between these two views where

states often become gridlocked. In the case of the contemporary United States, it has been unable to depoliticize the issue as it had done prior to the creation and ratification of the United Nations (Patrick, 2018). As a result, its utilization of sovereignty appears schizophrenic in terms of its pattern of inconsistency and this leads to a number of problems given the need for consistent behavior in the evolution of political cooperation (Axelrod, 2006). Another issue with the international system which demonstrates that the issue of collective action is, in practice, an extremely tall order, is the condition of institutional overload. This issue shows that while there is not complete apathy about collective action and that steps have been taken to facilitate governance of global problems, the initiatives that have been set into motion are disjoint and poorly coordinated. As a result, the international system's repose is fragmented, as many actors are working towards similar goals but in different ways which unfortunately often overlap with one another, resulting in a highly complex international legal environment which is difficult for states to navigate even if they wanted to cooperate more vigorously on an issue (Keohane, 2008). In terms of the dynamics of negotiation in the international system, one problem is that states will only cooperate when they perceive it is in their interests' to do so. This is intuitive and yet it is still a major problem given the number of factors which serve to make the imperatives of cooperation less perceivable. Speed, scale, complexity, and the lack of transparency of which actors are doing what all function to make the imperatives of cooperation less legible and therefore, less appealing (Stein, 1994). In the same logic, states will wait to commit to a solution until they find what they perceive as the best bargain in terms of sovereignty and national interest (Starkey et al, 2010). Moreover, even when multilateral negotiations are underway, the consensus is not likely until states have a bias towards cooperating, which

unfortunately seldom happens unless there is a crisis to galvanize populations enough to exert pressure on national governments (Starkey et al, 2010).   Drawing from Scholte's definition of globalization, another perspective which might explain the ambivalence of states to using the global taxonomy to address new problems is the fact that states are, independently and collectively, in a kind of denial about the nature of the changing world. If these problems truly necessitate tools beyond the international domain, then this would seem to displace the international system, in some ways, in place of the interest of a different form of political coordination capable of addressing global problems (2009). Scholte argues that states have at least a surface level interest in holding onto the globalization-as-internationalization definition because it provides the comfort of familiarity and therefore, does not imply change. And on a deeper, more philosophical level, by trying to preserve the perception of nation states being the primary actor in world affairs, states are resisting the fact that social relations throughout the world can be organized in alternative forms than through national, state, and country units. By denying global issues the proper definition, the international system is able to deter different forms of political and social organization.

In sum, the international system has been slow to respond in many instances due to the profoundly challenging nature of these problems as well as characteristics of the international system itself, particularly in relation to the ordering principle of sovereignty characterized by the idea of nonintervention. Insofar as international negotiation, some challenges to international cooperation cause states to resist taking the steps necessary to create broad effective solutions. And on a deeper level states even resist the terminological shift in anticipation of being displaced

from the center of international affairs. Unfortunately, this happens at the expense of many around the world.

Section 3: How Global Problems Could Change the International System

Given the scale of global problems like climate change, the relevant question is no longer whether or not climate change will be solved. If it were not addressed the world would be irrevocably changed geographically, demographically, and the international system might even cease to exist (IPCC 2015). Such dramatic changes would likely lead to new boundaries, new political units and ultimately a different system. Conversely, an insightful analysis assumes that we are able to solve this global level problem before such a tipping point and instead focuses how on innovations and trends in global governance could affect the international system (Avant 2107). Thus, the important question is how the international system can evolve based on the possible scenarios in which global problems like climate change are solved and what could those future systems look like relative to sovereignty and capacity to govern other global issues?" The current world system emphasizes nation-states as the preeminent actors and even the term "international" presumes the nation as the primary component. This is important because nations are imagined communities which are maintained or changed by events that manifest in the intangible geography of a social imaginary landscape (Anderson 2016). Given the reterritorialization of social geography by globalization —which allows people to form similar kinds of connections with one another around the world as they have formed with those in their national communities— global problems could manifest as events in a new global social consciousness. And if change in the world system is not unilinear, but based on selection as

Spruyt argues, then the politics of attention surrounding how an global issues are solved would be the most important consideration in an episode of international system change.

