BEATING THEM AT THEIR OWN GAME:
COOPERATING TO COMPETE IN A REALIST WORLD

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ABSTRACT

Remarkably, in spite of the increasing risk of an attack by a biological weapon since 1989 and extraordinary advances in bioscience and biotechnology, the BTWC remains unmodified. Unlike the other Weapons of Mass Destruction (WMD) agreements, thirty-five years after its entry into force, the BTWC still lacks exacting declaration and verification norms that would allow rigorous enforcement of its disarmament and nonproliferation principles. This is curious given the potentially state-breaking power of biological weapons. Equally curious is the reaction of states to this oddity. Given the 2001 Amerithrax incident, it would seem logical to for states to cooperate to strengthen the BTWC. In actuality, states are cooperatively contesting the BTWC in two ways. One, except for China, states that have WMD programs (“the haves”) are cooperatively contesting the inclusion of declaration and verification norms in the BTWC. Two, states that do not have WMD programs (“the have nots”) along with China are cooperatively contesting the exclusion of declaration and verification norms that would bolster the enforcement of BTWC Article X norms. Ironically, the reasons underlying both groups’ contestation are how three issues – equality, equity, and equanimity – impact states’ economies and their market shares in bioscience and biotechnology. To defend these conclusions, I extract and analyze quantitative and qualitative data from United Nations documents and sources. I then discusses the impact of the findings on international relations, international law, and the future of
international agreements. I conclude that the future of international security agreements could be in jeopardy if policy makers do not take a more integrated, interdisciplinary approach that addresses these equality, equity, and equanimity when developing such agreements.
Dedication

For my daddy, Robert D. Ditmer,

whose love for me has triumphed over the grave,

and to my three precious *raisons d’être*,

Megan E. Hazle, Andrew J. Hazle, and Robert L.L. Hazle,

who have always made me think – and love – harder.

May my legacy as a daughter and mother long outlive

the temporal relevance of this work of scholarship.
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Chapter 1

Cooperative Contestation and the Nuances of State Behavior

Introduction

The international community relies heavily on international agreements to facilitate international transactions, to codify customary behavior, and to shape state behavior. This is especially true with regard to Weapons of Mass Destruction (WMD). Consequently, understanding state behavior especially as related to the notion multilateralism and international agreements is crucial to understanding whether international agreements are effective instruments for achieving international security objectives. States express a range of behaviors over the multiple stages and modes of interstate interaction before, during, and after the entry into force of a WMD agreement. Thus, the viability of a WMD agreement is not simply a question of compliance or non-compliance, conforming or nonconforming behaviors, or cooperation versus defection. It derives instead from the complex interaction of state behaviors over the evolution of the agreement.

The development, institutionalization, implementation, and enforcement (hereafter “actualization”2) of international agreements are key to understanding state behavior. Contestation is a particularly critical and understudied behavior with regard to international

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1 There is substantial and continuing discussion and disagreement over the term “Weapons of Mass Destruction” (WMD). Defining or discussing that issue here detracts from the reality that the United Nations recognizes at least four types of WMD (chemical, biological, radiological, and nuclear), and others may be emerging. Since the crux of this study is the BTWC, the term will be used to refer to chemical, biological, radiological, and nuclear weapons and the research, development, and technological capabilities that support them.

2 To shorten this key phrase without losing its meaning, I will utilize the terms “actualization” or “actualize” as a catch phrases to refer to these four essential features of international agreements except where emphasis on or deconstruction of a particular word in this catch phrase is required.
agreements. Here, “contestation” will be specifically defined as the act of disputing or challenging the development, institutionalization, implementation, or enforcement of a norm or principle contained in an international agreement.\(^3\) Generally conflated with noncompliance, contestation actually encompasses a much more nuanced set of actions, especially as it relates to international agreements. Contestation is not a random behavior; rather, it is driven by identifiable motivations and concerns. Deconstructing these factors not only explains states’ motivations in contesting – and belonging to – international institutions, but also underwrites our understanding of the effectiveness of multilateral agreements. Failure to understand these nuances cripples the ability of international law and international relations specialists to assess the meaning of behavior of perceived adversaries. This misinterpretation of intent has been a key contributor to fractures in international relations as concerns WMD. A key element to bridging this gap in understanding is in decoding the meaning of the contestation of principles and norms embedded in international agreements. Identifying which norms states contests, analyzing how contestation can be utilized by states – especially weaker states – to enhance their bargaining power in international agreements belies the vulnerability of international agreements. Understanding why states contest specific norms explains specific state behaviors with regard to WMD. Finally, demonstrating that states intentionally and cooperatively contest specific WMD principles and norms or how they are implemented or enforced demonstrates a strategy states can leverage to translate cooperative contestation into power to obtain well-defined economic objectives unrelated to the security dilemma.

Context: Gauging Risk Amongst WMD Agents

Although it remains at the top of the World Health Organisation’s agenda, the demonstrated state-breaking potential of intentional biological events has not been given sufficient attention by the United Nations Security Council. Nature kills, and the evidence for this is overwhelming. Although the 1925 Geneva Protocols – the foundation of current WMD agreements – were largely devised to prohibit the explicit use of biological pathogens as state versus state weapons, they were developed in a time where natural biological events had the potential to produce more death than all other natural or intentional events combined. Given recent evidence of how naturally occurring biological events such as SARS, Avian Influenza, and Swine Flu can disrupt or discredit state political leadership, natural biological threats remain one of mankind’s greatest concerns. Although the risk of a state versus state attack appears to be low because the probability of a state versus state attack appears to be low, the impact of biological events is demonstrably high. Without overstating the actual risk of a state versus state biological attack, it would seem logical that global concern be more focused on something that has repeatedly demonstrated a devastating ability to impact the state politically, economically, and socially. Add to that the wide array and availability of biological agents, the ability to deliver biological agents insidiously, the challenges of distinguishing a natural event from an offensive use, the ability to leverage multifarious delivery means, and the remarkable advances in biotechnology, strengthening the BTWC should arguably move closer to the top of the United Nation’s security agenda.

There remains, however, a demonstrable lack of concern in the global community over the potential for state offensive use of a biological weapon. States express more concern that terrorists might perpetrate a biological attack against a state. Even given the current revolution
in biotechnology, states appear more focused on the BTWC limiting their ability to conduct unconstrained biological research and development because of the limits such might impose upon economic development. This is especially disquieting given the completion of the Human Genome Project in 2003, affordable tabletop gene splicers, and the extraordinary concurrent advances in nanotechnology and bacteriophage knowledge over the past ten years. The emerging capability to leverage bacteriophage capsids and nanotechnology to deliver detrimental gene sequences, other biological pathogens, or even chemical or radiological agents to specifically targeted cell structures would make the reasonable observer wonder why the United Nations does not more broadly debate the potential for disreputable use of such technologies. Though BTWC States Parties have recently begun to express concern for this explosion in bioscience and biotechnology, its efforts to establish and track the state of knowledge of either trail at least ten years behind current science.

In contrast, chemical weapons, while still considered weapons of mass destruction, have not yet clearly demonstrated their state-breaking capability. Given their largely tactical (albeit deadly) and predictable impact, the effectiveness of personal protective equipment, and the range of antidotes for most chemical warfare agents, chemical weapons have shown only limited potential as tactical and operational weapons. In addition, with the global implementation of the demilitarization of chemical weapons programs as the result of the 1996 Convention on the Prohibition of the Development, Production, Stockpiling and Use of Chemical Weapons (CWC),

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4 States appear to have made a calculation that due to a multitude of problems, the pursuit of chemical weapons even as tactical and operational weapons were not an effective investment. Even though highly effective in unprotected environments, the fall of the Soviet Union and military passive defense measures in areas where chemical weapons would have likely been a battlefield threat (e.g., Korea), have made chemical weapons largely obsolete. Add the moral repugnance of Iraq’s use of chemical weapons during the Iran-Iraq War against the Iranians and Iraq’s use of chemical weapons against its own Kurdish population to the cost of maintaining rapidly degrading chemical arsenals, chemical weapons have become more a danger to civilian noncombatants and to both military and nonmilitary personnel working at or living near the military installations and arsenals where such weapons are stored.
the number of states with offensive chemical weapons programs or that have chemical weapons arsenals has declined significantly.⁵ Although there has been some lag in the reaching the demilitarization levels outlined in CWC state implementation documents, most states that still possess chemical weapons have renounced their use, limited their use to defensive purposes, or have not demonstrated the ability to deliver them as a strategic threat. Indeed, the most worrisome consideration regarding chemical weapons agents, beyond their immediate lethality in an unprotected population, is their persistence in the areas they might contaminate if used or as they degrade in storage. Their persistence on military equipment that must be transited across international boundaries and returned to states involved in military actions at some point is an especially prevalent issue. Greater concerns about chemicals revolve around accidental events concerning toxic industrial chemicals (TICS) or toxic industrial materials (TIMS), and terrorist access and use of such within states rather state versus state use.

Likewise, the potential for the use of nuclear power as a strategic weapon has pervaded international relations since its use to end World War II. Its demonstrated capability to break a state has made nuclear weapons the centerpiece of United Nations WMD agreements for nearly sixty-five years. In spite of the overall reduction of the number of states with nuclear weapons programs since the first round of the Strategic Arms Limitation Talks (SALT I), and high hopes following the demise of the Soviet Union in 1989, concern over state versus state use of nuclear technology has reemerged since 2001. Increases in nuclear energy plants worldwide and a lack of faith in the ability of states’ biosecurity programs to prevent weapons grade fissile material from falling into the hands of terrorists keep nuclear weapons at the top of the United Nations list of concerns. Beyond the traditional threat to world peace that nuclear weapons pose lie the

potential for the increasing number of nuclear energy programs to underwrite state nuclear weapons programs. The singular purpose of nuclear weapons, coupled with the concomitant concern about the increasing use of nuclear energy, amplify the probability of nuclear accidents. Both the United Nation’s Security Council agenda and World Health Organisation’s agendas continue to focus on nuclear technology as the most significant accidental threat to the state and to national public health in the states where nuclear security remains a challenge.

**Contestation: The Puzzle and The Proposition**

While states generally continue to accept the need for international law regarding WMD, a palpable pattern of contestation of specific WMD principles norms has been emerging, most markedly since 1989. For the most parts, states have signed, ratified, or acceded to WMD agreements; however, some states also appear to not only contest select norms in the WMD agreements, but also do so cooperatively. This seems particularly curious given that we are supposedly in “the second nuclear age” and considering the potentially state-breaking power of the revolutionary advances in bioscience and biotechnology since 2000. Logically, if all WMD are equal threats to states, and if the norms and underlying assumptions about state WMD behavior have not changed, and if the conditions promoting states’ possession, acquisition, or development of WMDs have not changed, then the actualization of the norms in the WMD agreements should be notably similar. Essentially, states should be working off of a template for the actualization of WMD agreements. Furthermore, if states seriously feared a WMD attack, their overriding security concern would be to expand the BTWC in particular by adding declaration and verification protocols to it, and to vigorously enforce those aspects of the BTWC.

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They are not, especially in the case of the BTWC and in spite of the fact that cutting edge biological research and development poses a potentially greater state-breaking power or risk of attack than posed by nuclear or chemical weapons. States no longer fear a biological weapons attack by other states. They fear more being trumped in the international marketplace in bioscience and biotechnology – the next great horizon in the international economy.

Instead, rather than balancing the risk (both probability and impact) of a biological attack against chemical or nuclear attacks, “the haves” have engaged in what can only be described as a deliberate and cooperative global strategy to prevent the BTWC from adopting explicit and robust declaration and verification norms as have the other WMD agreements because they would benefit “the have nots.” Instead of the arguably hostile and competitive environment in which the nuclear norms and agreements have been formulated, the spirit of the BTWC process could be mistaken for a polite debate. The BTWC remains a brief, ostensibly vague, almost innocuous document, as opposed to the lengthy, detailed agreements deriving from contentious debate that have typified previous agreements. In contrast to the self-preserving, self-interested exclusivity that the P5 expressed in nuclear treaty documents and the punitive nature of the

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7 For purposes of this study, “the haves” will be defined as those states which either currently have WMD capability (chemical, biological, radiological, or nuclear) or have had in the past, and/or have the scientific knowledge or research and development programs to support such programs. With regard to advanced biosciences and biotechnology, “the haves” generally refer to the P5+1, plus perhaps Belgium. See Lawrence M. Rausch and Derek Hill, “Annual Deficits Continue for US Trade in Advanced Technology Products,” National Science Foundation InfoBrief, Science Resources Statistics, NSF 07-329 (August 2007): 1-10. See also table 2. Who’s Got What” in Chapter 5 of this work for a more definitive breakdown.

8 For purposes of this study, “the have nots” will be defined as those states which do not currently have WMD capability (chemical, biological, radiological, or nuclear), and that do not have the scientific knowledge or research and development programs to support such programs. The exception is China, while, although a member of the P5 and a state with WMD capability, perceives itself as not being a peer of “the haves” since it does not believe it possesses the cutting edge science and technology “the haves” do. Thus China straddles both groups, and in this study, is classified as one of “the have nots.”

9 The only visible threat from the process appears to be the proliferation of documents that would amount to a weapon of mass destruction if dropped on a population center.

10 The P5 are the five Permanent Members of the United Nations Security Council: the United States, the United Kingdom, Russia (replacing the Soviet Union), China, and France, and the only states recognized as legitimate nuclear powers. Recently, however, an increasing number of articles refer to the “P5+1” which includes Germany.
nuclear agreements’ implementation and enforcement strategies, the BTWC remains imbued in voluntary compliance.

Moreover, while the political and economic impacts of biological weapons on states would be as consequential as nuclear weapons, they have not been treated with the same intensity. This has not been the case. In fact, the opposite is true. Since it entered into force in 1975, not one word has been added to the BTWC. While this would seemingly indicate that states are increasingly less concerned with risk\textsuperscript{11} of a WMD attack by another state, or even a refutation of the WMD agreements or the treaty process, it is in fact due to states’ concerns with other spheres of power. In the case of the contestation of the BTWC, these concerns center specifically around economic gains and market share in bioscience and biotechnology in an increasingly competitive global economy. The reasons for this contestation are clear: they derive directly from the states’ perception of the inequality, inequity, or equanimity with which specific norms in the WMD agreements are being actualized. The evidence points unmistakably to how the underlying economic survival of the state and its ability to compete in the international market place. Interestingly, the contestation of the BTWC is not one-sided. Both “the haves” and “the have nots” are contesting norms or their implementation and enforcement in

\textsuperscript{11} The Society of Risk Analysis defines “risk” as “The potential for realization of unwanted, adverse consequences to human life, health, property, or the environment; estimation of risk is usually based on the expected value of the conditional probability of the event occurring times the consequence of the event given that it has occurred.” (Society of Risk Analysis (SRA). “Glossary P-R, ‘Risk’,” Society of Risk Analysis Online, http://sra.org/resources_glossary_p-r.php, accessed 3 November 2009.) However, with regard to WMD, the “probability” of an WMD event is “uncertain,” with uncertainty forking into both known (assumed) and unknown categories, which in turn fork into known categories, which split into categories that “[include] the uncertainties in the probabilities by explicitly assuming a uniform distribution…or neglect” and unknown categories. (Thomas Cool, “Proper Definitions for Risk and Uncertainty,” (February 25 and July 8, 1999). Website of Thomas Cool / Thomas Colignatus, http://129.3.20.41/eps/get/papers/9902/9902002.html, accessed 3 November 2009.) Consequently, while states obviously make some calculation of the risk of a WMD attack, the assumed probability of a WMD attack by another state is significantly skewed by the uncertainty inherent in the lack of data on WMD attacks. That is, states may assume that the probability of a WMD attack is too low or too high given what they believe about the certainty of an attack.
the BTWC as well as in other WMD agreements. More interestingly, “the haves’” reasons for contestation do not differ significantly from those of “the have nots.”

This understudied nuanced behavior deserves closer examination. Contestation behavior has been so long associated with noncompliance that analysts have disregarded other explanations for contestation. Consequently, the specific objectives of contestation remain unaccounted for or misunderstood in the analysis of state behavior and WMD agreements. The most salient example of contestation of WMD agreements manifests in the Convention on the Prohibition of the Development, Production and Stockpiling of Bacteriological (Biological) and Toxin Weapons and on their Destruction (BTWC). Fundamental to understanding contestation of the BTWC is Alexander Kelle’s 2008 paper on the United States’ behavior regarding the BTWC in 2000. In proffering Additional Protocols that did not satisfy States Parties’ demands to mimic declaration and verification norms in the nuclear and chemical agreements, Kelle argued that the United States was contesting those norms. Although Kelle concluded that the United States was able to do so because of its international status, he also demonstrated that contestation can take place within the context of overall compliance with an international agreement, and that it can be for purely economic reasons. I expand on Kelle’s work by asserting that the contestation of BTWC norms extends to more states than the United States and most particularly to lesser powers, that it extends to other WMD agreements, and that it is cooperative. Specifically, I theorize that the most likely reasons for this behavior lie in a) the pursuit of “the have nots” for political equality with “the haves,” b) the quest of both “the haves” and “the have nots” for the equitable impact of WMD norms on the state, and, c) the desire of “the have nots” to be treated with equanimity over the assumptions states make regarding the pursuit of advanced

scientific knowledge or technology. Moreover, I have concluded that while there are multiple points of data that might indicate contestation behavior, the most valid and reliable are the statements by the states themselves.

More specifically, I argue that the data presented here demonstrate that:

i. The WMD agreements have clearly identifiable norms embedded in them.

ii. States generally, explicitly accept the norms embedded in the WMD agreements as witnessed by the percentage of states that sign, ratify, or accede to WMD agreements.

iii. There is a discernible pattern of contestation of specific BTWC norms, especially since 1989.

iv. A similar pattern of contestation is discernible for other WMD agreements.

v. This pattern of contestation centers around the preferences of “the haves” versus “the have nots” with regard the costs or benefits derived from the institutionalization, implementation, or enforcement of particular principles or norms in the BTWC and similar principles and norms in other WMD agreements.

vi. The primary reasons states are contesting BTWC norms in particular and similar norms in other WMD agreements in general are as follows:

   a. EQUALITY: All states are created equal, and all norms are created equal. That is, “the have nots” are seeking recognition of their equal legal status as granted to them by international law so they can obtain the rights and privileges granted them in the BTWC, as well as in other WMD agreements. Not all states have the right to determine whether they can possess WMD, nor do they have equal access

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13 WMD behavior will be understood throughout this study to be any action that could be associated with the acquisition, development and sustainment of an offensive program to develop chemical, biological, radiological, or nuclear weapons, as well as associated research and development programs that might directly or indirectly support those programs.
to advanced science and technology; “the have nots” are attempting to ensure that all norms in the BTWC and other WMD treaties are equal in terms, implementation, and enforcement. Without self-determination, states are left to submit to the P5, and marginalized economically with regard to their ability to obtain cutting edge scientific knowledge and technology.

b. EQUITY: Both “the haves” and “the have nots” are seeking parity in the impact of BTWC norms on their domestic economies. “The haves” believe that equitable implementation and enforcement of the BTWC norms would be unfair given their disproportionate investment in bioscience and biotechnology research and development, and that it would negatively impact their domestic economies “The have nots” believe unequal enforcement of the BTWC norms has deprived them of access to discoveries and technology that would positively impact their economies.

c. EQUANIMITY: “The have nots” are seeking relief from the discriminatory assumption that all states possessing WMD or pursuing advanced scientific knowledge or advanced technology pose an equal threat to all other states.

Cooperation Without Contentment Brings Great Gains

The intent of the UN Charter was to provide states a venue to work cooperatively on issues of common interest, and security issues in particular. Instead, the UN structure, the competitive international security environment, and the subsequent WMD agreements heavily favored the P5. This is most apparent in the actualization of the nuclear Partial Test Ban Treaty (PTBT) and the nuclear Nonproliferation Treaty (NPT) where the P5 imposed the will of the powerful few on the marginal many due to the Cold War security environment. With the demise
of the Soviet Union, however, and within the context of an increasingly globalized economy, “the have nots” have forged a new alliance to ensure their security and economic viability when approaching the WMD agreements. This has played out most consistently in their cooperation in contesting how the development, implementation, and especially enforcement of the BTWC have been carried out since 1989. Ironically, “the haves” issues mirror those of “the have nots,” not only for some of the same reasons, but also in using a similar strategy.

At the heart of contestation lies the disagreement between the two factions over the importance of Article X of the BTWC, which specifically addresses the sharing of advanced bioscience and biotechnology. They also disagree over the need for the declaration and verification protocols to ensure such. While up to 1989 “the haves” had principally focused on disarmament and nonproliferation norms throughout the history of the WMD agreements, the BTWC constitutes an anomaly. It is the first agreement to totally ban a class of weapons. But by 1989, most states with active biological warfare programs had purportedly abandoned them. Moreover, the fear of biological warfare attacks by other states was replaced by the threat of terrorist attacks via biological agents. Thus, the disarmament and nonproliferation norms that would normally have been the focus of “the haves” largely diminished. This opened up the opportunity for “the have nots’” to focus attention on other norms embedded in the BTWC – and other WMD agreements – most of which dealt with knowledge and technology sharing. While enforcement of Article X plus the addition of declaration and verification norms would resolve the dispute, “the haves’” contestation of Article X and what have been called Additional Protocols has resulted in a stalemate on the Convention. This, in turn, has provoked “the have nots” to contest the implementation and enforcement of Article X as well as the lack of declaration and verification protocols in it.
To further complicate matters, although Article X provides for cooperation in the exchange of advanced bioscience and biotechnology, the United Nations implementation mechanism for this, the Confidence Building Measures, has largely failed. Instead, cooperation has largely occurred at the margins for “the haves” and select allies through military, and academic exchanges and commercial joint ventures. This tactic allows “the haves” to continue to transfer information and technology on a highly selective basis which does not fulfill the intent of Article X. As Kelle aptly points out, the United States’ contestation behavior was embedded in the concern that divulging proprietary commercial information would compromise a significant portion of the United States’ economy.\textsuperscript{14} More recent research demonstrates that this sentiment holds across all states with advanced commercial bioscience and biotechnology enterprises or research and development programs.\textsuperscript{15} Commercial enterprises have gone one step further to protect such exchange, using proprietary information clauses in contracts and protections such as patents to keep critical findings out of the purview of the BTWC. Bizarrely enough, the increasing practice by corporations and academic institutions of not patenting proprietary commercial findings and innovations may even protect them better from poaching moves this information further from access by “the have nots.” Both forms of protection hinder the Convention’s ability to not only assess emerging threats, but also to enforce Article X. These practices also delay the discovery that contestation of Article X has taken place, making analysis difficult as well.