Moving forward, there are three overarching considerations matter for how the international system can change based on how global climate change is solved, and all of them are tied to the idea that factors in each of these dimensions will play out in the politics of attention in populations throughout the world: 1) When: in terms of the point at which the problem is addressed relative to a point of no return or actual fracture; 2) Who: in terms of which actors are primarily responsible for solving the problem, and finally; 3) How: in terms of the methods employed to solve the problem. The current international system can be categorized in a number of different ways but for the purposes of this analysis, it will be defined as "Non-binding selective multilateralism." This is based on numerous observations in which states like the United States, Russia, and China have chosen to defect from cooperation on transboundary problems on the basis of sovereignty arguments which favor non-binding arrangements (Patrick 2018). Various combinations of these three categories could push the current international system into a number of different trajectories many of which could then prompt its reorganization.

When?

The timeframe within which a global problem like climate change is addressed is key due to the fact that people —the constituent elements of any nation-state— will be operating with a greater level of urgency in relation to the issue, as a point of no return or fracture draws closer. In the case of climate change, there is no specific date or atmospheric Co2 threshold, but the end of the century is commonly portrayed as the point by which the rates and of emissions must be under control (Brown and Calderia, 2017). However, this ambiguity presents a major challenge

to political cooperation given that climate change mitigation initiatives generally require states to take some degree of economic losses, and states are unable to identify how to orient themselves to get the best deal (Starkey, 2010). Thus, the likelihood for states to reach a consensus becomes greater as the perception of a potential crisis becomes greater. One problem with this is that by waiting until a potential crisis is more legible, the nature of the problem is likely to have evolved. In the case of climate change, if we wait until extreme weather events become more frequent — thereby making climate change more legible to populations and policymakers— the problem will evolve quickly from being just about extreme weather to also include the highly problematic issue of mass forced displacement. Thus, instead of having to address global climate change through primarily economic policy and industry regulation, the international system would then also have to contend with millions more displaced people and the economic burdens of resettling them.   Another problem related to how populations view this process is that people will likely still give positive credit to states throughout the timeframe in which a global problem is ongoing, up until the point of fracture where crises are widely experienced and people can clearly attribute the blame to states. The aftereffects of such a scenario remain to be known, and to be sure, many variables would play a part in determining whether or not people remain faithful to states as a form of political organization. However, if Spruyt's analysis of how supranational systems change is correct, then the closer to a fracture that an issue continues unsolved, the worse it will be for the political entities who are seen as holding the most authority to govern that issue and such a fracture could prompt an episode of institutional selection. In the case of climate change, if states fail to address the problem, populations will likely select the next most prominent political entity that is seen to be doing the work to address the problem. This is most likely cities

and depending on the success of the recent C40 global network of cities, potentially city leagues as well (Spruyt 1994).

Who?

Prior to a point of fracture, who people perceive as doing the most work to address climate change will be critical in determining which political entities are empowered by its solution and therefore how the international system could evolve as a result. Based on who is seen as doing the work to address the problem, political power will then gravitate towards that actor. If it is not states doing the work there is a chance they may retain the credit until public perception changes, which would then push the world system towards one which states are not the preeminent political entity. In terms of the actors who could do the work, there are both territorially grounded actors like states and cities as well as less territorially defined actors like private Multinational Enterprises (MNEs), Non-Governmental Organizations (NGOs), or a global corporation independent of states similar to the Internet Association of Assigned Names and Numbers (ICANN). States, MNEs, NGOs and a global corporation would operate at the global level to address climate change and cities, whether independently or in coordination, would operate at a local level. There is the possibility for cities to cooperate on a global level but this could only take place after a major crisis has already transpired.

How?

Arguably the most critical dimension of this analysis is the way in which climate change is solved. The methods and means employed to solve it will set the precedent for the global governance of climate change as well as future transplanetary problems. The problem can be addressed through either an episode of political cooperation or managerial coordination. Both

involve a degree of politics but cooperation for the purposes of this analysis implies binding solutions that formally cede some amount of sovereign autonomy and coordination implies non-binding arrangements to work towards the same goal. Either of these possible methods could give rise to a solution based on a political agreement to take certain actions or the implementation of some kind of technology.

Likelihoods of Possible Paths

Regarding the likelihood of each scenario, the first level of branching is whether or not the actions are taken to solve climate change are done by local or global actors. In this case, the more likely scenario is for climate change to be solved by actors operating at the global level. This is because the current world system is already predisposed to respond to states as primary stakeholders in negotiation episodes and this would be unlikely to change unless the imperatives to solve climate change were neglected by states to a point of fracture which could cause populations to lose support for states. The second branching pathway is whether political cooperation or managerial coordination is used to address the problem. In this case, managerial coordination is more likely because it is easier for most actors to engage in negotiations that are non-binding. Further, it is more likely that the work to solve climate change will be done faster under a coordination framework because formal political negotiations take longer to build consensus, largely because it takes more time for cooperation to evolve, especially among states (Axelrod 2006). The last branching path is whether the object of any given framework is based on a political agreement to take specific actions or the implementation of a technological solution. This is an important point because there is a great deal of speculation as to whether or not climate change can be solved by technology. As many scholars have pointed out, numerous

options for cleaner energy sources and relatively effective Co2 reduction technology already

exist (Pacala and Socolow 2004). However, while these technologies exist they have not been

utilized largely because of financial cost. This demonstrates the psychological barrier associated

with smaller scale technology being the solution. One question might be whether it is possible

that a firm or government could develop a much larger scale technology to address climate

change? Again, it is profoundly unlikely due to two factors: the scope of the problem; and the

burden that would be incurred by the state or firm that owns the technology. The problem is that

any entity which has the capacity to develop such technology would likely anticipate that

producing it would imply the burden of providing it. Against the scope of the issue as well as its

severity of the issue, its provision would become a public good, and therefore demanded as a

public utility which is far less profitable and desirable to any firm with a profit driven bottom

line. Even states would be averse to developing and providing such a technology because if it

were produced, the entity in charge of its provision would likely follow the path of ICANN

which was originally legally incorporated in the United States but became severed when the

internet became seen as a global public resource (ICANN 2016).   Comparatively, a political

solution is much more likely both relative to a technological solution and also because many of

the political imperatives to solve climate change have already been identified in multilateral fora

and it would be easier for the states to take the appropriate actions once the specter of climate

change became sufficiently galvanizing.

Emergence of Potential Systems

Combinations of these factors could lead to eight possible world systems based on how