Though complex, the reasons for contestation of the BTWC are determinable, and worth understanding if the international community is to continue to regulate state WMD behavior

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using international agreements or similar protocols. In brief, states appear to be reacting to inequality in status within the international community, the inequitable or inconsistent application of the BTWC and other WMD agreements norms, and the lack of equanimity with regard to assumptions and conditions that drive state behavior. Ultimately, if this trend continues, it will have an impact on the continued actualization of both the BTWC in particular, and on future WMD and security agreements in general. All WMD are effectively equal in international law, but because both nuclear and biological weapons have demonstrated strategic state-breaking capability, the contestation of the BTWC principles and norms seem indicative of underlying issues with the entire international security agreement process.

Methodological Overview

The contestation of WMD norms is evident across all five of the WMD agreements. Here, though, my focus is primarily to substantiate cooperative contestation of the BTWC, and to support the theories posited above. To do so, I employ inductive reasoning to examine the official texts of the five principle WMD agreements to extract and compare norms across the agreements and to analyze official texts of BTWC meetings (opening statements, working group papers, States Parties documents, Council of Experts statements, etc.) to demonstrate that states are contesting specific norms, that states are cooperating in this contestation, to verify that both “the haves” and “the have nots” are involved in contestation, and to explicate the states’ reasons for their behavior. Finally, I show where this contestation has occurred with regard to similar norms in other WMD agreements for similar reasons.

16The Preamble to the BTWC states that one of its objectives is to “Determine to act with a view to achieving effective progress toward general and complete disarmament, including the prohibition and elimination of all types of weapons of mass destruction.” The BTWC effectively equates nuclear, biological, and chemical weapons of mass destruction. See United Nations (UN), Convention on the Prohibition of the Development, Production and Stockpiling of Bacteriological (Biological) and Toxin Weapons and on Their Destruction (BWC) (London, Moscow and Washington, DC: Opened for signature on 10 April 1972), 1.
I conduct the analysis in the following manner. First, in order to establish a broader baseline for discussion of WMD norms, I extract and catalogue all specific principles and norms in the five principal WMD agreements\textsuperscript{17} to establish a complete picture of all principles and norms across the five principal WMD agreements. Second, I select sixteen states for closer scrutiny to show that quantitative data does not reveal anything significant about contestation behavior. Third, I illustrate how qualitative data from all WMD agreements for these select sixteen states divulges their reasons for contestation behavior. Fourth, I utilize official texts of BTWC meetings (opening statements, working group papers, States Parties documents, Council of Experts statements, etc.) for these sixteen states as well as for states that fall more broadly into either “the haves” or “the have nots” factions to specifically support the proposition that states seek equality, equity, and equanimity with regard to the actualization of the BTWC norms. Fifth, I utilize data from these texts to validate that this contestation is cooperative. I conclude that the evidence from states’ statements supports the theory that states are split on support of various principles and norms in WMD agreements based solely on their economic impact, specifically their market share in bioscience and biotechnology, on the state itself. This is contrary to the Realist assumption that underwrites the WMD agreements that states seek economic gains because they translate into military power in particular.

**Potential Implications for International Relations**

The results of this study should act not so much as a bellwether of a growing biological weapons threat as much as they should illuminate the impact of cooperative contestation of WMD norms on international relations, international law, and on the development and implementation of future WMD agreements or other international security agreements. If the

\textsuperscript{17} While this study focuses on the BTWC, relevant data on state behavior with regard to other WMD agreements is included as necessary to reinforce a point or demonstrate similar contestation of another WMD agreement.
reasons for contestation found here – equality, equity, and equanimity – continue to prove true over time, they may signal a need to revise the agreement process, implementation, enforcement, norms, or all of the above.

While on the surface the cooperative contestation of WMD norms might appear to be a hollow, legal fine point, states’ contestation and deviation from principles and norms in international agreements can impact international relations in multiple ways over time. States may come to see international agreements as inherently weak devices for obtaining international security, or inherently imbalanced and thus not attractive. This view could result in states avoiding the use of international agreements, ignoring international law, or even abandoning the existing agreements. Cooperative contestation could also revive the two hegemonic blocs that existed prior to 1989 and revive a Cold War situation, concluding in divisive global fear that carries into the next century. More significantly for international relations theory, the reasons for cooperative contestation – equality, equity, and equanimity – may signal a shift away from the applicability of the assumptions of Realist theory in which WMD agreements are embedded. The consideration of state political, economic and social conditions in the actualization of WMD agreements also raises questions about the applicability of Realism for describing, explaining, or predicting state WMD behavior. Here the conclusion is that states have little fear of a biological attack by other states, and are moving instead to retain or gain a market share in bioscience and biotechnology because they are not under the purview of the BTWC. Taken together, these concerns indicate a need to reassess the potential overuse of this dominant paradigm to analyze state WMD behavior as well as to formulate new international security agreements. Finally, the failure of Realism to fully describe, explain or predict state contestation of WMD principles and norms may suggest the need to examine whether other paradigms such as Liberalism – especially
Regime Theory—may be a more useful tool for analyzing state WMD behavior or for structuring WMD agreements.

In addition, and more optimistically, cooperative contestation of WMD norms has positive implications for cooperation on other challenging issues. The potential strategic threat biological research and development programs might pose to international security, however, argues for cooperation in retrenching to enhance the BTWC. Ultimately, though, this cooperative contestation of WMD norms may signal a broader change in state strategy on the actualization, of international security agreements. This, in turn, may have a destabilizing impact on the structure of the international system and the institutions that govern international relations.

Lastly, this study’s implications for international relations and states’ foreign policy are profound if the trends identified here continue. At the very least, several key states’ foreign policy assumptions appear dangerously outdated, misapplied, or over-generalized vis à vis a state’s WMD behavior. Given the capabilities inherent in current biological research and development, at worst the states may be overspending on the control of nuclear technology at the expense of a potentially greater threat. The overuse of an outdated set of assumptions may also threaten the fabric of international relations by mistakenly inferring state WMD behavior where there is no nefarious intent. Over-generalizing or misapplying assumptions about state WMD behavior based on the adversarial behavior of the Soviet Union and the United States to “unfriendly” states, while assuming the best of ones’ allies or those most like us, may result in a duality in the application of international law which should be inherently singular. Likewise, state acquisition of WMD may be a political tool of statecraft to buy a place at the international table, rather than an act of malice. While we should continue to err on the side of caution and
carefully examine the reasons behind state WMD behavior, my findings here suggest that we should also strive for consistency in the application of international law with regard to states and WMD. This study also suggests that we examine the validity of the assumptions embedded in international relations theory, their basis for WMD or other international security agreements, and their implementation and enforcement in order to avoid delegitimizing international law.

Roadmap for Reading This Study

This study consists of seven chapters. This first chapter outlines the problem, puzzle and associated issues, the conclusions derived from the data, and their implications. This study is embedded in two streams of theory: international relations theory and international law theory. Thus, the second chapter, International Law, Treaties, and Norms, discusses the derivation of norms, international law, and its role in this discussion. It also describes the relationship between international law, international treaties, and defines the contestation of norms. Chapter Three, International Relations Theories and Norms, presents the three dominant international relations theories, the role of norms in each, and how each assists us in understanding norm contestation. The fourth chapter, WMD Agreements and Norms demonstrates how WMD norms have evolved over time. The next two chapters – Quantitative Data and Qualitative Data – present two complementary sets of data from which the conclusions about contestation of norms in the BTWC derive, and discusses the validity and reliability of each data point in understanding BTWC and WMD norm contestation. The final chapter, Analysis and Conclusions, summarizes the findings and discusses their implications on international relations, international law, and the future of international agreements in detail.
Chapter 2

International Law, Treaties, and Norms

International Law

Understanding cooperative contestation requires understanding the two streams of theory that it is embedded in. Contestation is seated in international law; cooperation is seated in international relations. The origin of norms and their role in international agreements is critical to grasping the meaning of cooperative contestation of the principles and norms in the WMD agreements.

Traditionally, states have acceded to the need for an international system to facilitate relationships between states, to facilitate transactions between states, as well as to fulfill the demand for dedicated institutions and explicit agreements to address specific state behavior. Examples include: The Treaty of Westphalia, The League of Nations, The United Nations, The Geneva Conventions, The Vienna Convention, The Law of the Sea Convention, The Moon Treaty, the Outer Space Treaty, and the WMD Treaties. International law operationalizes the international system by serving as the basis for international agreements, including the WMD agreements. International law is multi-faceted – a normative, dynamic entity, determined by political actors, and is fundamental to the establishment and maintenance of international order.\textsuperscript{18} Though “an instrument of policy, broadly

conceived,” it is not considered an end unto itself, but rather a means by which to order and stabilize international order as well as to protect and promote stability, liberty, justice, welfare, and most importantly in this discussion, international security.19

According to Henkin et al., “The purposes of international law, like those of domestic law, are to establish and maintain order and enhance reliable expectations, to protect “persons”, their property and other interests, to further other values,” with the constituency being states rather than individual persons.20 In addition, because, “International law fosters the security and autonomy of states,…[it] prohibits the threat or use of force by any state against the territorial integrity or political independence of any other state.”21 Henkin elaborates, “Law is generally not designed to keep individuals from doing what they are eager to do. Much of law, and the most successful part, is a codification of existing mores, of how people behave and feel they ought to behave.”22 Contrary to the general notion of law as simply a deterrent to potential violators, law also functions to “reaffirm the standard of behavior.”23 With regard to states and standards of behavior, “International law aims at nations which are in principle law-abiding but which might be tempted to commit a violation if there were no threat of undesirable consequences.”24 Finally, “Law is one force – an important one among the forces that govern international relations at any time; the deficiencies of international society make law more

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20 Ibid, 2.
21 Ibid.
22 Ibid, 34.
23 Ibid, 35.
24 Ibid, 94.
dependent on other forces to render the advantages of observance high, the costs of violate prohibitive.” Thus, law may inhibit and can be prescriptive – it contains norms and standards which describe expectations of state behavior. That describes WMD agreements as well.

International can also be characterized as either “hard law” or “soft law.” “Hard law” creates precise legal rights and obligations; in contrast soft law tends toward the hortatory or exhortatory (seek, promote, avoid, make efforts to). WMD agreements contain both. The complication, Weil contends, is that “the proliferation of “soft law” has damaged the international legal system “by blurring the line between law and nonlaw.” The turn of international law toward exhortatory language to convey principles and expectations for state behavior rather than deliver well-defined hortatory tenets of behavior (“thou shalt or shalt not”) allows states a significant amount of interpretive leeway with regard to WMD behavior, and arguably, has set the states up for conflicting interpretation of how such principles and expectations are to be implemented or enforced. This will be discussed further in the ensuing chapters.

25 Henkin et al., 35.
26 Weil quoted in Henkin et al., 36-7. (Originally from Prosper Weil, "Towards Relative Normativity in International Law?" American Journal of International Law 77 (1983).)
Sources of International Law

“A rule of international law is one that has been accepted as such by the international community of states,” and derives from customary law, international agreement, or by derivation from the general principles common to the major legal systems of the world.\(^{28}\) Until the 1800s, international law was largely based on natural law, which was historically derived from western Judeo-Christian precepts because international was largely a western institution under the influence of western philosophers. Macdonald and Johnston state,

In the context of international law it seems evident that theory has taken on an expanded meaning in modern times. Traditionally, the theorist was a scholar immersed in philosophy or theology who approached the discipline of international law within the tradition of preexisting schools of thought, focusing on metaphysical and ethical aspects of the ‘science’ of international law. Virtually all of the ‘classical’ theorists of international law regarded themselves more or less consciously as exponents of a particular philosophical viewpoint with an intellectual and moral responsibility to develop the discipline within the selected tradition. Essentially, the philosophical theorist’s approach was that of linear development from philosophical premises of his own choosing. Even today, many of the philosophical theorists in international law tend to be associated, directly or indirectly, with the tradition of natural law, and this

has tended to produce a more or less explicitly ethical approach to the discipline.\textsuperscript{29}

This complex of issues surrounding the validity of various derivations of law has led to the establishment of the doctrine of sources. The doctrine of sources has served as the “principal intellectual instrument” for providing “objective standards of legal validation” since the 19\textsuperscript{th} Century. It “lays down verifiable conditions for ascertaining and validating legal prescriptions. The conditions are the observable manifestation of the ‘wills’ of the States as revealed in the processes by which norms are formed – namely, treaty and State practice accepted as law.”\textsuperscript{30}

According to Macdonald and Johnston, the prevalence of positivism and the emergence of positive law in the nineteenth century Western legal thinking ultimately led to today’s doctrinal theorists being broadly and overtly influenced by the positivist school of jurisprudence. To overgeneralize the notion of positivism, practice rather than philosophical precepts are codified. Consequently, they conclude, they rarely concern themselves with “the kinds of metaphysical questions that challenged the early classicists,” and instead are, “By and large they are content to regard international law as an emerging system of rules and procedures generally accepted in state practice and consent as the most fundamental element in the process of legal development.” They conclude that this had produced a generation of international law practitioners who are pragmatic problem solvers and who

\textsuperscript{29} Macdonald and Johnston quoted in Henkin et al., 42. (Originally from Macdonald & Johnston, “International Legal Theory: New Frontiers of the Discipline,” \textit{The Structure and Process of International Law}, 6-8.)

\textsuperscript{30} Schachter quoted in Henkin et al., 52. (Originally from Oscar Schachter, \textit{International Law in Theory and Practice} (Dordrecht: Martinus Nijhoff Publishers, 1991), 35-6.)
approach problem solving by employing scientific methodology rather than theoretical purists looking to create law based on moral-ethical codes.\(^\text{31}\)

Customary law emerged in the 1900s to accommodate the multiplicity of belief systems became evident and allowed norms to be theoretically generalizable to states in the international system. Referencing Janis and Falk, Henkin asserts that, “Nineteenth century positivism stressed law as science and played down the original affinity between religion and international. The diversity of cultures and ideologies in the international system of the twentieth century has also led to reluctance to consider continuing connections between international law and religion.”\(^\text{32}\) Positive law becomes customary law when it becomes general and consistent practice by states, and when states “…[follow] them from a sense of legal obligation.”\(^\text{33}\) While positivism and pragmatism may drive the creation of international law, it appears that those implementing the laws appear to follow something closer to a Critical Legal Studies approach to international law which is related to the international theory of Constructivism as least notionally. That is, they believe that international law is embedded in its extant environment, and thus subject to interpretation.\(^\text{34}\) This can greatly complication the implementation and enforcement of international laws and norms given the global, multicultural context in which international law exists.

\(^{31}\) Macdonald and Johnston quoted in Henkin et al., 42. (Originally from Macdonald & Johnston, “International Legal Theory: New Frontiers of the Discipline,” The Structure and Process of International Law, 6-8.)

\(^{32}\) Henkin et al., 10.

\(^{33}\) Ibid, 51.

\(^{34}\) Ibid, 48.
In contemporary times, especially for issues such as WMD, there is no directly applicable natural law or custom upon which to base international agreements. So international law has had to expand to generate principles and norms for ordering state behavior in the international system via negotiation, that is, via conventional law, which are essentially negotiated agreements – contracts – between the states. The interface between natural, positive, customary, and conventional sources of international law demonstrates the complexity from which WMD agreements as well as the possible sources for contestation.

**Instruments of International Law and Treaty Law**

International agreements includes an array of instruments – agreements, protocols, covenants, conventions, laws, accords, treaties, exchange of letters – have historically governed the development and implementation of state-level WMD programs. No specific nomenclature exists for distinguishing between the various terms employed to describe agreements, so I have used the general term “agreement” throughout this study to denote whatever instrument was utilized to codify the WMD principles and norms. Various instruments of international law may have different names, but all deemed to carry the same international legal authority under “[t]he principles underlying agreements between states – free consent, good faith, and the notion that ‘agreements must be upheld’.”

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The 1969 Vienna Convention on the Law of Treaties (VCLT), developed between 1949 and 1969 and signed in Vienna in 1969, has governed international agreements since it entered into force in 1980. Its own codification of customary law on treaties, the VCLT informs how states create treaties. The VCLT recognizes the United Nations Charter as the primary source of principles of international law, and explicates how states can structure and codify international agreements law, as well as how they can modify or separate from the agreements. *Pacta sunt servanda* – “Every treaty in force is binding upon the parties to it and must be performed by them in good faith,” is the universally recognized principle underlying the validity of international agreements. In addition, Article 18 of the VCLT stipulates that, “A State is obliged to refrain from acts which would defeat the object and purpose of a treaty when: (a) it has signed the treaty or has exchanged instruments constituting the treaty subject to ratification, acceptance or approval, until it shall have made its intention clear not to become a party to the treaty; or (b) it has expressed its consent to be bound by the treaty, pending the entry into force of the treaty and provided that such entry into force is not unduly delayed.” Article 18 is critical to understanding when states have obligations under international agreements. This is particularly significant given that six of the

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38 The 1986 Vienna Convention on the Law of Treaties has not yet entered into force, and thus is not considered here.
42 Ibid, 2.
sixteen states selected for special scrutiny for this study – China, Democratic People’s Republic of Korea (DPRK, North Korea), Egypt, France, India, Iran, Iraq, Israel, Japan, Libya, Pakistan, Russian Federation, Republic of Korea (ROK, South Korea), Syria, United Kingdom, and the United States are not even signatories of the VCLT.

Table 1. Vienna Convention on the Law of Treaties Membership

<table>
<thead>
<tr>
<th>Participant</th>
<th>Signature</th>
<th>Accession(a), Succession(d), Ratification</th>
</tr>
</thead>
<tbody>
<tr>
<td>China</td>
<td>3 Sep 1997 a</td>
<td></td>
</tr>
<tr>
<td>Egypt</td>
<td>11 Feb 1982 a</td>
<td></td>
</tr>
<tr>
<td>Iran (Islamic Republic of)</td>
<td>23 May 1969</td>
<td></td>
</tr>
<tr>
<td>Japan</td>
<td>2 Jul 1981 a</td>
<td></td>
</tr>
<tr>
<td>Pakistan</td>
<td>29 Apr 1970</td>
<td></td>
</tr>
<tr>
<td>Republic of Korea</td>
<td>27 Nov 1969</td>
<td>27 Apr 1977</td>
</tr>
<tr>
<td>Russian Federation</td>
<td>29 Apr 1986 a</td>
<td></td>
</tr>
<tr>
<td>Syrian Arab Republic</td>
<td>2 Oct 1970 a</td>
<td></td>
</tr>
<tr>
<td>United States of America</td>
<td>24 Apr 1970</td>
<td></td>
</tr>
</tbody>
</table>

“Customary law supplements and interacts with treaty law in a complex manner. International norms and rules often migrate between custom and treaty. Treaty conferences not only create new law but also codify existing customary rules into the less ambiguous form of treaties. The Vienna Convention did not enter into force until 1980 and was not retroactive, according to Article 4. Consequently, according to Article 3, all agreements concluded prior to 1980 are not subject to the

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44 Ibid, 4.
VCLT. They are, then, essentially conventional law. This includes the PTBT, the NPT, and the BTWC. That said, the basis for the WMD agreements is disputably considered to be customary international law since, over time, norms contained in them have been generally practiced by states and there is *opinio juris*\(^45\) – states believe that it is legally obligated to act in a certain way. So, WMD norms may be legally binding if they have been considered to be binding long enough to have evolved into custom. Moreover, the VCLT is considered to derive from customary law itself. Thus, arguably, provisions of widely-ratified and effective treaties often mature into customary rules that bind all states regardless of their individual ratification status,\(^46\) which includes by extension, the WMD agreements. The question is when that occurs.

Watts questions whether the WMD agreements can be considered customary law given his analysis of Article 60, paragraph 5.\(^47\) He states,

The shared political-military context of the Vienna Convention and the Additional Protocols casts doubt on the extent to which states envisioned the actual operation of …its customary status. States negotiated, concluded, and widely ratified both the Vienna Convention and the Additional Protocols in an era when nuclear weapons dominated military strategy…..A dispositive

\(^{45}\)In customary international law, *opinio juris* is the second element (along with state practice) necessary to establish a legally binding custom. *Opinio juris* denotes a subjective obligation, a sense on behalf of a state that it is bound to the law in question. See the International Court of Justice Statute, Article 38(1)(b)." Cornell University Law School Legal Information Institute (LII), "*Opinio juris* (international law)," LII Online, http://topics.law.cornell.edu/wex/opinio_juris_international_law, accessed 24 April 2010.


determination of the customary status of paragraph 5 remains elusive. Indicia of state practice with respect to security efforts and particularly the conduct of hostilities are closely guarded. But claims that paragraph 5 reflected customary law at the time of its drafting or that it matured into custom at some later point suffer from an oversimplified understanding of reciprocity under the law of war.48

That is, it is tenuous to claim that WMD agreements have evolved sufficiently into custom to be considered customary law since there states do not advertise their security arrangements. Nevertheless, it is arguably considered that states that are at least signatories to a WMD agreement are assumed bound by treaty law unless they formally withdraw from the agreement. That is, they are generally obligated not to act in contravention to the agreement unless they formally withdraw. This will be important in understanding what part, if any, contestation behavior as defined in Chapter 1, plays in states recognizing that they are bound by all norms in any WMD agreement.

**Norms**

International agreements are utilized to codify, among other things, the principles and norms, which serves as the point of departure for the analysis of contestation of the WMD agreements. Norms comprise a core institution49 within international law, and link principles to practice when applied to regulate state behavior within the international system. At the very least, norms codify state

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48 Watts, 430-431.

practice; more generally, they define expectations of state behavior; at the far extreme, they shape state behavior. In the WMD agreements as a whole, they generally define expectations of state behavior. However, starting with the BTWC which purportedly bans an entire class of weapons, norms can be seen in their ultimate role of shaping state behavior.