the solution to climate change becomes subject to the politics of attention and prompts publics to
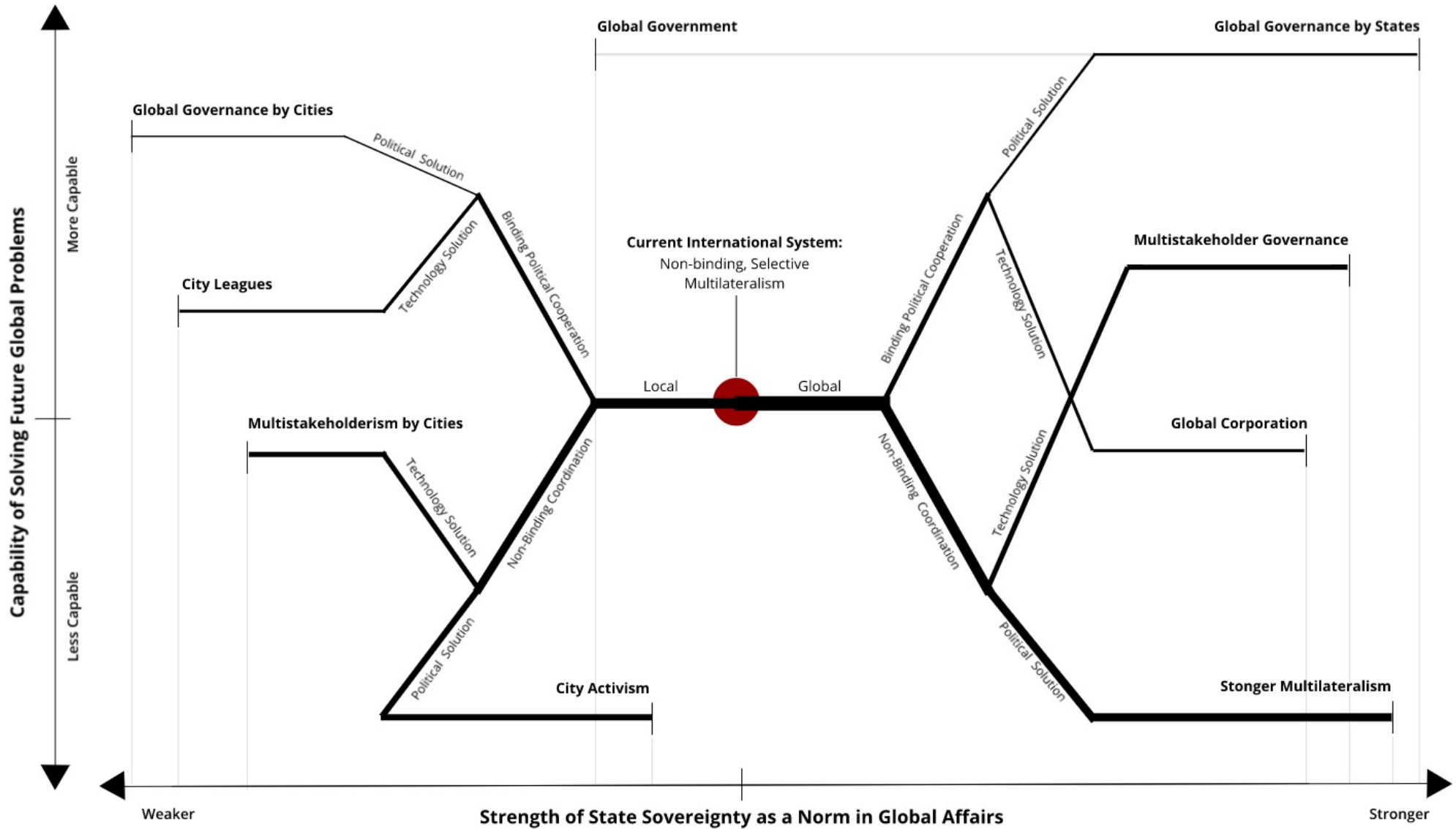
either reaffirm their support for states or invest in other actors. Possible systems stemming from the branch of local actors are as follows: City Activism, in which cities become the primary actors who lobby states to take specific actions on global problems. This system would be the product of coordination between cities towards a political solution. City Leagues, in which cities begin coordinating to implement green energy and CO_2 reduction technologies as well as cooperate on local policy reforms. This system would emerge from binding cooperation around the implementation of a technological solution. Multistakeholderism by Cities, which is defined as "two or more classes of actors engaged in a common governance enterprise concerning issues they regard as public in nature and characterized by polyarchic authority relations constituted by procedural rules" by Mark Raymond and Laura DeNardis (2016). This system would emerge from the non-binding cooperation between cities and multiple non-state actors —and states to a lesser degree— on the implementation of a technological solution. Finally, there is Global Governance by Cities, which would be the most divergent from the current international system, as it implies the displacement of nation-states as the predominant actors in world affairs and replaces them with cities as the dominant form of political organization. In this system, cities would become actors with enough legitimate authority to establish formal institutions for the governance of global issues through political means. This system would emerge from the political cooperation on a binding political solution, however, note that it would require an environmental catastrophe for cities to be given the requisite political authority to take the actions necessary to form this system.

Potential systems emergent from the branching path of global actors are as follows: The first and most likely scenario is a continuation of the current international system which has

essentially the same structure, but in which actors are actually predisposed towards coordination on the issue of climate change governance and actually do the work necessary to make progress. This system would emerge from coordination on a political solution once states are either develop a long-term orientation in their policies towards climate change mitigation or when the issue of climate change becomes salient enough to general populations and governments succumb to political pressures. The next possible system is Multistakeholderism by states which has the same definition as Multistakeholderism by cities, the primary difference being that the leading actor in agenda setting and policy legitimation would be states. This system would be a product of coordination between states and other actors at both the global and local levels on the implementation of a technological solution. Next would be a world system in which environmental regulation is coordinated by a type of global corporation which is not legally grounded in any state. This system would emerge from a situation where states formally cooperate on the implementation of a major technological solution that has to be levied at a global level in order to work. And in order to provide this technology without fear of bias, states would formally cede autonomy to regulate their own environments to an independent global corporation.   Lastly, there is institutional global governance by states. This system is distinct from global government, although both share the theme of greater concentration of authority in multilateral institutions. The key difference is that global government is based on the idea of a cosmopolitan world polity where people are transcendent of national identities and identify with the planet as a whole (Mazower 2015; Wendt 2003). Global governance refers to a system in which states are still independent of a supranational authority and their activity is characterized by more enlightened expressions of their sovereignty as an influence in international institutions

and multilateral regimes which is effectively mutual cooperation without a supranational authority (Patrick 2018). This system would emerge from political cooperation between states on a political solution, most likely the creation of an intergovernmental regime to govern climate change, the edicts of which would be binding for states party to it. It is also the least likely eventuality for how climate change could be solved for several reasons. First, the degree of cooperation needed for this system of governance is immensely difficult to evolve under the current system. The kind of cooperation needed requires a great deal of time and a sufficient margin for error to develop confidence among actors (Keohane andVictor 2011; Axelrod 2006). Climate change does not afford either of these luxuries and thus, even if actors in the international system begin negotiating towards cooperation through global governance, they will likely stop and opt to do the work through non-binding means and once a solution is identified.

Figure 1: Branching Model Demonstrating Potential Futures of World System in Relation to Sovereignty and Capacity to Address Future Global Problems.