The argument here that states are cooperatively contesting norms in the BTWC begs the question of whether all norms in an agreement are created equal. The answer is that it depends. The definition of norms remains rather slippery and contested itself. On one end of the continuum, norms are considered merely, if excessively vague, “generic rules.”50 In contrast, the reductionist view that norms are at most “unexplained sources of the exogenously given preferences of actors” that Florini attributes to both NeoRealism and NeoLiberalism,51 Thomson’s typification of norms as practices or behavioral regularities that states engage in, which Florini argues lacks in analytical utility because it “encompasses all observed patterns of behavior,”52 brings incremental improvement in terms of its analytical capability until compared to Florini’s own definition which echoes Krasner’s that norms comprise “standards of behavior defined in terms of rights and obligations” that carry with them a sense of oughtness.53 Given Hoffman’s observation that the tendency for theorists to focus on normative dynamics has resulted in viewing norms as static, singular independent variables when they appear to be much more

53 Stephen Krasner quoted in Florini, 365. (Originally from Stephen Krasner, ed., *International Regimes* (Ithaca: Cornell University Press, 1983).) Florini goes on to say that Krasner’s definition is too restrictive because it confines a norms to a given issue area as a component of regimes.
dynamic and belie a much more intersubjective relationship with the international system, the definition needs expansion. Consequently, Florini’s supplement of the definition with Finnemore’s notion of norms as “intersubjective understandings readily apparent to actors that make behavioral claims on those actors” and as “‘shared and social’ prescriptions of behaviour” is necessary to enhance the understanding and utility of the term. Thus norms are more than “shared expectations,” more than simply “standards of appropriate behaviour” since they are interpretable and subject to change and because “standards of behaviour [are] defined in terms of rights and obligations” which is not always true for norms, and not clinical enough to qualify as “prescriptions for appropriate and acceptable behaviour.” So what are norms?

Missing from the above definition is what links norms with the assumptions and conditions that impact whether states comply with norms, which is a key component of this argument. The Constructivist concept of intersubjectivity helpfully offers one explanation as to how various conditions in the international environment influence and are influenced by norms. Furthermore, by including Kartchner’s especially useful understanding of norms as “explicit values recorded in the full range of international non-proliferation regimes…” that capture “…the

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54 Hoffman, 3-4.
implicit *assumptions*, values and rules underlying international attitudes toward weapons of mass destruction”\(^{58}\) this enlarged definition of norms can accommodate both assumptions and conditions, as required here. Even though Kartchner’s definition broaches on conflating norms with regimes, which will be addressed further on in this chapter, Kartchner’s focus on WMD norms and the portrayal of norms as value-laden *expectations* of behavior influenced by assumptions in particular relays the notion argued here that norms, even in a positive law environment, are more than custom, practice, or behavior. This much richer definition allows a more comprehensive categorical examination of what influences the development of norms as well as what influences their contestation.

**All Norms Are Not Created Equal**

With norms, international law sets peremptory norms or *jus cogens* apart. Peremptory norms\(^{59}\) or *jus cogens* – compelling law – identifies norms from which no derogation or preemption by treaty is possible, and include but are not limited to genocide, maritime piracy, slavery, torture, crimes against humanity, war crimes, apartheid, wars of aggression, and territorial aggrandizement. Thus, peremptory

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\(^{59}\) According to Article 53: *Treaties conflicting with a peremptory norm of general international law (“jus cogens”),* “A treaty is void if, at the time of its conclusion, it conflicts with a peremptory norm of general international law. For the purposes of the present Convention, a peremptory norm of general international law is a norm accepted and recognized by the international community of States as a whole as a norm from which no derogation is permitted and which can be modified only by a subsequent norm of general international law having the same character.” (United Nations (UN), “Vienna Convention on the Law of Treaties (1969),” 18.) Furthermore, according to Article 64: *Emergence of a new peremptory norm of general international law (“jus cogens”),* “If a new peremptory norm of general international law emerges, any existing treaty which is in conflict with that norm becomes void and terminates.” What the Convention does not specify, however, is the process by which new peremptory norms emerge, which complicates the evaluation of whether the norms in the WMD treaties or the so-called “Nuclear Taboo” or “Biological Taboo” have elevated the WMD norms to that status. (Ibid, 22.)
norms “…describe a body of law widely accepted as binding all states in all situations.” Watts states that, “Even adherents to the doctrine of persistent objection usually concede that states may not opt out of *jus cogens* norms. In fact, exemption from persistent objection may be a hallmark of *jus cogens*, distinguishing it from ordinary customary international law.” Watts also states that, “Like custom, *jus cogens* does not require express consent,” which, while a reasonable conclusion if derogation is not possible, is problematic given that when custom becomes custom or ceases to be custom is indeterminate.

With regard to WMD agreements, the issue revolves around whether the agreements contain peremptory norms. Since states have negotiated (and continue to negotiate) the WMD agreements including how the agreements are applied and to which states, it seems clear that WMD norms have not yet attained this status. State behavior reinforces this supposition, since not all states belong to or have ratified the agreements, and not all states act as if the possession or use of WMD should be outlawed. In addition, the fact that some states are currently contesting the agreements or some norms in them is conclusive that states do not accept that WMD norms have not achieved peremptory status in international law. The point, however, is that some states are contesting the reality that the WMD norms are not peremptory while others are contesting them because they might become so. As Lindner and Rittberger posit, the institutions utilized to achieve a particular effect will vary, with their character determined by their utility in realizing a specific normative objective and their ability to reduce uncertainty, including “…readily

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60 Watts, 382.
61 Ibid.
available devices such as norms that ‘tell’ actors what ‘the right thing to do’ will be in a specific situation.” Furthermore, they contend that “…norms may even help them define their preferences in the first place, for instance, by providing helpful analogies (norms as road maps or sign posts),” especially when “disconnected from distributive issues.” 62 Consequently, it should not be surprising that states would leverage peremptory norms – or the rejection thereof – instrumentally.

**International Law, International Agreements and Norms**

In natural law whose *assumptions* provide the basis for the Realist framework of international relations, 63 norms tend or are intended to be fairly static 64 because the nature of man and of states is assumed to be so. Treaties based on assumptions about the nature of man generally contain norms that are contrived to constrain the iniquity inherent in the nature of man. 65 In customary or positive law, which is strongly associated with the Liberal or Constructivist frameworks of international relations, the dynamic political, economic, social, and even technological *conditions* in which international relations occur continually shape or reshape norms in order to accommodate these dynamic conditions as well. Not unexpectedly, since international law derives from both sources, the result is an inherent dialectical tension, even conflict, between natural and customary law as to

61 “Moreover, within the field of international law itself, the competing ideas of natural law based on moral and philosophic conceptions were increasingly perceived as irrelevant to the political order of sovereign States” because states were “not governed by morality of ‘natural reason;’ they acted for reasons of power and interest.” (Henkin et al., 52.)
64 Hence the derivation of the word “state.”
the source of norms as well as their interpretation and implementation within the international system.

However, as positive law influences or replaces natural law, norms would be expected to, and have, become increasingly subject to the increasingly dynamic conditions in the international political, economics, and cultural environment. Likewise, assumptions about the nature of man and the nature of the state have also been altered as the international system has come to the realization that there are a multiplicity of views of natural law across the states, with a similar impact on norms. Consequently, Liberal and Constructivist frameworks of international relations would expect norms to evolve over time because assumptions and conditions evolve as well as to be contested, while Realist frameworks would expect them to remain more static since the nature of man is assumed to be static.

Also and ironically, international agreements, which sometimes create law, may subsequently “…lead to the creation of customary international law when such agreements are intended for adherence by states generally and are in fact widely accepted.”66 In other words, international agreements are not always discovered through positivist practices nor are international agreements always preceded by custom. However, international agreements can lead to custom, which is arguably what has happened with state WMD behavior. The most salient problems with customary law are identifying when state behavior has become a custom and when the custom has changed. Neither are defined in international law. Hence, customary law naturally lends itself to evolution as well as to contestation if states

66 Henkin et al., 51.
modify their behavior, if state assumptions change, or if their valuation of the impact of conditions on custom changes. Indeed, Watts notes that, “…in the long term, repeated and especially widespread disregard or suspension of a rule of customary law would certainly undermine the element of state practice required for the rule to sustain its binding force.” More problematic, in Watts’ opinion, “By definition, established customary norms bind all states regardless of formal or express indicia of consent such as ratification,” and in the absence of reciprocity since, even though “the formation of custom requires ‘general’ practice,” unanimous or universal practice or accession is not required to establish general obligation. While customary law is arguably the basis for WMD agreements since they have been largely downward directed by the P5, the pervasive issues regarding the origin and evolution of custom obviously impact the intended stabilizing effect of WMD norms and agreements. This was unaccounted for at the inception of the agreements, with evolution of the norms unconsidered and unprepared for. Further complicating the issue is the movement of many of the non-WMD states toward the invocation of *jus cogens* with regard to WMD in seeking a total global ban on WMD.

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67 Watts, 380.
The Evolution of Norms

Since norms are based on principles and since the function of norms is essentially to establish expectations for state behavior, it seems reasonable to assume that norms are meant to be somewhat static, but not immutable, and throughout much of the Cold War this appears to be true. Much has been written about the uneasy stability the Cold War environment offered, and much of this stability has been attributed to the dominance of the P5 in the international system. Consequently, WMD norms as well as assumptions about state WMD behavior that drove their development and the assessment of the conditions in the international environment that influenced state WMD behavior were also fairly static because of the P5 influence on their development. Curiously, in spite of rapid globalization of the world’s economy, facile labor and capital mobility, and a revolution in technology, WMD norms indeed continued to remain quite static in the WMD agreements until the mid 1990s when non-P5 influence began to significantly impact the development of WMD norms as well as their implementation strategies. In this same time period, Henkin surmises, even though “...the rule against aggressive war had nonetheless become the ‘principal norm of international law of our time,’” with the ascendance of Article 2(4) of the U.N. Charter the meaning of the norms became a “moving picture” rather than a photograph, and increasingly

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subject to mutation and contestation, especially with regard to the possession or acquisition of WMD.\textsuperscript{72}

Why some norms are institutionalized and how, and why they evolve or otherwise change has not been adequately addressed in international relations theory. As Hoffman points out, there is no model for norm change, even though norms are demonstrably dynamic, emerging and disappearing (e.g., slavery, apartheid) as do the meanings of norms (e.g., appropriate uses of humanitarian interventions, the concept of sovereignty).\textsuperscript{73} Constructivists see the normative structure as, “…constituted by discursive interventions that secure the (re)construction of the values, norms and rules entailed in it,”\textsuperscript{74} though the process they accept requires that norms necessarily be internalized before either discursive intervention\textsuperscript{75} or contestation of regime norms occurs. That is, they appear to propose that the internalization of norms is a necessary condition of the evolution of norms.

This notion seems rather restrictive and ignores other options that states have with regard to norm change that do not include discourse. In addition, “The conventional separation in international relations theory between instrumental behavior and legitimated norms as explanations for state action has discouraged the study of phenomena that include both. As a result important practices including hypocrisy, norm violation, and the strategic reinterpretation of rules and laws are

\textsuperscript{72} Alexander Kelle, “Biological Weapons Disarmament,” 1.
\textsuperscript{73} Finnemore (2004), Krasner (1999), and Weber (1995) as summarized in Hoffman, 5.
\textsuperscript{75} This is likely assumed because, as Wiener summarizes, agreement on rules, principles and procedures beyond the state context rely on dialogue. (Antje Wiener, “Contested Meanings of Norms: A Research Framework,” Comparative European Politics 5 (2007): 4.)
under-examined….Internalization is problematic for empirical research in IR because it eliminates the possibility of strategic thinking by states in relations to international norms and rules. It leaves no room for instrumentalism around norms and so cannot account for norm violation, the strategic manipulation of norms, and the productive process of norm innovation.‖

As a corrective, Hoffman recommends “avoid[ing] thinking in terms of continuity or change and rather concentrate our efforts on understanding dynamism” to eliminate “an unfortunate bias in too many approaches to institutions and institutional change that sees continuity as stasis and ignores just how much activity goes into maintaining the status quo.”\textsuperscript{77} Change in international institutions, including norms, is ubiquitous, however, and must be understood, especially the roles of interpretation and contestation in that change. “Contestation is inherent in the process…” and “…is the engine of politics and mutual constitution itself….‖\textsuperscript{78} simply because norm development and implementation is politically charged, and because norms – and their evolution – can have such a momentous impact on state economics and society as well. Furthermore, just as contestation to change norms might be important, contestation against norm change might be equally significant, and must be examined. Hoffman goes on to reminds us that, “Interpretation and contestation are one mechanism to understand the constant motion of social norms and perhaps it can lend insight into the dynamism of institutions more broadly because of the interdependence of social

\textsuperscript{76} Hurd, “States and Rules, Norms and Interests,” 4.
\textsuperscript{77} Hoffman, 18.
\textsuperscript{78} Ibid, 2.
norms and formal institutions and the potential analogous need for interpretation of formal institutional rules.”  

Florini offers the most elegant and most useful analogy of norm evolution which aligns with this perspective. Utilizing an evolutionary biology analogy to explain the transformation of norms, Florini compares the function of norms to that of genes because genes act as “instructional units directing the behavior of their respective organisms…and strongly condition the behavior of most individual animals” much like “norms govern much state behavior.” In addition, “…genes and norms are both transmitted” with norms transmitted with the set of cultural beliefs, attitudes, and values. Finally, “…norms, like genes, are ‘contested’ – that is, they are in competition with other norms that carry incompatible instructions.”

With regard to norms, “International norm change depends upon changes in the percentage of a population of states holding a given norm.” Moreover, for Florini, “The genetic analogy suggests that, as with any instructional unit subject to selection, three factors account for the reproductive success or failure of a contested norm: (1) whether a norms becomes prominent enough in the norm pool to gain a foothold; (2) how well it interacts with other prevailing norms with which it is not in competitions, that is the ‘normative environment’: and (3) what external environmental conditions confront the norm pool. No one of these is sufficient to determine the path of a norm’s evolution. Each is a necessary but not sufficient

79 Hoffman, 18.  
80 Florini, 363.  
81 Ibid, 367.  
82 Ibid, 371.
condition.\textsuperscript{83} Furthermore, Florini posits that “…three factors… initial prominence, coherence, and environmental conditions explain which norms will be selected, but not how they will spread.”\textsuperscript{84} If these factors lead to selection, a logical assumption would be that the same might lead to “deselection” as well. What must be emphasized here, however, is Florini’s inclusion of the eminence of environmental conditions on norm evolution since this constitutes a key component of my argument that the contestation of WMD norms is causally linked to changes in states assumptions about the meaning of other states’ WMD behavior (acquisition, procurement, research and development) and to changes in conditions (structure, politics, economics, social, technology, etc.) the international environment. More specifically, the sources of international law, especially customary law, necessarily affect WMD norms due to their intrinsic link to assumptions and conditions, and the increasingly dynamic international environment cannot help but push up the tempo of the evolution of the WMD treaty norms as well.

Regime theorists tender the most fertile analysis of norm change via their analysis of regime change, though, even though Florini’s analogy best describes the process. Krasner establishes this relationship in linking norms to regimes in stating that, “Changes in principles and norms are changes of the regime itself,”\textsuperscript{85} so logically changes in regimes signal a change in norms as well. More problematic, as Stoeva notes, is that normative ideas do not have similar and logically ordered

\textsuperscript{83} Florini, 374.  
\textsuperscript{84} Ibid, 377.  
paths of evolution, or devolution, for that matter, since “International norms are socially constructed,” and society fluxes unpredictably. However, several theorists have associated regime change with the following conditions, which may allude to underlying reasons that the norms that comprise them change as well. Krasner notes that regimes, weaken “If the principles, norms, rules, and decision-making procedures of a regime become less coherent, or if actual practice is increasingly inconsistent with principles, norms, rules, and procedures.” Haggard and Simmons attribute regime transformation to one or more of four variables: (1) Compliance: The strength of the regime, as measured by the degree of compliance with regime injunctions; (2) Operationalization: The organizational form of the regime, that is, how regimes are organized and operationalized; (3) Complexity: The scope of the regime, that is, the range of issues it covers, its jurisdictional scope, all of which can increase or decrease the regime’s complexity or cost by increasing or decreasing the number of “externalities” associated with it; (4) Costs: The allocational mode, or what and how costs and benefits of the regime are distributed and by whom; and (5) Technology: Young noted that “technological developments severely exacerbated the internal contradictions” built into some regimes.

Important here is the general recognition that regimes and norms evolve, and, according to Florini’s, that they evolve in response to contestation. Likewise,

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86 Stoeva, 9.
87 Ibid, 8.
89 Stephan Haggard and Beth A. Simmons, “Theories of International Regimes,” International Organization 41.3 (Summer 1987): 496-498.
states’ acceptance of norms evolves with the evolution of the norms, per Constructivism’s notion of intersubjectivity. With regard to the BTWC, the contests appear to be related to the conditions above, specifically here, technology. I propose that the conditions that evoke cooperative contestation are states seeking equality, equity, and equanimity with regard to the implementation of Article X of the BTWC specifically.

**Operationalization of Norms**

The operationalization of norms “is a matter of interpretation,91 and will be used here to describe state level actions that indicate acceptance of norms. Implementation and enforcement of international agreements indicates a level of state commitment to an international agreement that simple signature, ratification, or accession bring, and while not alone indicative of state acceptance of adherence to norms is key to understand a state’s commitment to the norms. However, complete norm operationalization in the international space depends on domestic processes in an institutional framework which has a high degree of diversity as a permanent feature.92 While conflicting norms are difficult to establish in the first place because “actors can not be expected to concede on their principles,…”93 Once established, they may be easier to operationalize, though, as Elgstron posits, since states “may… be prepared to concede on matters of implementation (“how

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91 Lindner and Rittberger, 7.
93 Lindner and Rittberger, 8.
and when”) and on the scope or applicability of the norm.”

Key here is that implementation is part of operationalization, as is enforcement.

Enforcement of norms, especially the request by states for the enforcement of norms, is another key feature of operationalization. While much has been written on enforcement mechanisms for the nuclear agreements, enforcement is only inferred with regard to the BTWC because enforcement is generally associated with the disarmament norms. Without supporting declaration and verification principles and norms in the BTWC, the issue is moot at this point in terms of disarmament and other norms in the BTWC. Enforcement with regard to non-disarmament norms is one of the more significant findings of this study, however, and central to understanding “the have nots” contestation of the way the BTWC has been implemented. This is discussed in the data and the analysis chapters.

Schwellnus basis his analysis of norm implementation on what he considers the strength of the Constructivist assumption that, “Only well defined, consensually shared norms are counted as sufficiently strong to be effective, whereas contested norms are not expected to have any impact,” that is, to be implemented. And he attributes effective operationalization to a reduction in the slipperiness of the norms themselves, broadly speaking, that is, their ontological status as intersubjective phenomena rather than objective structural constraints or subjective motivations of the states; a lack of appeal to states’ populaces due to and absence of a direct call to action, and the international community’s aversion to constructing norms as clear-

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cut rules ("hard law") in favor of flexible principles.\textsuperscript{95} His own research demonstrates that effective implementation of norms relies on rights-based arguments rather than either utility-based or value-based arguments.\textsuperscript{96} The research here will be shown to support his findings with regard to contesting states in particular, even though utility comes in a close second. Furthermore, effective implementation of agreements depends on the sensitivity of the issue. Schwellnus explains, “In particular, states have tended to pay less attention to provisions requiring national implementation measures in treaties concerning weapons of mass destruction (WMD) than to equivalent provisions in treaties that impact states’ economies (such as those regulating trade, transport, migration and/or the environment). The implementation of nuclear, biological and chemical arms control and disarmament law is perceived by states as a sensitive issue because its primary focus is on the security of the state, rather than the individual. The absence of an international verification organization for the BTWC to this problem, while states parties’ reluctance, or unwillingness, to effectively address these matters in WMD agreement meetings to date has compounded the problem of ineffective national implementation.”\textsuperscript{97} More important, Elgstrom notes, even though conflicting norms are difficult to negotiate, and that norm negotiations are different than distributive negotiations because “actors can not be expected to concede on their

\textsuperscript{95}Guido Schwellnus, “The Role of International Norms in Domestic Norm Contestation: An Argumentation Analysis of the Polish Debate Regarding a Minority Law,” paper prepared for presentation at the workshop on Contested Compliance in International Policy Coordination – Bridging Research on Norms and Policy Analysis (Portaferry, County Down, Northern Ireland, 17-18 December 2005), cited with permission, 3.
\textsuperscript{96}Ibid, 33-35.
\textsuperscript{97}Persbo and Woodward, 3.
principles,…”98 actors “….may, however, be prepared to concede on matters of implementation (“how and when”) and on the scope or applicability of the norm.”99 So while implementation may be a valid measure of compliance, implementation may not be a predictor of contestation or lack thereof since compliance may not be an indicator or the lack of contestation. So, as Lindner and Rittberger suggest, by analytically separating institutional creation and institutional operation (implementation) phases and exploring their linkage, we may find a key to understanding subsequent institutional developments, i.e., the degree to which institutions are stable or contested.”100

Compliance

Compliance is generally understood to be acceptance, adhering by, or conformity to some defined standard. With regard to international agreements, compliance occurs at the individual state party level, although with regard to customary international law, arguably states do not necessarily have to be parties to an agreement to have their compliance assessed, i.e., to be considered compliant or non-compliance with an agreement. That is, compliance is understood to mean that states must bring domestic law into conformity with obligations under international law to ensure that agreements are upheld.101

As stated previously, theorists have concentrated their efforts on understanding compliance with international law rather than on deciphering contestation behavior or parsing the evolution of norms. As Hurd observes,

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98 Lindner and Rittberger, 8.
99 Elgström quoted in Lindner and Rittberger, 7.
100 Lindner and Rittberger, 3.
101 Persbo and Woodward, 3.
“Compliance and non-compliance have been treated in this debate as mutually exclusive opposites, with compliance leading to stronger international rules and non-compliance undermining them” although that may not be the case.102 Nevertheless, compliance is likely more often seen as the inverse of contestation, and hence must be addressed in advance of addressing contestation.103 Guzman thus concludes that no satisfactory explanation for state compliance with international norms exists, but that understanding state compliance is critical to international law since compliance underwrites it:

The failure to understand the compliance decision is troubling because compliance is one of the most central questions in international law. Indeed, the absence of an explanation for why states obey international law in some instances and not in others threatens to undermine the very foundations of international law. If international law matters, it must be the case that it alters state behavior in some circumstances. Without an understanding of this connection between international law and state actions, scholars cannot hope to provide useful policy advice with respect to international law. Without a theory of compliance, we cannot examine the role of treaties, customary international law, or other agreements. Nor can we consider how to improve the functioning of the international legal system, or develop a workable theory of international legal and regulatory cooperation.104

103 Whether contestation constitutes non-compliance will be addressed in the section on contestation as well.
Specifically, “The existing research on international norms puts ample emphasis on issues of norm compliance and state behaviour in the context of the growing legalization of world politics, and it aims to understand the behavioural choices that states make. Existing studies, however, do not seem to provide a comprehensive explanation of state actions neither prior to the creation of international norms nor in the process of their development. The current research is not concerned with norm compliance; instead it focuses on the question of how international norms come into existence.” However, overemphasis on the study of compliance and tendency to narrowly construe noncompliance alone with contestation misdirects analysis.