Capability of Solving Future Global Problems

More Capable

Less Capable

Strength of State Sovereignty as a Norm in Global Affairs

Weaker

Stronger

Global Government

Global Governance by States

Global Governance by Cities

Political Solution

City Leagues

Technology Solution

Binding political Cooperation

Current International System: Non-binding, Selective Multilateralism

Political Solution

Multistakeholder Governance

Binding Political Cooperation

Technology Solution

Local

Global

Multistakeholderism by Cities

Technology Solution

Non-Binding Coordination

Global Corporation

Technology Solution

Non-Binding Coordination

Political Solution

City Activism

Political Solution

Stonger Multilateralism

Future of the World System

The last time the world system went through a period of reorganization, states were selected as the primary form of political organization that populations wanted to either join or emulate. The imperatives that prompted the reorganization were based on economics (Spruyt 1994). Today, the imperatives of global problems are largely based on human welfare. Regardless of how the international system addresses those imperatives, the resulting system will still have to face the proliferation of global level problems in the future. Moreover, if an underlying goal of states is to maintain a system in which sovereignty as an operating principle remains in effect, then it is important to understand two factors: the strength or weakness of state-based sovereignty under each system relative to the current system, and the capabilities of each possible system in addressing future global problems Figure 1 demonstrates these possible futures.   Beginning with the possible systems that could emerge from local level actors solving climate change, by definition, any of these systems would likely diminish the role of states in global governance, and therefore weaken sovereignty. The system least harmful to sovereignty would be City Activism. This is because states would still be the primary actor in the world system and even though cities would be exerting a substantial pressure on them to pursue various policies, they would indirectly also be admitting their importance by presupposing that their engagement on an issue is necessary. This method would also be the least capable system of contending with future global problems because it perpetuates a non-inclusive and disjoint process for management of issues at the global level. The second least harmful system for sovereignty would be Multistakeholdersim by Cities. In this system, cities would become a leader in global governance and states would still be engaged on matters of implementation,

although they would likely have a diminished role in agenda setting on global issues. Sovereignty would be diminished because a key feature of sovereignty is its ability to allow states to shape their future in the international system and any scenario where their leadership is marginalized is counter to their self-determination. This system would be markedly more capable of dealing with future global problems due to its greater level of inclusivity, but it would still suffer from being disjoint and decentralized insofar as its capacity to identify and implement solutions to global problems.   Moving into the local level scenarios that would be substantially worse for state sovereignty, are first, City Leagues which become prominent in global governance. In this system, coordination between cities transpires across the globe on various issues. It would be corrosive to state-based sovereignty because cities would be shaping the world system without the inclusion of and possibly counter to the interests of states. It would also be substantially more capable of contending with global problems by being able to facilitate cooperation on the implementation of local level policies in cities across the world. However, depending on the degree to which other non-state actors are included in global issue governance, this system could lack inclusivity.   Finally, the system that is the most corrosive to state-based sovereignty is Global Governance by Cities, which would not dissolve the concept of sovereignty but transform it to where it is seen as more applicable to cities rather than states as a form of political organization. This would also be the most capable system of addressing a broad range of global problems due to its level of centralization. And given that this system would only be able to form after a catastrophe, its legitimacy would depend on whether or not populations perceive cities as stewards of human welfare more so than states. Regardless of both of these

elements, however, it would still lack inclusivity because it would marginalize states which would still have an important role to play in territorial governance.

Moving into the potential systems emergent from global actors, in general, all of these systems would positively reinforce sovereignty because they would either demonstrate its flexibility as an ordering principle —in the way Patrick describes it— or its renewed relevance in relation to global problems —in the way that Haass describes it (2018; 2018). The system which would have the smallest positive impact on sovereignty is where a Global Corporation is established to manage environmental regulation, because it would be issue specific like ICANN and therefore limit the degree that states would have to cede autonomy in context of global governance. It would also be the second least capable of solving future global problems because of its limited jurisdiction. And even though it would stand as precedent for how a global problem can be solved, it is still largely contingent upon the creation of a technology that requires such a high level of technical oversight that states acquiesce to the formal establishment of another global administrative corporation. Next, Multistakeholder governance would be slightly more beneficial to state sovereignty in that it would demonstrate its flexibility through the engagement with non-state actors, is by definition polyarchic in its power structure and thus would complicate matters of decision making because political power would be shared with non-state actors with critical expertise. This system would also be the second most capable of solving future global problems due to its level of inclusivity and high legitimacy. However it would fall short as a system when global problems manifest across different issue areas simultaneously. Multistakeholder arrangements are typically issue specific and thus, a world system where the norm for solving interconnected issues is through ad hoc, polyarchic bodies, addressing global problems could