What we do know about compliance is that one, state compliance with norms is largely voluntary due to the nature of sovereignty, agreements, and the lack of a universal, centralized enforcement mechanism; and two, states generally comply with norms in international agreements to which they are parties in spite of a perceived cost to their sovereignty. Theorists consistently offer two reasons for compliance: “either the treaty coincides with the states’ interests or states have internalized norms that suggest that they should comply even when the obligation runs counter to their interests.” However, non-compliance alone is not necessarily an indicator of the contestation of norms, as both states in compliance may be involved in contestation behavior, as will be demonstrated. Thus, non-

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105 Stoeva, 7.
106 Henkin et al., 23. (Originally from Louis Henkin, *How Nations Behave*) Henkin also believes that international law is also hortatory and must always yield to national interests.
compliance is not alone a valid metric for determining whether a state is contesting a norm.

Nevertheless, it is important to recognize compliant behavior with regard to international agreements, since non-compliance comprises an important and easily recognized indicator of contestation. The indicators of compliance include but are not limited to: Signature, ratification, or accession to an agreement, implementation of an agreement, voluntary subscription to or observance of agreements, compliance with declaration and verification mechanisms, observance of norms in an agreement, and norm diffusion or proselytism to name a few. Obviously, compliance coincides with operationalization since whether and how international agreements are operationalized demonstrates whether and how the agreements are being complied with. Again, however, while these are indicators of compliance, they do not explain compliance.

Furthermore, contestation is not simply noncompliance – it is much more nuanced than that. Few theories for norm contestation have been put forward. Amongst those, interpretation of norms has been identified as one of the major conditions of norm change via the contestation of the meaning of a particular norm. As previously asserted, “Established norms are not static; they are constantly (re)interpreted and acted upon.” So, while, as Hoffman explains, social norms “[establish] standards that elicit conformance,” they are subject to interpretation, and subsequently contestation or modification. Thus, the contestation of norms should be expected as part of the implementation process because of varying
cultural frameworks for its interpretation.\textsuperscript{109} Furthermore, differing interpretations of norms can lead to variations in compliance, as Wiener reports happened in Operation Iraqi Freedom when states diverged on whether to participate in the coalition or not.\textsuperscript{110} Groups of actors contest each others’ interpretations of social norms and it is through this contestation that new, more specific norms emerge and original established norms are altered or reified....” which constitutes “a conceptual break from the notion that conformance is the key implication of social norms.”\textsuperscript{111} Moreover, “processes of contestation reveal their political potential under pressure, i.e. in times of crisis.”\textsuperscript{112} Crisis, then, such as the contemporary contestation of the nuclear agreements by several states, heightens the salience of the political issues the agreement is embedded in as well as exacerbates contestation behavior by the states most affected politically.

Theorists have attempted to identify compliance in terms of when states comply with international agreements. Curiously, though, and here with particular regard to the WMD agreements, states generally comply with the treaties even when the specific conditions identified by theorists do not necessarily explain compliance behavior. For examples, for Jeffrey Checkel, Martha Finnemore, Margaret Keck, Jeffrey Legro, Thomas Risse-Kappen, Kathryn Sikkink, compliance is embedded in a good “fit” between international and domestic norms. That conclusion would insinuate that the general reason states comply with WMD agreements derives from common values rather than from instrumental calculations.

\textsuperscript{109} Wiener, “Contested Meanings of Norms,” 2.
\textsuperscript{110} Wiener, “Contested Compliance,” 193.
\textsuperscript{111} Hoffman, 6.
\textsuperscript{112} Puetter and Wiener, 7-8.
which has also been pointed out as a likely candidate for compliance, and discounts other reasons states themselves register. Santa-Cruz points to norm diffusion and moral cosmopolitanism (where norms are held as universal and spread largely through “moral proselytism” by transnational movements) as indicative of compliance. In addition, Wiener argues that successful norm diffusion depends on cultural validation, indicating that diffusion is a necessary condition for compliance. Wiener believes, since, hypothetically, the meaning of norms evolves through discursive interventions “that can lead to either the confirmation or the reinterpretation of their meaning, which in turn determines compliance with the norm.” Thomas Franck, suggests that “states are likely to obey norms of international law that have a high degree of ‘legitimacy.’” He goes on to define legitimacy as having four indicators: “determinacy - the ability of a rule to convey a clear message; symbolic validation a ritual or signal of ‘pedigree’ that induces compliance by communicating the authority of the rule or of its originator; coherence – the extent to which application of a rule is consistent and also justifiable in principled terms; adherence – the nexus between a ‘primary rule of obligation’ and ‘a hierarchy of secondary rules’ that defines how rules are to be made, interpreted and applied.” Absent these, Franck argues, a state will be tempted to pursue its own self-interests, which he does not see as a sufficient

116 Henkin et al., 36.
condition for compliance to norms. With specific regard to compliance with WMD norms, Kartchner posits that, “A culture’s predisposition to adhere and conform to international norms related to weapons of mass destruction, or that culture’s preference for rejecting, ignoring, or flouting such norms, is an important strategic cultural indicator of how it will approach the other three decisional factors related to weapons of mass destruction.” While, as Kartchner suggests, strategic culture may provide insight into motivations and intentions not readily explain by other frameworks, as with the theory of “good fit,” while any or all might be necessary conditions for compliance to norms, none offered above appears to be a sufficient condition for compliance, nor do they explain contestation. I argue that compliance and contestation are not mutually exclusive, and that states have preferences for which norms they contest depending on political and economic factors. So while in an ideal world states should have higher philosophical standards for their reasons for adherence and contestation, the data here suggests that it is more utilitarian. Determining whether this is a positive or negative indication of the value of international law to states is outside the scope of this paper, however.

Just as reasons states comply with norms vary, so do degrees of compliance. Noutcheva distinguishes fake, partial, and non-compliance with norms, and argues that the lack of strong normative justification affects the degree of compliance,

117 According to Kartchner, who was examining strategic culture to determine whether it strengthen or undermines international or domestic adherence to norms, “Strategic culture” – “shared beliefs, assumptions, and modes of behavior, derived from common experiences and accepted narratives (both oral and written), that shape collective identity and relationships to other groups, and which determine appropriate ends and means for achieving security objectives.” See Kartchner, 3-8.
118 Ibid, 9.
119 Ibid, 6.
particularly on sovereignty-related issues, if domestic political actors’ question the legitimacy of demands. For Henkin, “The commitment of states to the rule of law in international relations, the norms of international law that the system has developed, and the measure of compliance with those norms at different periods and in different contexts, all reflect the major political forces in the system and respond to periodic change in that system.” So, just as norms evolve, so does compliance, seriously complicating establishing trends and subsequently identifying sufficient causes of compliance.

Reciprocity – both specific and diffuse – are also seen as necessary preconditions to general compliance with norms. Specific reciprocity describes situations in which roughly equal actors engage in a bilateral agreements, usually contracts, to procure similarly valued goods or services through promissory exchanges. Keohane notes that specific reciprocity can be a temperamental, temporary, and isolated form of cooperation that can frustrate those who seek stable, beneficial agreements, even though it can ensure some level of cooperation in the anarchic world of international relations. Specific reciprocity also portrays agreements as merely epiphenomenal evidence of momentary state interest, rather than reflective of lasting or meaningfully binding norms on state behavior. On the other hand, diffuse reciprocity describes interactions between states or groups, with a broader scope of commitment to accepted standards of behavior that will reduce unnecessary and inefficient conflict. Nevertheless, he cautions that diffuse

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121 Henkin et al., 3. (Originally from Henkin, “Chapters 1-4,” How Nations Behave.)
reciprocity can only be achieved where the actors share compatible interests and norms of obligation. Absent these prerequisites, diffuse reciprocity exposes parties to exploitation.\textsuperscript{122} Watts, however, concludes that, “The traditional principle of reciprocity both reflects and reinforces an international legal system dominated by sovereigns. Negative reciprocity, a measure of state self-help, follows easily from a system that sees the state as the true and perhaps exclusive beneficiary of international legal norms.”\textsuperscript{123} Consequently, while reciprocity, particularly diffuse reciprocity, might be a necessary condition for compliance to norms, reciprocity can also be used to obtain states’ interests, which seems antithetical to the concept of norms. Taken together, the absence of these conditions also constitute possible indicators of contestation, which will be discussed in the next section.

Watts has identified other conditions that might thwart compliance – or perhaps reasons for contestation:

1. Disagreements over empirical and scientific evidence that informs the development and implementation of norms
2. Differences in how to weight the importance of different types of evidence in the development and implementation of norms
3. The indeterminacy of concepts regarding norms
4. Differences of experience, and the existence of a plurality of moral and political values

\textsuperscript{122} Keohane summarized in Watts, 370. (Originally from Robert O. Keohane, “Reciprocity in International Relations,” \textit{International Organization} 40.1 (Spring 1986): 1-27.)
\textsuperscript{123} Ibid, 417.
5. Disagreement about the weight of the relevance of norms to particular cases, and

6. The need to select some norms over others\textsuperscript{124}

Looking at these from the inverse could imply that the existence of these conditions, e.g., agreement over empirical and scientific evidence that informs the development and implementation of norms, or agreement on how to weight the importance of different types of evidence in the development and implementation of norms, etc., that concurrence on these conditions underwrites compliance with norms. Conversely, disagreement over these could indicate contestation. How these assumptions play out here will be examined in the chapters on analysis as well.

Interestingly, compliance with norms itself has not always been the norm. Persbo and Woodward note that, “The shift in emphasis from international verification to national compliance is amplified by UN Security Council action since September 2001 to create and enforce legally binding rights and obligations, in particular, to create obligations for those states that remain outside these treaty regimes.”\textsuperscript{125} That is, compliance appears to have replaced verification that states parties were in compliance to the general expectation – i.e., norm – being that compliance is the expectation regardless of whether a state is a member to an agreement or not. This itself has provoked an interesting debate, and defiance,

\textsuperscript{125} Persbo and Woodward, 2.
amongst nonmember states to international agreements which will be further
explores in the Analysis Section, too.

Nevertheless, UN member states, whether states parties to agreements or
not, continue to generally and explicitly accept the need for norms for state
behavior with regard to WMD as well as to generally comply with them even if
they contest them as well. This extension of the expectation of compliance to
international agreements for all states, states parties to agreements or not, marks a
significant shift in the expectations of customary international law, and will be
addressed as one of the possible conditions provoking cooperation to contest norms
in a later discussion. Hence, noncompliance does not appear to be a good indicator
of contestation.

Contestation

Contestation of anything is an indicator that some party to an agreement is
not in concurrence with a part or the whole of the agreement. The same appears to
be true for the contestation of norms and WMD agreements. With regard to
international agreements, though, contestation is not complete rejection as much as
it is a questioning of some element of an agreement or how the agreement is being
operationalized (implemented and enforced). Contestation of norms, like genetic
evolution, is not only a part of the process of norm development, it is inevitable.¹²⁶
“States may decide to violate international law in an attempt to work a change of
custom or treaty interpretation,” and, “A state might knowingly deviate from what
had been established law (or established interpretation of a treaty) in hope of

¹²⁶ Florini, 367.
changing the law may…change in response to new needs and new insights.”\textsuperscript{127}

Returning to Florini’s analogy of norms being instruction units much like genes, Florini states, “These units influence the behavior of their host organisms. And norms, like genes, are ‘contested’ – that is, they are in competition with other norms or genes that carry incompatible instructions – and some are reproduced at much higher rates than their competitors.”\textsuperscript{128} She goes on to say, “Norms evolve because they are subject to selection. The genetic analogy suggests that, as with any instructional unit subject to selection, three factors account for the reproductive success or failure of a contest norms: (1) whether a norm becomes prominent enough in the norm pool to gain a foothold; (2) how well it interacts with other prevailing norms with which it is not in competition, that is, the “normative environment”; and (3) what external environmental conditions confront the norm pool. No one of these is sufficient to determine the path of a norm’s evolution. Each is a necessary but not sufficient condition.”\textsuperscript{129} To summarize Florini, the process is competitive or conflictual, and norms are selected because they are more prominent (widely recognized), can survive in the normative environment – i.e., can compete effectively with other norms in the same category, and they can survive hostile conditions in the external environment, that is, in the environment in which they are operationalized. Moreover, according to Kocher and Schuessler, “Normative conflict will remain a problem at the international level,” because

\begin{footnotesize}
\begin{itemize}
\item \textsuperscript{127} Henkin et al., 27. (Originally from Louis Henkin, “The Invasion of Panama Under International Law: A Gross Violation,” \textit{Columbia Journal of International Law} 29.2 (1991): 293, 311.)
\item \textsuperscript{128} Florini, 364.
\item \textsuperscript{129} Ibid, 374.
\end{itemize}
\end{footnotesize}
“normative conflict will be even more problematic at the international level than at the domestic level.”

The literature on contestation of norms is thin, although, as Kelle notes, within international relations, “…the literature has recently been advanced by the notion of ‘contested compliance’ as a means to investigate ‘changes in the normative structure of world politics.’” Even then, Wiener notes that the treatment of the topic of noncompliance has been thin and largely focused on the reasons states comply with norms and how non-compliance might be explained. She adds, “The case study of contested compliance is carried out to illustrate the input of social practices on changes in the normative structure of world politics,” which narrows the scope of possible pressures to the influence of intra-state social behavior on international relations. Even then, Kelle adds, “intra-state analysis has stopped with the determination of (non)-compliance, upon which the focus of attention has shifted to the question of how to deal with non-compliant behavior.” In overfocusing on non-compliance, much of what is purported to happen in the discursive feedback loop remains poorly understood. This study examines contestation more broadly, looking at both contested compliance and non-compliance behaviors to identify contestation behaviors as well as the reasons states engage in contesting WMD norms, and moreover, whether states are cooperating to contest WMD norms, either through contested compliance or non-compliance.

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130 Kocher and Schuessler, 3.
131 Wiener defines contested compliance as “a situation in which compliance conditions are challenged by the expected norm followers.” (Wiener, “Contested Compliance,” 189.)
Constructivists also point to a lack of internalization as a precursor to contestation. As stated earlier, Constructivists see normative structures deriving from a process that requires internalization before discursive intervention – their mechanism for norm evolution - to occur prior to contestation. The necessity of those conditions is not obvious since Kelle himself demonstrates that the United States’ contestation of the norms in the BTWC was a strategic ploy to effectively derail the implementation of the BTWC norms by replacing it with a competing normative regime structure that the United States never intended to ratify, i.e., internalize. The necessity of internalization prior to contestation also seems antithetical in an era where the P5 arguably disproportionately influenced the development and implementation of WMD norms. As Reisman noted, “The independence and rights of choice of smaller states were restricted by larger neighbors in their own interests and, it was often avowed, in the interest of systemic security.” This was further exacerbated by awarding the five major protagonists singular veto power in the United Nations Security Council (UNSC), which effectively disenfranchised smaller states as many issues were redefined as security threats and referred to the UNSC for action.

Negative experiences in compliance with norms that negative experiences can also affect the state’s willingness to abide by international norms, Kartchner proffers. Kartchner also posits that rejection or adherence to WMD regimes and norms is most likely to occur when such adherence is deemed “rational” within the system of shared meaning, or adherence is perceived as enabling decision makers to

134 Reisman as quoted in Henkin et al., 4. (Originally from W. Michael Reisman, “International Law after the Cold War,” American Journal of International Law 84.4 (1990).)
achieve culturally-endorsed outcomes, or the ends and means for achieving the culturally endorsed outcome (adherence) are consistent with a “repertoire…of adaptive responses” deemed appropriate by decision makers.\textsuperscript{135} No global studies of contestation of a specific category of norms, such as the WMD norms, have been conducted, to date, though, making most of this analysis anecdotal or case-specific at best.

More logically, contestation can occur at any point in the process of development and implementation of international agreements and can take on many forms. It would certainly be logical and believable that contestation might occur at every phase of norm development and implementation as exemplified in the number and types of behavior contestation. There is an array of obvious contestation behaviors: failure to sign, ratify, or accede to an agreement, obfuscation of an agreement, failure to implement or enforce an agreement, one-upmanship, withdrawal from an agreement, violation of an agreement, a prima facie breach of treaty language,\textsuperscript{136} and ambiguous actions that “edge close to a prohibited activity or actions, that, while not banned, raise the possibility of circumvention”\textsuperscript{137}

Formal contestation, even in a customary law environment, is an acceptable if discouraged behavior. Indeed, Henkin et. al note, “The development of new norms often depends on accompanying a particular expression of a norm only if there is put in place a means for resolving disputes as to its meaning or

\textsuperscript{135} Hudson as quoted in Karchner, 8. (Originally from Valerie M. Hudson, “Culture and Foreign Policy: Developing a Research Agenda,” \textit{Culture and Foreign Policy}, ed. Valerie M. Hudson (Boulder: Lynne Rienner, 1997).)


\textsuperscript{137} Ibid.
application….” Thus, specific agreements generally contain a clause that explicates the process states can use to withdraw from a treaty they have ratified. Moreover, since the Vienna Convention on the Law of Treaties entered into force in 1980, Article 54 of The Vienna permits states to terminate or withdraw from a treaty “in conformity with the provisions of the treaty; or at any time by consent of all the parties after consultation with the other contracting States.”

Informal contestation is unregulated. Though Henkin et al. accept that a change in custom or a new interpretation of an agreement may be in order due to changing state needs or new insights on the issue addressed by an agreement or law, and “States may decide to violate international law in an attempt to work a change of custom or treaty interpretation,” informal contestation may be hazardous not only to the state but to the international system. Henkin et al. also believe that states that employ informal contestation strategies (defiance of a treaty, deviation of the customary interpretation of an agreement, etc.) put the state at peril since the state could be perceived as violating the law, and suffer the consequences. But the greater concern appears to be that informal contestation also might open up the question of whether customary law is valid in such cases, bringing the system of customary law into question as a whole.

One significant problem in our failure to examine behavior for nuances in behavior that might signal contestation. In relating contestation to noncompliance, we may misattribute, misinterpret, overanalyze or infer intent, or even overlook the

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138 Henkin et al., 27.
140 Henkin et al., 27.
141 Ibid.
importance of a particular behavior because we miss the significance. Shear suggests using the following criteria to distinguish contestation from other intentions: \(^{142}\)

- Whether an action violates treaty language, and if not whether it creates tension regarding obligations.

- Whether an action, even if it does not breach treaty language, alter or disappoint expectations, and if so, whether expectations were Realistic.

- Whether the conduct affects formal or informal rules for verification of the agreement or for resolving disputes over compliance.

- Whether it suggests anything about state motives.

- Whether a violation or ambiguous actions contributes to a state’s military capacity or alter the balance of power.

- Whether an action, even if not a clear violation, improve a state’s ability to abrogate an agreement.

- Whether an action undermines the predictability or transparency of the balance of power.

While this might offer a means for distinguishing the intent of various state behaviors, it does not offer explicit reasons for the contestation of the BTWC or other WMD agreements or norms, nor does it explain why states might cooperate to contest the WMD norms, which is a key element of this study.

\(^{142}\) Shear, 146-7.
Though necessary to avoid completely conflating noncompliance with contestation, it appears that as “…all compliance problems are not of equal consequence,” neither is all contestation behavior of equal consequence. “Although we may attribute considerable significance to a noncompliant act simply because it occurs, informed policy judgments require a sense of what the other side gains, or what we lose, as a result of a given action…” if agreements “exist to protect or advance national interests”¹⁴³ as Schear suggests, or more broadly, what assumptions and conditions might underlie contestation. A more methodological and discrete analysis of contestation behavior is required to do so.

Finally, contestation is not necessarily noncompliance. As will be seen, states can be party to agreements but continue to contest various aspects of the agreements for various reasons. While theorists have defined a behavior which they have labeled contested compliance, the international community continues to equate contestation with noncompliance. This sort of reductionism does not serve to distinguish the two and to determine how each separately and together impact WMD agreements.

**Cooperation**

Not surprisingly, Liberalism has the most to say about cooperation, compliance, and contestation of international norms since it examines international institutions and the interplay of international decision makers in greater depth than either Realist theories or Constructivism. Institutionalists hypothesize that cooperation more likely if actors know the payoffs and distributive implications of

¹⁴³ Schear, 145.
their institutional choices (lower level concerns) because they can project expected distributive effects; where these effects are not obvious, institutional choices may be more contested; where actors are not able to make the calculation as to the distributive effects, institutions are likely to be conflicted due to opposing norms or polity-ideas. The widespread use of game theory amongst Liberal theorists to predict outcomes of state interaction, while useful in understanding bimodal behavior, it does not capture the range of assumptions and conditions that states consider when determining their strategy with regard to the negotiation or implementation of WMD norms, the complexity of those decisions, nor the impact of collective action. In Liberalism, cooperation derives from game theory under anarchic conditions without supranational enforcement capability. Moreover, “Cooperation is affected by perception and misperception, the capacity to process information, and learning,” rather than to instrumentalism or to reactions to assumptions or conditions in the international system. They assume that actors learn, and consequently, their strength lies in their ability to explain the “substantive content of regime rules and why they evolve.” So, ultimately, actors act and react based on knowledge. However, game theorists “cannot predict at what point consensual values or knowledge will produce cooperation. Consensus still may not overcome problems of collective action.” More importantly, cooperation may be an unintended consequence, i.e., several countries may cooperate in response to a threat (political, economic, social) from another state or group of states, or in response to instruments developed that might have the same effect, here limits on

144 Lindner and Rittberger, 7.
145 Haggard and Simmons, 504.
notions such as sovereignty, scientific and technological development, economic expansion, etc.

Hence, while game theory might predict compliance or contestation, it might miss concurrent contestation behavior as well as cooperative contestation due to its lack of dimensionality and reliance on knowledge as a game changer. Indeed, Liberal institutionalists’ “…interest in regimes sprang from a dissatisfaction with dominant conceptions of international order, authority, and organization. The sharp contrast between the competitive, zero-sum “anarchy” of interstate relations and the “authority” of domestic politics seemed overdrawn in explaining cooperative behavior among the advanced industrial states. Consequently, the movement toward regime theory did not improve on Liberalism’s ability to predict concurrent or collective behavior, including contestation, outside of the context of states sharing similar normative (as opposed to instrumentalist or distributive effects) frameworks for decision making.

Establishing a general trend of WMD norm contestation constitutes an important element of this study. Establishing state-level cooperation to contest WMD norms is equally important and perhaps more significant to international relations since it signals an emerging pattern of state-level behavior that might have a profound impact on the development and implementation of international agreements, and even on international law as a whole. Most importantly, if a trend for state-level cooperation to contest WMD norms can be ascertained in one of the most critical areas of international security, and cooperation to contest WMD norms

\textsuperscript{146} Haggard and Simmons, 491.
is shown to be successful, the fate of not only WMD agreements but other significant international security agreements – or international agreements in general – may be in question. Hence, understanding cooperative contestation is value-added to the understanding of the effect of international law and international agreements on state behavior.

While a significant amount has been written about cooperation at the institutional level, nothing has been written specifically about cooperation as a strategy to influence norm development or as a strategy to contest norms. Pooled sovereignty constitutes the closest fit to the concept of cooperative contestation, and the only one that has been specifically applied to normative structures. As Wiener summarizes, “… regional integration based on the practice of pooled sovereignty in the context of supranational institutional settings became a widely accepted concept for stabilizing that normative structure (Haas, 1958; Brunkhorst, 2002; Haas and Haas, 2002). Now, one could hypothesize about an emerging pressure and contestation of shared norms which will either — as a social outcome — favor and enhance the normative structure of regional integration, or, lead to competition among different normative structures.”

Even then, pooled sovereignty explains only this single mechanism for cooperative contestation, and within that, only examines normative convergence as a necessary condition for norm contestation.

The policy dilemmas created by the growth of interdependence since World War II generated new forms of coordination and organization that fit uneasily in a

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Realist framework.” But Liberalism did not fare much better. Given the “...generally held belief that Western states create a community of shared values and norms which facilitate rather than hinder cooperation in the international arena – in particular in situations in which these values and norms are threatened,” they were surprised to discover that this assumption did not hold when crisis was injected in the situation. At the end of the day, they concluded that a “common commitment to Liberal norms and the rule of international law is not sufficient to substantiate a consensus over policy.” They proffered that this finding demonstrated a need to understand the mechanisms by which governments resolve differences on norms and coordinate international policy at the intergovernmental level, and more specifically, “… what lessons can be drawn from the persistent occurrence of normative divergence on foreign policy matters with a view to decision-making institutions and procedures in close communities of states…” If not predictable in states with shared values, how much less predictable in states with divergent values, as will be demonstrated in the data.

Henkin points out, “It is now widely accepted that understanding the regional and cultural context for US foreign and defense policy, especially with respect to combating the proliferation of weapons of mass destruction, and preventing their use against the United States or its allies and friends abroad, is required to effectively promote US nonproliferation objectives. This is in part due to the transition from a world dominated by a simple bipolar conflict with clear ideological underpinnings and motivations, to a vastly more complex world of

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148 Haggard and Simmons, 491.
149 Puetter and Wiener, 2.
150 Ibid, 2- 3.
numerous actors (both state and non-state) whose motivations are unclear, and whose objectives may not always be explicit, or are not conveyed in terms we understand.”¹⁵¹ Even post Cold War Russia has been “stressing the need for cooperation in international law.” Referencing Mullerson, he observes that “New global problems challenging humanity – the threat of nuclear holocaust, environmental crises, economic difficulties…can be solved only by all states acting together, by the common efforts of all nations.”¹⁵² While the reflex has amongst analysts has been to understand why states seek WMD and how to prevent proliferation of WMD, the cooperative contestation of WMD norms appears to provide a more complete understanding and explanation of WMD behavior overall, including proliferation.

**Back to the Future: The Fate of BTWC**

The argument here is that states are actively contesting norms in the BTWC and cooperating to contest or attempting to modify WMD norms. This is not surprising given the evolution of conditions and assumptions underwriting the norms in the agreements, and the greater importance placed by the states on how economic conditions in particular affect their viability. This contestation was somewhat subtle and passive, and not particularly or deliberately cooperative, up through the development and attempted implementation of the NPT. More notable is the deliberateness and informal cooperation (as opposed to formal collective action) that they have employed to contest the development, institutionalization, implementation, and enforcement of the BTWC, especially Article X.

¹⁵¹ Kartchner, 5.
¹⁵² Henkin et al., 6.
Although the BWTC entered into force in 1975, there was little interest in its development or implementation until the 2001 Amerithrax attacks. Curiously, in spite of rather dramatic and dire warnings about the increased risk of a biological attack, states have oddly continued to remain content with leaving the BTWC essentially nearly as it has stood since inception. It continues to consist of seven sparse pages of text which do little more than codify what have become the standard exhortatory norms embedded in the other WMD agreements, with a few additional implementation protocols which Kelle has deemed to have little value. On the surface the behavior appears to be rather innocuous: a slow roll by states unconvinced of the value of the BTWC in an international environment where other issues such as natural disasters and natural epidemics appear to be more imperative. However, at a deeper level it appears to be states deliberately employing diverse cooperative contestation tactics in an attempt to be especially economically bulldozed by either the enforcement of Article X or the nonenforcement of Article X. The reasons for this contestation are the same for both groups of contestants: issues of equality, equity, and equanimity, which will be carefully analyzed in the ensuing chapters.

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154 “Risk” is classically defined as the possibility of an event happening multiplied by the impact of the event, and is used according throughout this discussion.
Chapter 3

International Relations Theory, Norms and Cooperative Contestation

IR Theory and Norms

To return to the argument here, states are cooperatively contesting the norms in the BTWC or their enforcement. The sense of imbalance behind this behavior is directly related to how they assess the impact of Article X in terms of equality, equity, and equanimity. In spite of this potentially profound finding and the reasons for it, few analysts have attempted to examine this behavior or to determine how such a finding might affect international relations, international law, or the future of international agreements. In this chapter, I summarize how each of three prominent international relations theories views norms within international relations, how the assumptions of each influence how they view state WMD behavior in general, and how they address cooperation with particular regard to contestation.

Assumptions Aweigh

States derive their assumptions about state WMD behavior from multiple sources, but the most dominant source of assumptions used for the development of the WMD agreements during the Cold War were those derived from the Realist theories of international relations. International relations theories provide various frameworks that allow policy makers and analysts to describe, explain, and predict the behavior of the units in the international system, with states being the most prominent unit. Morgenthau likened the “difference between
international politics as it actually is” and “a rational theory derived from it” to that “between a photograph and a painted portrait. The photograph shows everything that can be seen by the naked eye; the painted portrait does not show everything that can be seen by the naked eye, but it shows, or at least seeks to show, one thing that the naked eye cannot see: the human essence of the person portrayed.” 156 We look here, then, at the portrait, and how that portrait portrays the role of norms by the painter. More specifically, since states have largely been the units in the international systems that deal with WMD programs, the discussion here will necessarily focus on the assumptions of each theory of international relations with regard to state behavior in general, as well as how each of the three theories perceives the role of norms within the international system.

The core tenets of the Realist, Liberal, and Constructivist schools of international relations and their family trees are well known, as are their assumptions about international security. Since each school’s position on norms and cooperation is fully discussed in other literature, I only offer an overview of each of the three theories here, with the discussion centered on how each theory addresses norms, their role in the international system, and their influence on state behavior, with particular emphasis on state WMD behavior.

Realism

Realism is a positivist and rationalist theory that assumes, at its core, that states are the fundamental units in an anarchical international system that they are driven by self-interest, and that war is consequently natural and unavoidable. According to this theory, states employ

military power to improve their relative power position\textsuperscript{157} so they can obtain or defend their interests\textsuperscript{158} in a static international environment with a pre-determined amount of power to distribute amongst the units. Hence, self-help rather than cooperation is the primary means by which states survive or thrive in this zero-sum international system. Mearsheimer sums up Realism as interests and power.\textsuperscript{159} Consequently, with regard to security issues, Realists believe that the relative power of states in the international system adequately explains state behavior at the system level because states seek to survive and to attain relative gains in power, especially military power, which is a means to an end to relative gains. Thus, for Realists, state relations and interactions occur in a competitive security environment with each state looking out for itself, with states unable to “depend on others for their security,” and with “alliances [as] only temporary marriages of convenience.”\textsuperscript{160}

Realists believe that Realism adequately describes state behavior at the system level. The underlying assumption here is that while state behavior at the unit level changes, the fundamental behavior of states at the system level remains largely static. Consequently, for Realists, all interstate behavior derives from self-interest and results in relative gains, so state behaviors constitute instruments through which those objectives are achieved.\textsuperscript{161} Returning to the role of norms as functioning in part to make expectations about state behavior more predictable, or static, it would seem logical that the function of norms within Realist theory would be to act as

\textsuperscript{159} Mearsheimer, “Hans Morgenthau and the Iraq War,” 1.
\textsuperscript{161} Mearsheimer warns that Realism should not be conflated with neo-conservatism, as is the current reflex. Neo-conservatism believes that overwhelming technological superiority, i.e., military power, levels the political playing field and can induce an environment that makes the realization of idealist goals such as democratization possible. See Mearsheimer, “Hans Morgenthau and the Iraq War,” 4.
leverage to create a more predictable international environment. Instead, Realism assumes away
the need for norms because it assumes that relationships between the units in the system are
largely static – i.e., predictable. Accordingly, “The conventional separation in IR theory between
instrumental behavior and legitimated norms as explanations for state action has discouraged the
study of phenomena that include both. As a result, important practices, including hypocrisy,
norm violation, and the strategic reinterpretation of rules and laws, are under-examined.”

Critical to the context in which WMD norms were developed and implemented is that,

Realism, in its various forms, has been the dominant theoretical approach to International
Relations for most of the Cold War period, but in recent years other approaches that
emphasize international cooperation, the importance of international norms and
institutions and cooperation have gained greater acceptance. This is not confined to the
community of scholars, but as became evident during the Iraq crisis has permeated much
of public opinion.

As President George H. W. Bush articulated, he looked forward to “a new international system
of states to replace the bi-polar Cold War order based on a consensus among major powers on
international norms, principles of international law and human rights that should govern relations
among states.”

**Role of Norms in Realism**

Klotz sums up the Realist position on norms in international relations, stating:

In international relations, because of the prevailing Realist perspective, debates over the
role of norms are often reduced to basic arguments about material interests versus ethical

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163 Bluth, “Norms and International Relations,” 2.
164 Ibid.
ideals. Realists characteristically reject norms as rationalizations for self-interest and deny them explanatory power. But if norms are solely a moral alternative to interests, only in the absence of motivations of interest would Realists give credence to a norms explanation. All behavior, even altruism, can be reduced to individual rewards and interests explanations….In practice, actions are motivated by a complex combination of self-interest…, self-affirmation…, and group interests. To understand the role of norms, therefore, we should move beyond the paradigmatic division between the Realists and the idealists.⁶⁵

This thinking derives from Realist thinking on institutions as well, of which norms comprise a subset. Broadly speaking, Realists believe that institutions do not matter because they merely reflect the balance of power in the world.⁶⁶ While Realists recognize that “…states sometimes operate through institutions,” they believe that institutions and rules “reflect state calculations of self-interest based primarily on the international distribution of power” with “[t]he most powerful states in the system creat[ing] and shap[ing] institutions so that they can maintain their share of world power, or even increase it.”⁶⁷ That makes institutions primarily arenas for acting out power relationships.⁶⁸ Moreover, while Realists recognize that institutions help overcome the problem of cheating by creating rules that constrain states, they contend that institutions are instrumental – that states leverage them out of self-interest rather than to simply reduce conflict or facilitate state-to-state interaction as Liberals contend.⁶⁹ Hence, though cooperation is possible, it is inhibited by relative-gains considerations and concerns about cheating.⁷⁰ Realists

⁶⁷ Ibid, 13.
⁶⁸ Ibid.
⁶⁹ Ibid, 14.
⁷⁰ Ibid, 12.
also consider international agreements generally nothing more than a reflection of the power system. Thus, as Kocher and John Schuessler conclude, “Given that normative conflict is inevitable, Realists like Morgenthau argue that temporary balances of power are the best the world can do, and the alternatives (hegemony, total war) are much worse….Short of thick normative agreement, temporary balances of power and interest are the best that the world can do.”

Moreover, norms create an uncomfortable space for Realists, not only ontologically but epistemologically. Most difficult, though, is the association of norms with collective security, since collective security collides with the Realist assumption of self-help. Realists like Mearsheimer and Waltz are fundamentally skeptical of collective security, which implies a distrust of the ability of norms to influence state behavior, especially as regards international security. The current international security environment, however, relies largely on collective security. As Bluth points out, certain norms are related to collective security in establishing standards for state behavior, and the collective must observe them to achieve international security. Hurd does not see norms and interests as mutually exclusive, since norms can be used instrumentally, and accordingly believes that Realism can accommodate norms. According to Bluth, this is consistent with Realist approaches, and Mearsheimer advocates the need for the establishment of European security group to balance out fragmenting Soviet power and US hegemony. Not surprisingly, given their penchant for institutions and their beliefs about the ability of institutions to influence state behavior, European states opted instead to join multilateral organizations such as NATO and the EU, and to accept international norms on the

use of force and the concomitant constraints on their foreign and domestic policies. This illustrates that while Realists can accommodate collective security, it is its utility they find attractive.

Realism has a mixed track record on its ability to predict state behavior with regard to WMD behavior, even acquisition. This is ironic, given that all WMD agreements are based on Realist assumptions. Even though states are no longer subject to the classic security dilemma as evidenced by falling defense budgets, and “do not fear any kind of military threat emanating from other states against their territory,” states continue to hold onto or pursue nuclear weapons programs to some degree. While South Africa, Belarus, Ukraine, and Kazakhstan have all dismantled their nuclear capability, India, Pakistan, the DPRK, Iraq, Iran, and Israel have continued to pursue it despite sanctions. Although possession of WMD appears to incite proliferation, rather than deter it as Realists argue, nuclear proliferation on a grand scale has not happened as Realists predicted.

However, states do increasingly perceive threats to their economies, and not in terms of their military power. Describing the international system as anarchic is arguable, since most states do not face an external military threat, and because the general worry over the use of WMD has been limited to a select number of states that overtly flaunt international WMD norms. Consequently, it is questionable whether any Realist framework can adequately provide valid assumptions about state WMD behavior, since its own assumptions in this context apply to so few states. States currently face two interstate challenges – the financial impact of economic globalization and terrorism. Realism does not accommodate either, moving the theory further

173 Mearsheimer as characterized in Bluth, “Norms and International Relations,” 4.
174 Ibid, 11.
175 Ibid, 15.
into irrelevance, except for the fact that the WMD norms themselves were developed using Realist assumptions.\textsuperscript{176}

Finally, states implicitly acknowledge norms, their ability to define expectations, codify normative behavior, and their potentially prescriptive influence, even if Realists theorists do not. For example, as Bluth notes,

It is true that states remain reluctant to intervene in conflicts or crisis situations when their own national interest is not at stake. Paradoxically, this is in part a consequence of the institutions and norms that have been created that mitigate very strongly against the use of force except in the case of self-defence. It is becoming increasingly clear that the predilection against intervention in the internal affairs of other states which was codified during the Cold War period is weakening in the face of a changed international system where conflicts arise predominantly at a sub-state level.\textsuperscript{177}

That is, non-interference was an implicit norm (expectation) until sub-state level issues that had the potential for pouring over state boundaries into other states or which had the potential for destabilizing the state system emerged. Now, the norm of non-interference is being quickly replaced by an expectation (norm) that other states will come to the aid of another state if an internal, threatening issue arises. In addition, though the expectation during the Cold War was that states would use power to achieve their objectives, the new norm is that the use of military force is largely coercive.\textsuperscript{178} While national interests and power are still important for Realists, to some degree, these are norms in and of themselves because they define expected behavior, leaving Realists with a philosophical dilemma to contend with.

\textsuperscript{176} Bluth, “Norms and International Relations,” 16.
\textsuperscript{177} Ibid, 24.
\textsuperscript{178} Ibid, 24-25.
Realism and WMD Norms

Robert Art and Kenneth Waltz contend, “states in anarchy cannot afford to be moral,” because, “The preconditions for morality are absent in international politics.”¹⁷⁹ For Realists, states must be highly rational, because in an international system where anarchy – the absence of a world government to enforce agreements, norms, or laws – rules, states must do what they need to in order to survive. Moreover, most Realists contend that ethics play no role in the acquisition and use of WMD because states do not follow ethical norms.¹⁸⁰ That is, Realists assume that states generally operate under Realist assumptions, which assert that states base their decisions on international relations on their interests, which are predominately their need to obtain relative gains in power, and especially military power. But, Bluth observes, even in war, which is a constant state for Realists, “very considerable resources were expended to ensure that the Allies acted in conformity with international conventions,”¹⁸¹ during Operation Iraqi Freedom (OIF). For example, in OIF, “The kind of strategic bombing of civilian areas that occurred in World War II would not be considered unthinkable.”¹⁸² Even the Bush II administration recognized that there are “normal” states in singling out “anarchic states” (rogue states), with anarchy defined as non-democratic authoritarian regimes, state-sponsorship of terrorism, and WMD acquisition programs.¹⁸³

Though Sagan himself believes that ethical norms sometimes have an impact on states, he also proffers that Realism is correct in assuming that “the impact of such norms cannot be understood outside the context of power relations in the anarchic and competitive international

¹⁷⁹ Sagan, 74.
¹⁸⁰ Ibid, 73.
¹⁸² Ibid, 14.
¹⁸³ Ibid.
system.” Even so, whether or not a state itself accedes to ethics and norms, because other states do,
\(^{185}\) it must be able to understand that position and accommodate it in its analysis of other states’ behavior because some statesmen are strongly influenced by moral considerations and promote WMD policies different from those who act only on parochial state interests.\(^{186}\) Regardless, Sagan argues that since some statesmen do follow ethical norms for WMD, Realists must take this into account “while not losing their focus on the highly competitive nature of international politics.” He states, “In the modern world, the strong may not want to do what they can, for excessively aggressive behavior will force the weak to develop their own weapons of mass destruction.”\(^{187}\) Sagan also proposes that there is a need for a “Balance of Ethics. “Statesmen who focus on the balance of power and ignore moral considerations altogether…create a self-fulfilling prophecy” because he will be seen as unable to cooperate with allies, willing to break treaties, and unable to settle for less than hegemony,\(^{188}\) thus provoking a rational reaction by an otherwise ethically-driven state. “Ethical norms may indeed matter in international politics, but the norms that matter most are the ones that are supportive of, and therefore are supported by, the most powerful actors.”\(^{189}\) In concluding that norms are what the powerful states make of them, he fails to consider the power of the collective, which is one of the central points of this thesis, and which will be discussed in the Analysis Section.

**Liberalism**

Liberalism differs from Realism in that it assumes that while the primary unit of analysis in the international system may still be states, other units of analysis, especially institutions, can

\(^{184}\) Sagan, 75. 
\(^{185}\) Ibid, 76. 
\(^{186}\) Ibid, 75. 
\(^{187}\) Ibid, 73. 
\(^{188}\) Ibid, 75. 
\(^{189}\) Ibid, 76.
also be construed as units of analysis since they can “alter state preferences and therefore change state behavior.” \(^{190}\) Liberalism also assumes that the international environment is dynamic with the derivation of power in the international system not limited to military power, but attributable to the economic, social, and political spheres of influence. Liberalism assumes that states are functionally the same at the unit level due to the conferral of “sovereignty” upon them by international law, and that sovereignty theoretically equalizes any imbalances in power in power. Thus while military power may remain a tool of statecraft, states can leverage other sources of power to procure the absolute gains required to secure their interests.

**Regime Theory**

More relevant to this discussion is regime theory, a derivative of Liberal branch of international relations theory. According to Kelle, the concept of regimes entered international relations in late 1970s as a derivative of Liberal institutionalism. Like norms, regimes originate when actors in the international environment seek to govern a specific activity. Some regimes arise out of widespread practice; other regimes must be actively and deliberately constructed. \(^{191}\) In the broadest sense, as Krasner describes, regimes are patterned behavior. “Wherever there is regularity in behavior, some kinds of principles, norms or rules must exist to account for it.” \(^{192}\) More precisely, Krasner states, “International regimes are defined as principles, norms, rules, and decision-making procedures around which actor expectations converge in a given issue-

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\(^{191}\) Oran R. Young, “International Regimes: Problems of Concept Formation,” *World Politics* 32.3 (April 1980), 349.

area,” and “have been conceptualized as intervening variables...”

But, as Puchala and Hopkins point out, Krasner’s definition tends to conflate regular patterns of behavior with explicit or codified rules, and does not explain how they influence behavior. As Krasner summarizes, “Oran Young, and Raymond Hopkins and Donald Puchala see regimes as a pervasive characteristic of the international system....Susan Strange argues that regime is a misleading concept that obscures basic economic and power relationships.”

A third position, articulated by Arthur Stein, Robert Keohane, and Robert Jervis, “modified structural,” accepts the basic assumptions of structural Realist approaches, which posit an international system of functionally symmetrical, power-maximizing states acting in an anarchic environment.” “This usage is consistent with other recent formulations. Keohane and Nye, for instance, define regimes as "sets of governing arrangements" that include "networks of rules, norms, and procedures that regularize behavior and control its effects. Haas argues that a regime encompasses a mutually coherent set of procedures, rules, and norms. Hedley Bull, using a some-what different terminology, refers to the importance of rules and institutions in international society where rules refer to "general imperative principles which require or authorize prescribed classes of persons or groups to behave in prescribed ways. Institutions for Bull help to secure adherence to rules by formulating, communicating, administering, enforcing, interpreting, legitimating, and adapting them.”

Young describes regimes as human artifacts, social institutions that comprise convergent expectations and patterns of behavior or practice – social conventions with “no existence or meaning apart from the behavior of individuals of groups” – with deviance or nonconforming

behavior a common occurrence.196 More expressly, regimes, for Young, consist of several components: 197 substantive rights (anything an actor is entitled to by virtue of having a recognized role), and rules (well-defined guidelines or standards of action that specific members are expected to perform or refrain from performing; procedures (“recognized arrangements for resolving situations requiring social or collective choices”) used to aggregate preferences of the actors into collective choices; and implementation (compliance mechanisms). However, he observes, international regimes “are typically unsystematic and ambiguous” rather than “highly coherent and internally consistent constructs.”198 Young goes on to define regimes as “social institutions governing the actions of those interested in specifiable activities (or meaningful sets of activities),” and thus are “recognized patterns of practice around which expectations converge.” This, Young contends, makes them social institutions that govern the actions of those interested in specifiable activities (or accepted sets of activities,199 rather than functions, even if they contribute to fulfilling certain functions.200 Regimes are a social structure is important to many theorists, as will be addressed later.