become profoundly difficult due to disorganization (Avant 2017).   The second most beneficial system for sovereignty would be Stronger Multilateralism, which is an adapted continuation of our current system but that emphasizes deeper levels of commitment between states on global issues. This system would still be predisposed to non-binding arrangements and therefore be conducive to state sovereignty, however, it is also the system that is the least capable of contending with future global problems. This is because its structure would lack centralization due to its non-binding nature and its authority would lack legitimacy due to the exclusion of non-state actors. The problem is that this scenario is also the most likely to occur. Conversely, out of the probabilistic scenarios, the system that is the most beneficial for state sovereignty and the most capable of solving future global problems, Global Governance by States, is the least likely to develop. It would be beneficial to sovereignty because it would cement the role of states in the world system as the most important actors thereby securing their ability to influence the world system and preserve its character as being largely state-centric. It would be the most capable of solving future problems as it would institutionalize the process of international negotiation, by standardizing processes, and increasing certainty, which would make governance of global issues far more ergonomic. Further, it would have the possibility to be highly inclusive of non-state actors through formal institutional agencies.   One final scenario which is so unlikely that it does not necessarily fit into this model is that of a World Government. The majority of scholars believe that it would take nothing short of a transplanetary crisis to prompt the formation of a world government (Patrick 2018) and even scholars of world polity theory, its foundation, believe that it would be so difficult to form in terms of the social factors required that it is presently impossible (Hurrell 2007). It must be considered, however, because global climate

change on its own as well as other problems it could lead to —such as global pandemics or extreme levels of forced displacement— could cause the kind of transplanetary crisis and subsequent sociopolitical reorganization by the end of the century if our current trajectory remains unchanged, its formation and characteristics should be noted as well. The logic is this: if climate change goes unmitigated, it will dramatically exacerbate a number of issues. The time in which populations around the world are suffering would provide a greater statistical opportunity for the social geography to be reshaped in a way that people identify more through their common suffering than through national bonds. Consequently, this could trigger a selection episode where populations around the world pressure their respective states to become part of a supranational government, and this would not be the first time that the idea of a world state surfaced after a major fracture in world affairs (Mazower 2012). While this system may be capable of managing global problems due to a broad jurisdiction, it would have a negative impact on state sovereignty as it would call for its subjugation to a supranational authority without the equality implied by Global Governance —by virtue of independent states negotiating as equals in their sovereignty.

Section 4: Potential Solutions and Conclusions

In attempting to identify how broad consensus can be reached on issues of global importance, many scholars have looked the international system in structural terms and have identified sovereignty as a key component. Two scholars, in particular, have recently focused on sovereignty and how it is conceptualized throughout the international system in such a way that it is obstructive to collective action. Richard Haass focused on the concept of sovereignty in terms of world order and proposed that due to how it has been normatively exercised since its institutionalization through the Treaty of Westphalia in 1648, it has unduly focused on the idea of

nonintervention, which holds that states cannot intervene in one another's domestic affairs. In recognition of the reality that domestic affairs in today's globalizing world often spill over borders in a way that can affect the globe as a whole, he argues that it is time for sovereignty to be re-conceived as a right as well as an obligation. In this way, he argues that world order would benefit if they recognized that their sovereignty as a state was contingent upon the maintenance of their responsibilities to other states insofar as their domestic affairs affect others (2018). Another scholar, Stewart Patrick, also argues that sovereignty is poorly conceptualized, but in a different way. His proposal is to retrain states —particularly large ones like the United States— in their exercise of foreign policy, such that they recognize that sovereignty is not a finite resource which is traded away when a state engages in collective action, but strengthened and reinforced when expressed through collective action with other states. A composite proposal which takes into account both the need for states to pursue their self preservation differently and the essential inviolable right of sovereignty balanced out by the principle of mutual obligation, a potential solution comes in the form of a familiar contract; a social contract. This is where an updated principle of sovereignty and a reframing of its utilization present viable solutions for the current system's inflexibility and irresponsiveness to changing realities.   In conclusion, states can no longer use transnational tools to solve global level problems, as they are distinctly different than their preceding transnational iterations and their degree of disjuncture from the latter demonstrates how important it is that the international system embrace a strategy of mitigating these issues which is unique to their characteristics. If this inadequate approach to global governance persists, the world system is more likely to undergo more divergent structural

changes, depending on how states collectively orient themselves around the problem of globalization.

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