Mearsheimer sees regimes and institutions as synonymous, arguing that he does so because they are used interchangeably in the institutionalist literature.201 And, for Mearsheimer, because there is “no widely-agreed upon definition of institutions in the international relations literature,”202 he defines institutions “as a set of rules that stipulate the ways in which states should cooperate and compete with each other…”and that “…prescribe acceptable forms of state behavior, and proscribe unacceptable kinds of behavior,” making regimes rules in effect. For

198 Ibid, 341-345.
199 Young, “Regime Dynamics: The Rise and Fall of International Regimes,” 277.
202 Ibid.
Mearsheimer, such rules “are negotiated by states,” and can “entail the mutual acceptance of higher norms, which are ‘standards of behavior defined in terms of rights and obligations,’”203 thus putting norms in a different category than regimes, unlike regime theorists. Haggard and Simmons balk at this conflation of regimes and institutions because institutions are a broader concept, “the essential feature of which is ‘the conjunction of convergent expectations and patterns of behavior or practice’” although regimes aid institutionalization by “regularizing expectations.” A third, narrower definition characterizes regimes as “multilateral agreements among states which aim to regulate national actions within an issue-area,” which Haggard and Simmons obtain from Young.204 For Haas, regimes are “collective arrangements among nations designed to create or more effectively use scientific and technological capabilities,” and which “are increasingly designed to minimize the undesired consequences associated with the creation and exploitation of such capabilities.”205 However, which technologies and which consequences (physical, economic, cultural, educational, etc.) should be addressed by regimes is the issue. This is of particular importance to the discussion of WMD agreements since the state of knowledge of science and the acquisition of technology are two critical facets of the agreements that are commonly the subject of WMD norm contestation. However, “Agreements are ad hoc, often "one-shot," arrangements. The purpose of regimes is to facilitate agreements. Similarly, Jervis argues that the concept of regimes "implies not only norms and expectations that facilitate cooperation, but a form of cooperation that is more than the following of short-run self-interest,”206 and strengthen agreements.

204 Oran R. Young, Resource Regimes: Natural Resources and Social Institutions (Berkeley: University of California Press, 1982), 20.
205 Ernst B. Haas, “On Systems and International Regimes,” World Politics 27.2 (June 1975), 147.
Regimes resemble contracts as well as negotiating frameworks for Keohane, with specific rules to be enforced. “Regimes,…facilitate the making of substantive agreements by providing a framework of rules, norms, principles, and procedures for negotiation,” and thus are distinct from all of the above. For Keohane, “regimes must embody principles (“beliefs of fact, causation, and rectitude”) and norms (standards of behavior defined in terms of rights and obligations),” rules, and decision making procedures. For Keohane regimes as establish mutual expectations about others’ behavior that provides a framework for continuing negotiation of the rules and their implementation. He refers to Jervis’ principle of reciprocation as foundational to the effective functioning of regimes since it “forbids specific interest calculations,” although he recognizes that self-interest amongst actors is difficult to prevent. Keohane also emphasizes the voluntary nature of regimes since they have no binding authority. “In the absence of a supranational power (world government), regimes facilitate agreement and “correct institutional defects in world politics along…liability, information, [and] transaction costs.” For Keohane, uncertainty, conflicts of interest, competitiveness, and risk explain the demand for regimes for Keohane, create predictability of behavior and mutual benefit, and maximize utility.

However, Keohane distinguishes agreements from regimes to explain why there is a demand for international regimes. Moreover, to be effective, regimes “must specify what constitutes cooperation and what constitutes cheating.” “Yet even under conditions of strategic interaction and unstable equilibria, regimes may be of value to actors by providing information.” More important to this discussion Keohane posits that information quality and quantity reduce uncertainty and risk, whereas asymmetric information, and information that encourages

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208 Ibid.
209 Ibid, 337.
210 Ibid, 333-335.
211 Ibid, 336.
counterproductive behavior (moral hazards), is deceptive, or irresponsible as examples of issues interfering with information quality in agreements.\textsuperscript{212}

**Role of Norms in Liberalism**

Whatever the case, there appears to be agreement amongst regime theorists that international regimes consist of four broad constructs: principles, norms, rules, and procedures. Krasner offers the most succinct definitions for each of these four constructs: “Principles are beliefs of fact, causation, and rectitude. Norms are standards of behaviour defined in terms of rights and obligations. Rules are specific prescriptions or proscriptions for actions. Decision-making procedures are prevailing practices for making and implementing \textit{collective choice}.”\textsuperscript{213} Two other important characteristics of regimes are that they are “durable institutions with a cooperative character,” i.e., they are not temporary and they are not reactive to temporally driven events like emergencies, and they do not address war or the balance of power since these “are not or not necessarily cooperative in character.”\textsuperscript{214} As Kelle explains, regimes have a more active role in international relations. For Kelle and others, “international regimes shape expectations, prescribe roles, guide behaviour and thereby create an order among actors on the international level…” and therefore “are a subset of international institutions” and distinct from international organizations or international treaties even though treaties can formalize regime structure and regimes can utilize international organizations for their implementation.\textsuperscript{215}

Haggard and Simmons, too, argue, that regimes may affect state behavior in two ways. “One,…regimes alter the environment in which states interact and make cooperation more likely.

\textsuperscript{212} Keohane, “The Demand for International Regimes,” 341-343.
\textsuperscript{214} Ibid.
\textsuperscript{215} Ibid.
Two, they reduce transaction costs that multiple bilateral agreements on the same issue would generate.\textsuperscript{216} So, while regimes also do not necessarily instill order or stability, they may underwrite it – or contribute to its instability.\textsuperscript{217} Young states that, “Regimes…exert pressure on their members to act in conformity with some clear-cut social goal.”\textsuperscript{218}

**Regimes and Norms**

Regimes, then, constitute an overarching organizing feature of the international system within which specific standardizing phenomena reside, and, “Principles and norms provide the basic defining characteristics of a regime. There may be many rules and decision-making procedures that are consistent with the same principles and norms.”\textsuperscript{219} For our purposes, however, without getting lost in the fine points the arguments above enunciate, to the extent that differentiating those phenomena can be useful to understanding state WMD behavior with regard to WMD agreements which are based on features of regimes, regime theory can be a useful analytical construct. In other words, because normative consensus is required to generate regimes, which can then be codified, more importantly normative consensus can be separated out and analyzed as a causal or constitutive variable to explain cooperation to contest the norms. More specifically, as Haggard and Simmons maintain, regimes exist if derogations from or the “explicitness of commitment required before a regime can be said to exist,” and thus serve as something of a metric for verifying whether behavior constitutes a regime\textsuperscript{220} - or the contestation of a regime. Moreover, and more importantly here, Klotz states that regime theory offers two explanations for the origin of norms: hegemony and interaction. NeoRealists argue that “norms reflect a hegemon’s national interests or domestic values” while “…neoLiberals argue that norms

\textsuperscript{216} Haggard and Simmons, 513.
\textsuperscript{217} Ibid, 495-496.
\textsuperscript{218} Young, “International Regimes: Problems of Concept Formation,” 341.
\textsuperscript{219} Krasner, “Structural Causes and Regime Consequences,” 187.
\textsuperscript{220} Haggard and Simmons, 494.
are generated by actor interactions,…within the rubric of ‘cooperation under anarchy.’”

Curiously, with specific regard to the generation of WMD norms, both may be true, especially within the realm of contestation.

While his conclusions about war is disputable since it takes two to tango except in the case of pre-emption, Kelle’s chief observation about regimes is their distinct ontology within the institutional setting and their defined role in international relations. Susan Strange, however, has stated grave reservations about the value of regimes in analyzing state behavior, arguing that “…the concept is pernicious because it obfuscates and obscures the interests and power relationships that are the proximate, not just the ultimate, cause of behavior in the international system.”

Moreover, she voices concern that, "All those international arrangements dignified by the label regime are only too easily upset when either the balance of bargaining power or the perception of national interest (or both together) change among those states who negotiate them.”

Kelle, however, maintains that Krasner’s definition of each of the characteristics of regimes enriches the analytical toolkit since regimes and their characteristics “can be related unambiguously to distinct real-world phenomena and adds explanatory power in the context of judging regime effectiveness.” As such, regimes bound state behavior by explicating injunctions and, often, define how states can modify the regimes. However, even though, as Haggard and Simmons point out, it “risks the charge of formalism,” it also “clearly separates normative consensus from the definition of regimes, treating it rather as a causal or constitutive variable that may be useful in explaining cooperation.”

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221 Klotz, 21-22.
223 Ibid.
224 Haggard and Simmons, 495.
225 Ibid, 495.
Regimes are important to this discussion because norms are a subset of regimes and thus subject to changes in the same assumptions and conditions that regimes are. Moreover, regime theory provides a basis for disaggregating norms from institutions, principles, rules, and procedures while not detaching them from the dynamic body of assumptions and conditions, which affects them. In doing so, it allows us to analyze how changes in the assumptions and conditions that affect other components of regimes also affect norms. In addition, it is accepted that international regimes are not static after they are developed, but rather “undergo continuous transformation in response to shifts in their political, economic, and social environments.” As a component of regimes, it can be assumed that this is true for norms as well. Young does not propose a definitive formula or developmental sequence for regime formation, but proposes three categories that regimes fall into instead.226

- Spontaneous order – “the product of the action of many men but... not the result of human design.” (Hayek)
- Negotiated orders – those “characterized by conscious efforts to agree on their major provisions, explicit consent on the part of individual participants, and formal expression of the results.”
- Imposed order – one “fostered deliberately by dominant powers or consortia of dominant actors.”

WMD agreements are decidedly negotiated and sometimes imposed orders, thus we should expect higher transaction costs, including increased contestation of the norms. Moreover, if the states contesting have similar political, economic, or cultural objectives, the transaction cost may be even more formidable if like-minded states cooperate to contest the transaction or to oppose

226 Young, “Regime Dynamics: The Rise and Fall of International Regimes,” 282.
imposition of an agreement to which they have played a marginal role in negotiating, such as can be said of the nuclear and to some degree, the chemical agreements.

**Constructivism and Norms**

Constructivism, which is generally but arguably classified as a distinct theory of international relations, offers the most rigorous theoretical treatment of norms in international relations and the richest explanation of state behavior regarding norms. Constructivism has been in mode since the 1990s when the Realist-Liberal debate got stale, and positivists took the opportunity to introduce a “third debate” into international relations theory,\(^\text{227}\) one meant to build a bridge between the two dominant approaches. While Constructivism has no agreed upon definition, its uniqueness can be found in how it views how the units of analysis interact with the international system and with each other. Constructivists “study the cultural and ideational forces that produce legitimate rules while rationalists study incentives and cost-benefit utilitarianism. Unlike Realist and Liberal international relations theories where key assumptions and concepts are exogenously given, Constructivists tender that they are instead socially constructed – including interests. Constructivists also “study the cultural and ideational forces that produce legitimate rules while rationalists study incentives and cost-benefit utilitarianism.”\(^\text{228}\) Consequently, as Wendt believes, an independent social reality exists beyond our ability to observe it empirically; furthermore, both identities and interests are exogenous in both Realism and Liberalism, and thus can be transformed, especially by complex learning, which Liberalism espouses as an agent of change.\(^\text{229}\) That is, they are intersubjective – simultaneously constructed and constructing. Nevertheless, Constructivists start with the


\(^{228}\) Hurd, “States and Rules, Norms and Interests,” 5.

\(^{229}\) Zehfuss, 13.
existence of an *a priori* reality that is it is constantly interacting with the reality around it. So, “…the way international politics is conducted is made, not given, because identities and interests are constructed and supported by intersubjective practice.”²³⁰ This approach revolves around identity which moves beyond interests to notions of self and how the environment shape and is shaped by interaction to create a social reality; agents and structures are “mutually constitutive entities with ‘equal ontological status.’” This notion, according to Zehfuss, places Constructivism in a middle ground position which “is problematic but central to Constructivism…” with “Wendt’s, Kratochwil’s and Onuf’s work thus reflect[ing] different ways in which the middle ground can be taken.”²³¹ Raymond Hopkins and Donald Puchala, and Oran Young best outline the third approach, which is “strongly informed by the Grotian tradition, which sees regimes as a pervasive phenomenon of all political systems.” Consequently, they conclude, statesmen perceive state behavior as highly constrained by principles, norms, and rules that prescribe and proscribe varieties of behavior. Furthermore, Realism is too narrow to explain “an increasingly complex, interdependent, and dangerous world.”²³²

More important to this discussion is that the “core constructivist notion of intersubjectivity rests on common understandings that are generally expressed in terms of rules and norms” according to Kratochwil, but where “shared meaning […] is inextricably linked to what is accepted as legitimate or good”²³³ That is, Kratochwil assumes that norms influence all human conduct, and that, “Political interactions take place on the basis of partially shared, if contested, understandings which illuminate them for both actors and observers and thereby help

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²³⁰ Zehfuss, 12.
²³¹ Ibid, 10.
²³³ Zehfuss, 15.
analysis. Any attempt to eliminate elements of appraisal and interpretation to make analyses more ‘objective’ leads to a misconceptualisation of praxis, as human beings use moral criteria and interpretation.” For Kratochwil, meaning is derived from an “intersubjectively shared context” which Kratochwil sees as “based on and mediated by rules and norms.”

“Consequently, norms are crucial to his discussion of political action. They shape decisions but also give actions meaning and provide people with a medium through which they may communicate.”

As to the character of norms themselves, norms are not merely constraining, nor are they deterministic of behavior, nor are “…rules and norms… simply the distillation of individual utility calculations but rather the antecedent conditions for strategies and for specification of criteria of rationality. Rather they can be both regulative and constitutive, although “the latter cannot be reduced to the former.” As Onuf explains, “human social relations depends on the existence of rules…. [which] regulate aspects of the world but,….also always constitute situations in the first place.” So, analysis of social space must begin with an analysis of the rules. A rule for Onuf “’is a statement that tells people what [they] should do’.” Rules create the possibility of agency, including states; they also provide agents choices on how to achieve goals while simultaneously acting to shape the choices of action.

Furthermore, norms not only establish certain games and enable the players to pursue their goals within them, they also establish inter-subjective meanings that allow the actors to direct their actions towards each other, communicate with each other, appraise the quality of their actions, criticize claims, and justify choices.” What is more, according to Kratochwil,

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234 Zehfuss, 16-17.
235 Ibid.
236 Ibid, 17.
238 Ibid, 75-76.
what sets norms apart from rules, regimes, and institutions is their moral character. Zehfuss states, “Kratochwil argues that only the emergence of a ‘moral point of view’ can advance us towards a solution….Norms provide the basis for a reasoning process in which some violations of the rules are classified as excusable, whilst others are not. For this process the identification of relevant premises…is significant. Whether an action can obtain support depends on the definition of the situation, on what it is seen as an instance of. Therefore the justifications given for a particular course of action provide an important indication for its appraisal….“239 In including this moral point of reference in the discourse of international transactions, Constructivists identify a key inadequacy in Realist and Liberal theories of international relations while injecting a parameter to state decision making that makes them accountable for their behavior and choices. The inclusion of morals into international relations also advances the understanding of *jus cogens* in international law, specifically its increasing debate on its role in WMD agreements.

**Theoretical Tilts on Cooperative Contestation**

So do any of the theories singularly explain why nations would cooperate to contest norms in WMD treaties? That is, in terms of the explanatory power of the various international relations theories to address norms within the context of international relations, and specifically with regard to cooperating to contest WMD norms, the following can be said.

**Realism and Cooperative Contestation**

Though, as Mearsheimer asserts, Neorealism as an “anachronistic view of the international system that seriously misunderstands the nature of contemporary international relations and the forces that determine the interaction between states….In particular, the

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239 Zehfuss, 18.
fundamental assumption that the international system is anarchic flies in the face of reality. Simply put, international reality diverges sharply from the Realist assumptions, particularly from the assumption that the international system is anarchic since norms are pervasive in international relations. In truth, practically all aspects of international relations are highly regulated and constrained by norms of conduct and international regimes.240 Furthermore, though Realism might not specifically accommodate norms, “The ease with which states mix strategic considerations and social norms and conventions in the practice of foreign policy suggests that the two are not distinct domains.”241 That is, “…there is no such thing as non-normative behavior or pure self-interest independent of a normative context.”242 Thus, structural Realists are more apt to recognize that the system holds together via rules and that norms guide the interactions between the players in the system. Consequently, they would be likely to include regimes in their analysis in an attempt to understand international order and cooperation, and to expressly understand why self-interested actors seek to establish regimes, as well as how to account for fluctuations in the number, extent, and strength of international regimes over time based on rational choice given varying circumstances.243

Regardless, the importance of understanding the Realist perspective on norms lies in the fact that all of the WMD agreements were initially drafted and implemented during an era where Realism was the dominant international relations theory. Hence, even though Realism refutes the notion of other than utilitarian norms and eschews cooperation, again, unless its utility is required by a state, one would expect that norms developed for the WMD agreements would be

instrumental – developed to ensure that states can retain or increase their military power, particularly the P5.

With regard to cooperation, Realism does not address cooperation directly. Rather, as with norms, cooperation would be an instrumental posture for a state, i.e., one that would increase a state’s military power or that would result in relative gains of power. Likewise, contestation of norms would derive from the same stream of thought, that is, states would contest norms if the norms reduced the state’s military power or its relative gains in power, or if norms lost their utility in achieving relative gains. Thus, states may still embrace an analytical framework that aligns with their view of the world, and which justifies the structuration of norms that underwrite their position of power in the international system or which obtains the relative gains of power they seek.

**Constructivism and Cooperative Contestation**

Constructivism is a theory of norms, in effect, and one tinged in morality as well. It rejects the notion that the international system is anarchic in assuming that norms and rules are inherent in human society, while arguing that there morality has a place in the debate about state behavior. Constructivists “see norms as crucial….what states aim to do is an endogenous variable, not an exogenous given, and norms shape both the goals of states – their perceptions of their interests – and the means they use to achieve those goals. While rational choice sees norms as reflections of the fixed preferences of the most powerful states, the constructivist approach believes that one of the roles norms play is to help determine those preferences.”

Norms are also socially constructed, so they are derivatives of society, whether national or international.

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244 Zehfuss, 245-246.
Thus, norms are omnipresent, and the constant conduit to international relations at all levels of analysis. More importantly, Constructivists assume that norms influence state behavior. “States in Constructivism are thus modeled as rule followers by socialization and not as calculators of interests and incentives.”

As far as cooperation goes, society by definition is cooperative. Norms shape that cooperative space by “...’telling’ actors what ‘the right thing to do’ will be in a specific situation. These norms may help actors to choose certain institutions among a multitude of potential ‘efficient’ alternatives in order to reduce uncertainty or complexity (norms as focal points) or, in novel situations, these norms may even help them define their preferences in the first place, for instance, by providing helpful analogies (norms as road maps or sign posts). We argue that where political actors are either unable to make cost benefit computations about the expected effect of institutions or where the question of the creation of specific institutions is disconnected from distributive issues, norms will feature much more strongly in defining the preferences of political actors and will thus serve as road maps or sign posts (see Jachtenfuchs, 1999, pp. 44-46; Gourevitch, 1999; B. Rittberger, 2001).”

Norms, then, facilitate cooperation and define the rules for cooperation. However, cooperation to contest norms is a different notion altogether because norms shape behavior, one of which is cooperation. It is difficult to imagine a situation in which norms would shape contestation unless explicitly laid out in an international agreement. Indeed, most agreements, including the WMD agreements, spell out how to withdraw from a treaty, but withdrawal is only one behavior of many in contestation. If the moral aspect of norms is taken into account, though, it would appear that Constructivists would

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submit that cooperation to contest norms would be likely if states held a moral objection to the norm itself or to how was being implemented.

**Liberalism and Cooperative Contestation**

Idealism poisoned Liberal explanations of international relations. “Realism questioned the importance of international law as a constraint on state behavior and by the 1970s…” rendered it “virtually moribund.”^248^ Realism in some sense was a reaction to the failure of Wilsonian Idealism embodied in the League of Nations at the end of World War I. While the hope was to create a rule-driven cooperative environment in which states could resolve issues affecting the states, the dominance of some states in the League led to a reaction by others. Rather than universal norms leading to universal peace as imagined, some states took the opportunity to exert their influence due to their relatively greater military power, while others took the opportunity to accrue military power in order to challenge those already in positions of global influence. When Idealism failed, Realist thinking filled the theoretical gap until Liberal Institutionalism challenged it in the late 1970s.

Since Liberalism holds that states create institutions in response to states’ interests, and since regimes comprise a subset of institutions and encompass norms, rules and processes, Liberal theories accommodate norms. For Liberals, norms comprise a subset of regimes, so they reflect what happens at the institutional level, i.e., norms are shaped by the international structure and codified in institutions. Within Liberalism, Regime Theory decidedly offers the most explanatory power of reasons norms exists, and why states engage in cooperative behavior. Liberal theories hold that interdependence and cooperation result in absolute gains, and that states’ specific interests drive the creation of institutions which function to facilitate the

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^248^ Haggard and Simmons, 491.
acquisition of those gains as well as to facilitate political, economic, and socio-cultural transactions between states. The introduction of non-state entities into the international system regularizes interactions between states and offer states multiple opportunities to cooperate to achieve absolute gains of many types (e.g., economic, political, military, etc.). Moreover, institutions assist states with the implementation of norms and provide a mechanism for accountability with regard to the implementation of the norms. Consequently, the Liberal theories would predict that states would maximize the utility of the institutions as well as cooperate to attain absolute gains. Even though cooperation may be difficult to achieve due to a lack of trust, the transparency introduced by regimes reduces uncertainty and mitigates fear, facilitating state collaboration.\textsuperscript{249} Extrapolated to apply to understanding cooperating to contest norms, Liberal theories would also predict that states would likely cooperate to contest norms for the same reasons that they cooperate to do anything – to maximize utility of the institutions to obtain or maximize absolute gains, or if an institution itself had grown irrelevant.

**A Single Lens Won’t Do**

Hurd argues that in separating rationalist incentives and cost-benefit utilitarianism from constructivist cultural and ideational forces, analysts hit a dead end for both empirical research and conceptual framing. Rather, they should be combined. This approach is especially useful in understanding the strategic construction and interpretation of international norms, states’ justification of their decisions under international rules, and understanding the problem of hypocrisy in applying international norms.\textsuperscript{250} That said, Michael Desch’s claim that “critics of Realism can point to very few cases where, when push comes to shove, power and interest have


\textsuperscript{250} Hurd, “States and Rules, Norms and Interests,” 5.
not trumped norms in shaping state behaviour”\textsuperscript{251} should be heeded. In this study it has been helpful to apply multiple theoretical lenses to the puzzle and the issues it is embedded in order to deconstruct how interests (Realism), conditions in the international environment (Liberalism / Regime Theory), and their impact on states interpretation of norms (Constructivism) inform or assist in describing state WMD behavior, in explaining it, and then in predicting it. While ultimately it might appear that states are being almost entirely utilitarian in their approach to norms, the implicit acceptance of norms as both standards of behavior and shapers of behavior by states cannot be accommodated by Realism. Furthermore, the movement to most stringent norms (e.g., \textit{jus cogens} with regard to WMD, or regional “WMD free zones”) suggests an ethical-moral stance that Realism cannot accommodate either. Moreover, the constant evolution of the understanding of the discrete norms themselves is best explained by Constructivism. So, while the puzzle can be analyzed from one theoretical perspective, any description, explanation, or prediction emanating from that single line of thought would be inadequate.

\textsuperscript{251} Bluth, “Norms and International Relations,” 11.
Chapter 4

WMD Agreements and Norms

A Brief History in Time: The International System from 1945 - 1989

Since the Treaty of Westphalia, nation states have been the dominant unit of analysis in international relations. Since 1945, international relations have been facilitated through the United Nations, whose purposes are:252

1. To maintain international peace and security, and to that end: to take effective collective measures for the prevention and removal of threats to the peace, and for the suppression of acts of aggression or other breaches of the peace, and to bring about by peaceful means, and in conformity with the principles of justice and international law, adjustment or settlement of international disputes or situations which might lead to a breach of the peace;

2. To develop friendly relations among nations based on respect for the principle of equal rights and self-determination of peoples, and to take other appropriate measures to strengthen universal peace.

3. To achieve international co-operation in solving international problems of an economic, social, cultural, or humanitarian character, and in promoting and encouraging respect for human rights and for fundamental freedoms for all without distinction as to race, sex, language, or religion; and

4. To be a centre for harmonizing the actions of nations in the attainment of these common ends.

Although the United Nations Security Council has 15 members, five states were ultimately appointed in the Charter to serve as permanent members: the United States, the United Kingdom, the Soviet Union, France, and China. The other 10 members are elected for two-year terms. By design, then, these so-called “P5” states have dominated the management of international security, especially given that each has single vote veto power that can prevent a resolution from passing in the Council. So, even if Article I of the Charter specifically calls out the purposes of the United Nations as one of maintaining international peace and security, the development of friendly nations, and the achievement of international co-operation in solving international problems, these objectives were quickly stymied as ideological differences between the United States and the USSR effectively “…[curtailed] the development of new norms, institutions and procedures, and rendering others the subject of only specious agreement of or minimal value.”

Disagreement over the structure of the post World War II world complicated by the possession of nuclear weapons by the United States and the Union of Soviet Socialists Republics (USSR) ultimately set off what became known as the Cold War as the two states, founded on competing modernization theories, raced to validate the claims of their competing theories, particularly through advanced technology development: the atomic bomb and the space race. This posturing subsequently divided the world into two ideological camps whose hegemony served as the major trading partners and guaranteed the security of their allies or satellite states,

especially against nuclear aggression by the opposing pole, until the dissolution of the USSR in November, 1989.

The failure of Idealism to bring peace and stability through the League of Nations in the post-WWI security climate rendered it a weak link in the international security structure. As a result, there was little serious discussion until the late 1960s of any way that states might relate to each other in so-called anarchy other than how Realism described this relationship. And it was in this context that WMD norms were developed and implemented.\textsuperscript{254} From the chartering of the United Nations through the signing of the CTBT, much of this time period was dominated by Realist international relations theory, and the WMD treaties generally reflect Realist assumptions about state behavior, especially WMD behavior.

The end of colonialism between roughly the end of World War II and the mid-1970s resulted in the proliferation of new, “unaligned” nation states, which, according to Henkin, frequently aligned with the Soviet Union against the West to press an agenda of economic self-determination.\textsuperscript{255} To further complicate matters, the sudden end of the Cold War on November 9, 1989 stunned all but the most idealistic on both sides of the Iron Curtain, releasing states from political and economic obligations to both the United States and the Soviet Union. So, while the end of the Cold War is identified as the starting point for much of the contestation of WMD norms seen today, since the history of this event has been exhaustively addressed in other reputable works, it is offered here only as context to understand how the end of the Cold War impacted state behavior with regard to WMD norms established in the four principal WMD agreements signed and ratified by 1989, and the fifth – the CTBT – in progress at that point.

\textsuperscript{254} See also Honda’s comments on the preeminence of Realism. Eric H. Honda, “Paradigm-Lost, Ten Years On: Pushing IR Theory Forward or Backward?,” paper prepared for the 56\textsuperscript{th} Annual Meeting of the Western Political Science Association, Oakland, CA, 17-19 March 2005.

\textsuperscript{255} Henkin et al., 4.
Most relevant to this discussion is that the fall of the Berlin Wall altered the international structure overnight. In what seemed like overnight the number of states in the international system increased from 159 to 185.\textsuperscript{256} The immediate fallout was the end of bipolarity and the profound power vacuum in the former USSR and its former client states. Suddenly these fledgling new states, many of whom had lost their client state status with the demise of the Soviet Union, were suddenly and unexpectedly hard-pressed to formulate and sustain their own political, economic, and social structures in an international system in chaos itself. This not only resulted in a further proliferation of states, but further challenges to the existing structure of the international system and the rule of law. According to Henkin, the “[r]esulting disorder…challenged established legal norms and the traditional commitment of state autonomy”\textsuperscript{257} as states caught up in civil war reinterpreted the UN Charter to include new concepts of collective action, and a reordering of state interests away from physical (territorial) security to economic security as globalization swept across the globe. This only added to what Henkin describes as international law’s loss of its “European” flavor since World War II. While these fledgling and newly independent states flailed patently in maintaining national order, their determination to regain and maintain national sovereignty by leveraging their status – as they understood it – under international law impacted how business was being done in the United Nations. Because many of these states had been Soviet client states, with their chief advocate reduced to “also ran” in the contest for international hegemony, they rather quickly regrouped to formulate the largest voting bloc in the UN General Assembly.

\textsuperscript{256} According to the United Nations website, the number of member states increased from 159 in 1990 to 185 by 1995, seventeen of which were formerly part of the Soviet Union or which were former or partitioned from former Soviet client states. See United Nations (UN), “Member States – Growth in United Nations Membership, 1945 – Present,” \textit{United Nations Online}, \url{http://www.un.org/en/mebers/growth.shtml}, accessed 4 November 2009.

\textsuperscript{257} Henkin et al., 4.
Furthermore, the international system endorsed and maintained unique P5 privilege through permanent membership on the UNSC, also bred the nuclear arms competition amongst the P5 – which had all turned nuclear by the 1960s as they jockeyed for preeminence by retention or expansion of their nuclear weapons program. The P5’s unique capability to approve security agreements that favored themselves, or to quash any agreement that limited them, allowed them to retain preeminence in international security via their membership in this unique UN-sanctioned nuclear club. One of their biggest worries – states cheating and developing clandestine WMD programs, particularly nuclear programs, were well-founded given India’s first nuclear test in 1974,258 Pakistan’s nuclear testing beginning in 1998,259 South Africa’s secret nuclear program prior to 1991,260 suspicions of an Iraqi nuclear program beginning in the 1980s,261 Iran’s nuclear capability since the Shah was in power,262 and concerns that North Korea, Syria, Libya, and Israel have had undeclared nuclear program for decades in some cases.263 In essence, the P5 imposed the will of the powerful few on the marginal many due to the Cold War security environment – fear of nuclear annihilation – and their lock on the UNSC. To this writing, hopes for a genuinely more “universalist” approach to international law continue to be thwarted given that five states continue to hold single veto power in the UNSC, although I will argue here that states are learning how to circumvent that power through cooperative contestation behavior. Given the lack of trust – or proclivity to cheat, as Realists assert – it makes sense – to the P5 – for states and their primary security organization, the UNSC, to predominantly subscribe to Realist assumptions, particularly with regard to state WMD behavior.

259 Ibid.
260 Ibid.
261 Ibid.
262 Ibid.
263 Ibid.
up to the submission of the CTBT for signature in 1996 since the era in which the WMD treaties were developed and largely implemented – 1945 to 1996 – was predominantly Realist in perspective with regard to state WMD behavior. However, the inequity in impact of the articles in the WMD agreements and the unintended consequences of the WMD agreements on the non-P5 states appears to be a game changer, as will be demonstrated.

During the Cold War transition, the former Soviet Union, which had undergone its own crisis of confidence regarding its control over its own WMD research and development programs with the fiasco at Sverdlovsk in 1979, and its sustainment of its own nuclear surety program with the Chernobyl incident in 1986, was now left accounting for thousands of nuclear weapons scattered across its client states’ landscape, many of which were quick to cut political ties with the reformulated Russia. Chemical and biological weapons held by former Soviet client states could not be completely accounted for after 1989, and worse, as the world was to later discover, Russia did not dismantle its chemical or biological weapons programs until 1991, leaving the world to wonder what had happened to those weapons as well. In general, “the have nots” had little influence in international security matters, and especially with regard to WMD due to the lawful dominance of the P5 in the UNSC. This history has also been thoroughly documented and discussed, and thus is mentioned here only as context for the assertion here that the “the have nots” have reformulated how they will assert what they believe is their sovereign right in UN security matters, including the WMD agreements.

**The Role of Realism in the Development of the WMD Norms**

It was in this state-centric era and bipolar international security environment that four of the five principal WMD agreements were initially developed and implemented. Consequently,

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WMD norms and treaties largely institutionalized the existing power structure and reflect their security concerns. Consequently, the conditions under which the WMD norms were developed and thus the derivative assumptions about state behavior were predominantly Realist in nature. So, the WMD agreements were essentially Realist at their core not only due to the derivation from Realist precepts, but were reinforced by the inequity in power bestowed on the P5 and translated into a permanent structure in the United Nations Security Council. So, Realism “worked” for explaining, although not particularly for understanding, the nuances in state WMD behavior during most of the Cold War. That is, Realism seemingly explains, in a reductionist way, state behavior in the Cold War security environment – a power struggle between a handful of technologically dominant states which Jervis states is one of two main factors in determining offensive advantage,265 and international institutions accurately reflected the international power structure during much of the Cold War in cementing the P5’s power, and the structure of the United Nations Security Council still largely continues to reflect it. While the international relations analysts have since generally expanded their analytical toolbox to include a host of perspectives through which to analyze state behavior, the P5, which oversees international security matters, continues to control the UNSC, and thus, the structure of the WMD agreements. As a result, WMD treaty norms were initially developed and implemented in the same privileged yet adversarial environment by this elite group of states, which brings into question their status as norms. The WMD treaties still appear to broadly rely on the traditional Realist interpretation of the state possession of resources and their intent in using them. That is, the treaties continue to assume that the acquisition of knowledge of the basic science and basic primary resources required for the development of WMDs infers the intent to use them. Projecting state behavior given the absence of cases of state use of WMD can at best be considered tenuous and at worst

poor science. During much of the Cold War, the logical conclusion would be that the P5 was projecting its own intentions (behavior) onto other states pursuing WMD programs or the acquisition of the knowledge and resources that might allow them to develop them. The evidence, however, points to a more complicated relationship between states, especially as regards the development, implementation, and enforcement of the BTWC norms.

The post 9/11 environment had an even more curious effect on international relations and WMD. Not only have states reformulated their notion of the function of international law, but they also seem to be reworking the framework through which they analyze state WMD behavior. So stunning was the impact of 9/11 that Bracken calls the post 9/11 era the “second nuclear age” with the mix of rogue states, non-state actors, and proliferation of nuclear technology at the heart of the resurgence. As Persbo and Woodward note, “The terrorist attacks on the United States on 11 September 2001 catalyzed a significant shift by certain states away from efforts to strengthen the multilateral WMD treaty regimes (through improved verification arrangements) towards a rather less ambitious (or eminently successful) agenda to improve national implementation of these treaties.” The assertion points to a palpable shift to the increasing role assumptions and conditions have on the development and implementation of WMD norms, as well as state behavior regarding the norms. More puzzling, though, given the reality of the advances in chemistry, biotechnology, and nuclear science, the evidence suggests that states have reordered threats or are in the process of doing so, especially with regard to WMD. More specifically, states look to be less threatened by state versus state use of WMD, and much more

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concerned with the potential loss of market share accessible via the technological capabilities associated with WMD as well as with the terrorist versus state use of WMD.

A Biological Clock or Nuclear Clock?

Though of the four types of Weapons of Mass Destruction (chemical, biological, nuclear, and radiological), nuclear is the most well-known and most feared because many individuals alive today have a historical memory of the use of the atomic bombs against Japan in World War II, have pictures of the live nuclear tests done in various parts of the world seared into their memories, or grew up during the Cold War when serious ideological differences over competing modernization theories split the world into two political camps that continually threatened the nuclear demise of each other. Less discussed are deadly chemicals used tactically in both world wars and more recently on indigenous populations, and biological weapons, long used historically as a tactical battlefield weapon.

In 1925, so vivid and recent was the memory of the use of poisonous gases during World War I that although the League of Nations did not succeed in getting a treaty to control international trade in arms, munitions and war materials, delegates signed The Protocol for the Prohibition of the Use in War of Asphyxiating, Poisonous or other Gases, and of Bacteriological Methods of Warfare in Geneva on June 17, 1925.\footnote{United Nations Office for Disarmament Affairs (UNODA), “The 1925 Geneva Protocol,” \textit{UNODA Online} (17 June 1925), \url{http://www.un.org/disarmament/WMD/Bio/1925GenevaProtocol.shtml}, accessed 25 January 2010.} Initially aimed at prohibiting first use of chemical weapons, the prohibition of the use of “bacteriological or biological methods of warfare were added to the proscriptions” by the Polish delegate rather as an afterthought.\footnote{Mark Wheelis, \textit{A Short History of Biological Warfare and Weapons}, eds. M.I. Chevrier, K. Chomiczewski, M.R. Dando, H. Garrigue, G. Granasztoi and G.S. Pearson, “The Implementation of Legally Binding Measures to Strengthen the Biological and Toxin Weapons Convention” (Amsterdam: Kluwer Academic Press, 2004), 26.} With regard to the Biological and Toxin Weapons Convention, toxins produced by any of these microorganisms or by other living organisms are also classified within this rubric due to their
source. Interestingly, however, biological weapons have the longest history of use as weapons of mass destruction, and natural biological events have been the greatest killer of mankind since the beginning of history, so it is somewhat a curiosity that the nefarious use of biological agents is now under considered by the general public and perhaps overstated in current government threat assessments. That said, while beyond the purview of this study, it is useful to know that the recorded use of biological weapons in war goes back to 1340 at Thun L’Eveque in Hainault (now northern France),\textsuperscript{270} although the most recent use has been by domestic terrorists. Consequently, both states and the general population tend to think of biological weapons as terrorist-driven as opposed to a state versus state problem.

Since the introduction of nuclear weapons, neither chemical nor biological weapons have been as high on the international security radar as they were prior to 1925 because chemical weapons have not demonstrated their strategic value, and because the United States determined – and I will argue prematurely – prior to signing the BTWC that biological weapons had little strategic value. With the exception of the period beginning in 1982 following Iraq’s use of chemical weapons in against its own population during the Iran-Iraq War through the beginning of Operation Iraqi Freedom in 2003, concern about chemical weapons has diminished considerably. By the time the second war in Iraq began the number of states with offensive chemical weapons had diminished with the end of the Cold War. Add to that the willingness of states to demilitarize chemical weapons for a multitude of reasons – political as well as the cost of maintaining stores of deteriorating chemical shells and social revulsion against the use of chemical weapons even in warfare, left a countable number of states – most prominently Iraq and North Korea – thought to have usable chemical weapon capability and the political will to utilize

\textsuperscript{270} Wheelis, 15.
them, even in war. As concerns biological weapons, after the BTWC was signed and ratified, biological weapons drew little attention until Ken Alibek’s confessional work about the extent of the Soviet biological warfare program up until the early 1990s. Even then, it was not until after the post 9/11 Amerithrax attacks that the spotlight was back on biological weapons.

Regardless, most prominent in both the states’ and the general population’s minds in terms of global security threats are nuclear weapons. This is equally remarkable since there have historically only been two nuclear (atomic) attacks on states, and the international community arguably considered both defensive. That said, with the specter of nuclear annihilation a constant theme in the United Nations and in the media, governments and populations in nuclear states in particular consider nuclear weapons the greatest threat to international security in spite of the statistical reality. Increasingly concerning to Western governments and populations is the potential for terrorist use of nuclear – or more likely radiological – devices against their populations. Though perhaps a more imaginable event than a state-versus-state nuclear attack, statistically the probability of a nuclear or radiological event is still dwarfed by even naturally occurring biological events with which we have direct experience.

While apropos to the most recent events, both nuclear weapons and biological weapons – and especially contagious pathogens - share a critical characteristic: both can be used strategically, that is, both can be used to break the state. Though biological defense experts and public health officials can see this potential, public concern hones in on naturally occurring epidemics such as SARS and H1N1, and on terrorist use of pathogens – especially anthrax – such as has occurred in the United States since 9/11. Add to that the statistical probability of a naturally occurring biological event, the availability of biological agents in nature that can be fairly easily cultured, the relatively low cost to develop and maintain biological programs, the
absence of registries or restrictions on the exchange of biological agents for scientific research, the multiple mechanisms that can be used to foment a biological attack, the difficulty of attribution of an attack, the potential for contagion or transmission of a biological agent, the potential for secondary or tertiary disease cycles, and the inability to easily differentiate an intentional from a natural event, the exponential expansion in knowledge of microbiological features and processes, and the rapid advances in biotechnology\textsuperscript{271} logically lead to the presumption that the risk – both the probability and the magnitude – of a biological attack is higher than a nuclear attack.

Had the general public knowledge or perhaps a more general awareness of this, perhaps their perception of the threat might be altered. At present, though, when the general public thinks of biological weapons, it generally thinks of naturally occurring, known pathogens such as viruses, bacteria, fungi, protozoa, and helminths (worms), prions, or ectoparasites that cause infectious diseases which possess the ability to incapacitate or kill its host that are used as weapons. Less generally understood is how advances in bacteriophage recombineering, discrete knowledge of attachment mechanisms, and crossover applications – especially the mimicry of bacteriophage structures in nanotechnology, and synthetic biology impact the potential threat spectrum. Moreover, given the paucity of our current technologies to detect a biological event – natural or an attack – magnifies the deficits in our knowledge of how to prevent the potential impacts the acquisition, production, or even accidental release of a pathogen re-engineered using one of these methods might engender. Add to this global inconsistency of biosurety or biosecurity measures, the lack of international standards for research development of advanced biotechnological applications, the proliferation of laboratories globally working doggedly on

these advances, and the ringing absence of restrictions on the import or export of these advanced biological presents international relations analysts with a puzzle: Why has the BTWC remained only seven pages long, without Protocols for declaration and verification, and without an agency to patrol state behavior if the threat has the potential to be greater than that of nuclear?

**WMD Norms**

While perhaps richly rewarding for theorists to distinguish institutions from regimes from norms and other subcomponents, this thesis does not rely on theoretical nuances woven throughout international relations theories. Instead, I extract the most useful concepts from these theories in order to define norms and to analyze their contestation. Of these theories, while Realism is the most useful theory for explaining their origins and their continuity as outlined above, regime theory is most useful for discerning the derivation of norms from principles, which, in turn, are captured by the regimes themselves. For purposes here, as Kelle expounds, “The principles of an international regime represent the shared beliefs of regime participants about the issue area that the regime is set up to regulate.” So within regimes, WMD norms will be simply defined per Krasner as “…standards of behaviour defined in terms of rights and obligations,” and then expanded per Kelle’s adaptation of Müller’s additional qualifications that regimes, and consequently the norms which they contain, are “…durable institutions with a cooperative character.” All of that to say that norms are institutions that require cooperation by the parties to the agreements in order to achieve standards of behavior and obligations exacted in the agreements while maintaining rights of the parties to the agreements.

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WMD, generally comprise a category of *weapons* that include chemical agents, biological agents, nuclear agents, and sometimes radiological agents. Curiously, the two categories of international law – customary law and treaty law – that cover WMD do not contain an “authoritative definition of WMD” because states have generally leveraged international law rather than national law to address WMD issues. Consequently, international agreements on WMD, commonly labeled conventions or treaties, are the legal instruments that govern their possession, development, acquisition or use. These agreements contain principles and norms that outline expectations of not only the states party to the various WMD agreements, but also the broader international community.

The five principal WMD agreements are:

*Figure 1. Five Principal WMD Agreements*

The analysis here focuses exclusively on these principal agreements since other accoutrements - protocols, treaties, agencies, etc. – function to support implementation or enforcement of these agreements. Of these, though, the BTWC provides the most fertile ground for analyzing the contestation of WMD norms, especially those that fall outside of the usual suspects – disarmament, declaration, and verification – since not only have the States Parties actively resisted inclusion of additional protocols that would afford those requirements, but the States

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Parties reveal in their statements during the BTWC Annual Review Conferences and Meetings of States Parties, and other supporting meetings. A brief history of the BTWC is helpful in setting the context for the contribution understanding the development of the initial agreement, attempts at developing supporting protocols, and continuing meetings brings to understanding the contestation of the BTWC.

When the BTWC was concluded in 1972 it represented mostly an agreement negotiated among the three depository powers United States, United Kingdom, and the then Soviet Union. Kelle succinctly summarizes its history as follows:

The BW prohibition regime dates back to the 1925 “Protocol For the Prohibition of the Use in War of Asphyxiating, Poisonous, or Other Gases, and of Bacteriological Methods of Warfare.” Initially conceptualized as a response to the wide-spread use of chemical weapons (CW) during World War I, the focus of negotiators was exclusively on prohibiting the use of chemical warfare agents. Only upon a Polish initiative were “bacteriological methods of warfare” included into the Protocol text. Upon ratification or accession to the Geneva Protocol many states issued unilateral declarations limiting the circumstances under which they would feel themselves bound by the provisions of the Protocol. As a result, it has been widely regarded as a no-first use agreement among states parties to the Protocol. Thus, in terms of the normative structure of the current BW prohibition regime the 1925 Geneva Protocol merely established a weak version of the non-use norm. The 1972 BWC builds on the legacy of the 1925 Geneva Protocol and vastly expands the repository of regime principles and norms. Furthermore, there are no unilateral declarations limiting the scope of the applicability of the BWC and its

provisions are to be applied *erga omnes* – not only with respect to other states parties – and at all times – not only limited to times of war. The regime was further expanded in 1990 when the so-called *Australia Group* – a grouping of like-minded states which harmonize their export control policies and exchange information on “problematic” export requests – extended the scope of their activities so as to include BW-related material and equipment.276

Since 1972 there have been six Review Conferences for the BTWC (1980, 1986, 1991, 1993, 1996, 2001, and 2006), supplemented by multiple Ad Hoc Group Sessions (1995 to 2001, although some were held sporadically prior to that), and Annual Review Meetings (2003-2010), which are supported by Meetings of Experts. Each Meeting of Experts has a designated theme. At the Six Review Conference in 2006 it was decided to hold four sets of annual meetings prior to the Seventh Review Conference in 2011, each set to include a one week Meeting of Experts followed by a one week Meeting of States Parties. This has been downsized for the 2009 and 2010 meetings against the objections of some states due to cost and redundancy. In addition, the United Nations maintains a National Implementation Database (NID) that was created by the Implementation Support Unit (ISU) following the 2007 Review Conference to “assist States parties in their efforts to consider national and regional implementation of the BWC” in response to a need deriving from the 2003 annual meetings to gather information on national implementation and biosecurity arrangements. The NID contains information on implementation and biosecurity measures from all States – party or not to the BTWC. The ISU is responsible for updating the NID.277 In addition, between the 1986 and 1991 BTWC Review Conferences,

States Parties agreed upon a set of Confidence Building Measures (CBMs) to support the BTWC which produced a template in 2001 via which states could voluntarily declare various capabilities to fulfill obligations outlined in Articles V and X of the BTWC.

**Methodological Basis**

To determine whether broader and cooperative contestation of WMD, and then specifically BTWC norms has been occurring and whether there are trends in contestation that should be further examined, I have adapted and expanded upon Alexander Kelle’s methodology that he utilized in a draft written for presentation at the 2008 ISA Annual Meeting and then in a second draft written for the 2009 ISA Annual Convention in which Kelle argued, respectively that nations were actively contesting the norms of both the Biological and Toxin Weapons Convention (BTWC) as well as the Chemical Weapons Convention (CWC). In analyzing the process of norm contestation of the BTWC and the CWC, and in making his case that states were contesting norms in both, Kelle made several key contributions toward understanding the contestation of WMD norms that I leverage here. One, he methodically extracted and categorized specific norms in both conventions that could then be linked specifically to norm contestation behavior that. Two, his conclusions suggested that contestation might be broader and more deliberate than believed. Three, he inferred but did not examine the possibility that contestation behavior might be more varied, that is, more than simply noncompliance. The assumption here, obviously, is that states can comply and contest at the same time.

However, due to scoping constraints, Kelle limited his analysis of the contestation of norms in the BTWC to the US case, and his discussion of the contestation of norms in the CWC,

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278 Kelle, “Biological Weapons Disarmament.”
279 Kelle, "Norm Contestation.”
although broadened to include more than one state’s case, is specific to how the meaning of norms, especially Disarmament, Verification, and Adaptation, to various States Parties is related to contestation. While groundbreaking, lacking from his analysis of both the BTWC and CWC is the identification of norms, which crosscut all of the WMD agreements, and an examination as to whether a broader contestation of either specific norms or crosscutting norms can be identified and the reasons for the contestation explained. Consequently, while Kelle proposed contestation as an identifiable and deliberate action on the part of some states, as well as related to specific norms in the case of the CWC in particular, he did not describe the contestation of the norms in the WMD agreements as a general trend or extend his analysis of the reasons for the contestation beyond particular norms or characteristics of norms themselves. While all potentially valid, the question of whether contestation is a broader trend and whether it can be attributed to more than noncompliance with disarmament or nonproliferation norms or to changing meanings of norms begs to be answered. I fill that gap here.

Thus, one significant point of departure from Kelle’s methodology in this study is worth highlighting here. While it is true that, as Kelle observes, it is impossible to “provide a comprehensive account of the contestation of all regime norms”280 due to the number of norms in the WMD agreements and due to the constant evolution that the meaning of the norms undergo over time, particularly through treaty implementation and other state practice, a more thorough cataloguing of the norms in the WMD agreements and an analysis of their common occurrence across the agreements is doable, even if Kelle would consider it only temporally valid since he believes that the meaning of norms changes over time. His deliberately narrow focus in combination with his assumption that norms revolving around disarmament – the disarmament

280 Kelle, "Norm Contestation,” 8-10.
norm, the verification norm,\textsuperscript{281} the adaptation norm that he calls out in his analysis of contestation of the CWC, and the declaration and verification norms he identifies as manifestly absent from the BTWC – as the most critical to those specific agreements limits his scope of inquiry of WMD norms and the reasons behind the contestation. In addition, in identifying the criticality of these norms not only does he reinforce the more universal assumption amongst analysts that these are the most imperative but also that compliance is the key indicator of contestation. Consequently, even though Kelle’s more narrow focus of both studies does not lend itself to the examination of a broader, more generalized pattern of contestation posited here, Kelle has not only opened up a critical discussion in international relations, but provided a point of departure for further study of WMD norms contestation behavior as well. In particular, Kelle has enriched the understanding of discrete points of contestation for the BTWC, and introduced into the discussion of WMD norms how the interpretation and evolution of the meaning of norms impacts the interpretation of the agreements. I leverage both in this analysis.

**An Approach to Analyzing Contestation Behavior**

Nevertheless, it goes without saying that Kelle’s examination of the process of contestation of the BTWC and the CWC provides a fertile point of departure for further examination of state behavior vis à vis the WMD agreements, and his methodical cataloguing of the norms in the BTWC and the CWC is a useful tool for assessing the contestation of specific norms even if noncompliance is not the only metric I will use to assess contestation. However, I assert that examining state behavior more broadly with regard to the development and implementation of WMD norms might reveal a broader trend of contestation of the WMD norms and different WMD norms, as well as some informed insight into whether the behavior is

\textsuperscript{281} Note that Kelle actually labels this as a principle rather than a norm. See Kelle, "Norm Contestation," 9. Note that the transfer of knowledge is glaringly absent here.
crosscutting with regard to particular norms and whether states are cooperating in this contestation behavior.

More apropos to this study, while much of WMD analysis focuses strictly on nuclear weapons and the success or failure of the nuclear agreements, I would assert that what has happened with the development and implementation of the BTWC since the end of the Cold War better demonstrates how current contestation of WMD norms is being broached largely because almost all states conduct biological research and produce pharmaceuticals, consequently, many more states are impacted by the BTWC than any of the other WMD agreements. I will also broaden the analysis to other WMD agreements enough to the contestation of these norms is not unique to the BTWC, that some appear to being contested cooperatively, and consequently this understudied behavior may have serious impacts on not only the ability of states to negotiate security agreements in the future, but on international law in international relations in general.

In addition, in perhaps the most significant departure from Kelle’s methodology, I look beyond noncompliance with WMD norms to examine both contestation trends as well cooperation in contestation. Consequently, the critical assumptions I posit here are that noncompliance is not the only form of contestation, states contest norms other than those identified by Kelle, these norms fall into three categories that can roughly be labeled equality, equity, and equanimity, and that states not only interpret norms differently, but that they prioritize them differently. Thus, this analysis examines the wider range of WMD norms catalogued here in order to discern whether a look at the broader picture supports the theory of cooperative contestation of the WMD norms and whether it exposes contestation behavior beyond noncompliance, two trends which may indicate a greater impact of norm contestation on international relations as a whole. Though Kelle’s work provides a starting point for looking at
contestation, my assumption is that noncompliance is not the only form of contestation. While compliance certainly can be a significant metric in determining contestation of a norm, other, less obvious, state behaviors signal contestation as well, including, for example, states cooperating to create nuclear free zones, might be considered contestation of norms as well.

**Methodology**

The methodology employed in this thesis focuses primarily on establishing the broader pattern of contestation of WMD norms using the BTWC as the most active current case since the CWC is in full if imperfect implementation and applies to a limited number of states, since the CTBT is stalled for the moment while the international community deals with issues in select states, and because the BTWC affects almost all states since all states have biotechnology capability of some sort and / or natural pathogens that might be harvested and used or transferred for further development in other states. While my methodology heavily leverages Kelle’s methodology and typification, my approach here departs from and expands on Kelle’s methodology in several ways. Since the extraction of norms is qualitative analysis and decidedly subjective, there is a difference in the number and category that Kelle and I have identified. In addition, I go further in my analysis to determine whether states have lodged similar concerns with regard to other WMD agreements.

- First, in order to establish a broader baseline for discussion of WMD norms, I extract and catalogue all specific principles and norms in the five principal WMD agreements to get a complete picture of all principles and norms across all of the agreements.

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282 While this study focuses on the BTWC, relevant data on state behavior with regard to other WMD agreements is included as necessary to reinforce a point or demonstrate similar contestation of another WMD agreement.
• Second, I select sixteen states for closer scrutiny and then cull quantitative data for all WMD agreements and examine these to assess what they reveal about contestation or cooperative behavior.

• Third, I extract and examine qualitative data from all WMD agreements for these select sixteen states to determine what they divulge about contestation and cooperative behavior.

• Fourth, I discuss the patterns, nuances, or trends found in the data regarding contestation and cooperative behavior.

• Fifth, I examine official texts of BTWC meetings (conference opening statements, working group papers, Meetings of States Parties documents, Council of Experts statements, etc.) for indications of contestation and cooperative behavior for these sixteen states as well as for states that fall more broadly into either “the haves” or “the have nots” factions.

• Sixth, I offer possible explanations for the contestation and cooperative contestation of specific principles and norms, with particular regard to the BTWC using evidence from the official texts.

For consistency and validity, the primary source documents for supporting the claims above derive from an array of United Nations documents from the BTWC Review Conferences, Meetings of States Parties, Meeting of States Experts, and other related sources.
Chapter 5

The Biological and Toxin Weapons Convention: Norms and Cooperative Contestation

Norms and Cooperative Contestation

I argue here that the contestation of BTWC norms is widespread, and that both “the haves” and “the have nots” are cooperating to contest specific principles and norms in the BTWC as well as other WMD agreements. I propose that the most likely reasons for this behavior lie in three particular, nuanced areas: a) the pursuit of “the have nots” for political equality with “the haves,” b) the quest of both “the haves” and “the have nots” for the equitable impact of WMD norms on the state, and c) the desire of “the have nots” to be treated with equanimity over the assumptions states make regarding the pursuit of advanced scientific knowledge or technology. In this chapter, I demonstrate which indicators beyond noncompliance best denote contestation, which best capture the nuances of contestation of the BTWC, and which indicate cooperation to contest. In the next chapter, I analyze official United Nations documents to determine whether statements from states serve as better indicators of contestation and cooperation.

Noncompliance as an Indicator of Contestation and Cooperation

With regard to the WMD agreements, contestation has almost exclusively been associated with one specific behavior – noncompliance. In turn, noncompliance has almost
exclusively been associated with specific norms – disarmament, nonproliferation, declaration, and verification. This has largely been due to the underlying Realist assumptions about states’ reasons for either acquiring WMD or seeking the scientific knowledge and technical capability that might support the development of a WMD program. Thus, noncompliance has served as the main indicator of contestation because noncompliance with the critical norms – disarmament, nonproliferation, declaration, and/or verification – is seen as a single point of failure for ensuring state or international security. There are several problems with this approach. First, noncompliance, by definition, can only refer to states that are at least signatories to a WMD agreement. If noncompliance is the measure of contestation of WMD agreements or specific norms within them, then we cannot account for contestation behavior of states that are not at least signatories to an agreement. Second, compliance can be fake, partial, or imposed. In other words, states party to an agreement may make it appear that they are complying with an agreement or a particular norm when they are not. States may also pick and choose which norms in an agreement they will comply with while ignoring others, and do so with impunity since the focus of compliance is, again, generally determined based on disarmament or nonproliferation norms. Compliance may also be imposed on a state by various means, generally via economic sanctions. Thus, using compliance as the measure of contestation does not capture the nuances of equality, equity, and equanimity. Finally, states may actually comply with the norms embedded in an agreement to various degrees without actually being a signatory to the agreement, which cannot be captured through the use of compliance as a measure of contestation behavior alone.

Moreover, states evaluate how compliant another state is based on how the evaluating state weights a particular norm. States may believe that they are compliant with an agreement but may not be considered so by other states due to interpretations of the meaning of compliance. With specific regard to the BTWC, the use of compliance as a measure of contestation is further complicated by the absence of a patent declaration and verification norms. While the BTWC is understood to be a complete ban on a class of weapons, without a means to determine compliance with the agreement (i.e., verification), states are left completely to their own interpretation of compliance with the BTWC. This does not, however, mean that I dismiss compliance as one of many possible indicators of contestation.

Cooperation is viewed by Realism as a utilitarian relationship, but functions as the machine of Liberalism. By design, because the international agreement process is embedded in the theory of Liberalism, the BTWC and WMD agreement process is cooperative. The process, however, needs to be separated from the reality of the result. In the case of cooperative contestation, the task is to support my proposition that cooperative contestation derives from a need on the part of states to achieve equality, equity, and equanimity. Compliance tells us nothing about cooperation. Consequently, compliance cannot be a valid indicator of contestation or cooperation behavior for any WMD agreement, especially the BTWC.\textsuperscript{284} States’ motivations for cooperating must be discovered through other means, specifically their own statements about their reasons for their behavior.

Because contestation and cooperation are embedded in equality, equity, and equanimity, they both require a much richer set of variables than simple compliance to reveal these nuances. Critical here is identifying indicators that depict the conditions underlying contestation and

\textsuperscript{284} Haggard and Simmons argue that cooperation is an indicator of compliance. While addressing their argument is beyond the scope of this paper, it is worth noting their findings. Stephan Haggard and Beth A. Simmons, “Theories of International Regimes,” \textit{International Organization} 41.3 (Summer 1987): 494.
Cooperative Contestation Beyond Noncompliance

General research on the subject of contestation is thin. Rarer is research on contestation with specific regard to WMD agreements, and to the BTWC in particular. In Chapter 2, I submitted several possible examples of behaviors that might constitute contestation of the BTWC (or other WMD agreements). Even these have their own idiosyncrasies as outlined below, and thus are not particularly helpful in fleshing out the nuances of contestation.

- Enter reservations to an agreement – States may qualify the signature of an agreement with statements that are entered into record as to their applicability given various conditions that exist in the international system or to the particular agreement.
- One-upmanship – A state might refuse to sign an agreement because it believes that its own principles and norms regarding the WMD in question exceed those of the United Nations agreement.
- Withdraw from an agreement – States may formally vacate an agreement already signed or ratified via the process outlined in the agreement.
- Commit an overt violation or deviation from an agreement – States may flagrantly disregard or be defiant in contravention to the principles and norms of the agreement.
- Commit a covert violation or deviation from an agreement – States may indulge in secret disregard or unpublicized behavior in contravention to the principles and norms in the agreement.
• Commit a *prima facie* breach of treaty language – States may inadvertently or deliberately behave in a way that appears to violate the language of the agreement.

• Commit ambiguous actions that “edge close to a prohibited activity or actions, that, while not banned, raise the possibility of circumvention” – States may actively taunt or flaunt the principles and norms in the agreement.

While these are interesting, and in some cases, compelling indicators of contestation behavior, these will not be addressed in this study. Most have greater applicability to case studies and the behavior of particular states. Instead, I will examine other indicators associated with contestation and cooperation to discuss their validity and reliability in assessing cooperative contestation.

**Use of WMD and Cooperative Contestation**

Use of WMD is the poorest predictor of contestation but perhaps the best indicator of contestation. This is because there has been little actual use of WMD, making use a definite signal of contestation, especially since the entry into force of the CWC. The “WMD taboos” have, however, driven the probability portion of the risk of use down to nearly zero. Robust nonproliferation norms, and implementation and verification criteria in the nuclear and chemical agreements, have reinforced the taboo and discouraged cooperation to contest employing either. Natural biological events actually have worked to increase cooperation amongst states to defeat or limit the impact of biological weapons, and the BW taboo appears even stronger than either the nuclear or chemical taboos. Given states’ actual use of WMD against other states, use

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286 Ibid, 145.
would demonstrate contestation. But use of any WMD, especially biological agents, does not expressly describe cooperative contestation to achieve equality, equity, or equanimity.

**Possession of WMD and Cooperative Contestation**

The possession of WMD is a reasonably good indicator of contestation behavior of a WMD agreement and of specific principles and norms embedded in a WMD agreement. By international law, the P5 are allowed to possess nuclear and chemical weapons, but the possession of biological weapons has been completely banned. Thus, possession of WMD by other states constitutes contestation of these norms. However, many of the states showed in table 2 have either abandoned their programs, or adhere to the most critical WMD principle of nonuse. With regard to the BTWC, many of the states shown in the chart discontinued their offensive programs upon becoming a member of the BTWC. The history of WMD proliferation is clearly embedded in cooperation, and some (e.g., India, Pakistan, Israel, Egypt, Syria) initially centered around contestation of the notion that WMD agreements could limit sovereign states from pursuing independent WMD programs. Other WMD programs were built via cooperation with “the haves.” Consequently, possession of WMD presents an ambiguous or mixed picture of whether possession derives from cooperative contestation to obtain equity, equality, and equanimity. This conclusion requires further substantiation from other sources; possession cannot be used as a valid and reliable indicator of either contestation or cooperation.
Table 2. Who’s Got What?287, 288

<table>
<thead>
<tr>
<th>STATE</th>
<th>NUCLEAR</th>
<th>CHEMICAL</th>
<th>BIOLOGICAL</th>
<th>MISSILE</th>
</tr>
</thead>
<tbody>
<tr>
<td>NUMBER</td>
<td>9 [+3 -5]</td>
<td>26</td>
<td>17</td>
<td>15</td>
</tr>
<tr>
<td>Afghanistan</td>
<td></td>
<td></td>
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<td></td>
</tr>
<tr>
<td>Albania</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Algeria</td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Argentina</td>
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<td></td>
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<tr>
<td>Belarus</td>
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<tr>
<td>Brazil</td>
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<td></td>
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<tr>
<td>Bulgaria</td>
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<td></td>
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<tr>
<td>Chile</td>
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<tr>
<td>Congo</td>
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<td></td>
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<tr>
<td>China</td>
<td></td>
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<tr>
<td>Cuba</td>
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<tr>
<td>Ethiopia</td>
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<tr>
<td>Egypt</td>
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<tr>
<td>France</td>
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</tr>
<tr>
<td>India</td>
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</tr>
<tr>
<td>Indonesia</td>
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<tr>
<td>Iran</td>
<td></td>
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<tr>
<td>Iraq</td>
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<tr>
<td>Israel</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Japan</td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Kazakhstan</td>
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<td></td>
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<tr>
<td>Laos</td>
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<tr>
<td>Libya</td>
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</tr>
<tr>
<td>Myanmar</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>North Korea</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pakistan</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Romania</td>
<td></td>
<td></td>
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<td></td>
</tr>
</tbody>
</table>


288 The qualification of the number derives from the reality that many states have abandoned offensive WMD programs, or, if they maintain them, may not have the means to effectively deliver the agent in question.
Other Indicators of Cooperative Contestation

To simplify the remainder of the study, I have selected sixteen states for special scrutiny from table 1. These sixteen have been singled out for more discrete investigation due to their overall impact on WMD policy, either because they are in the P5 or because they have been in the forefront of the WMD debate since at least the end of the Cold War.

1. China
2. Democratic People’s Republic of Korea (DPRK, North Korea)
3. Egypt
4. France
5. India
6. Iran
7. Iraq
8. Israel
9. Japan
10. Libya
11. Pakistan
12. Russian Federation
13. Republic of Korea (ROK, South Korea)
14. Syria
15. United Kingdom
16. United States

The initial focus here will be on evaluating indicators generally associated with state contestation behavior, starting with WMD agreement membership status, which is indicated below in table 3.
Table 3. Who’s Promised What?\(^{289}\)

<table>
<thead>
<tr>
<th>Country</th>
<th>DPTI</th>
<th>PTI</th>
<th>UN</th>
<th>NPT</th>
<th>UN</th>
<th>RMCG</th>
<th>CGW</th>
<th>CIGI</th>
<th>CIGI</th>
</tr>
</thead>
<tbody>
<tr>
<td>China</td>
<td>NO</td>
<td>NO</td>
<td>NO</td>
<td>8-Mar-92, 12-Mar-92, 17-Mar-92</td>
<td>NO</td>
<td>15-Nov-94</td>
<td>12-Jan-95</td>
<td>25-Apr-97</td>
<td>24-Sep-96</td>
</tr>
<tr>
<td>Democratic People's Republic of Korea (North Korea)</td>
<td>NO</td>
<td>NO</td>
<td>NO</td>
<td>12-Dec-85</td>
<td>NO</td>
<td>13-Mar-87</td>
<td>NO</td>
<td>NO</td>
<td>NO</td>
</tr>
<tr>
<td>Egypt</td>
<td>8-Aug-63</td>
<td>10-Jan-64</td>
<td>1-Jul-88</td>
<td>28-Feb-81</td>
<td>10-Apr-72</td>
<td>NO</td>
<td>14-Oct-96</td>
<td>NO</td>
<td>14-Apr-88</td>
</tr>
<tr>
<td>France</td>
<td>NO</td>
<td>NO</td>
<td>NO</td>
<td>2-Aug-92, 3-Aug-92</td>
<td>NO</td>
<td>27-Sep-84</td>
<td>12-Jan-95</td>
<td>2-March-95</td>
<td>24-Sep-96</td>
</tr>
<tr>
<td>India</td>
<td>8-Aug-63</td>
<td>15-Oct-63, 16-Oct-83, 18-Oct-83</td>
<td>NO</td>
<td>NO</td>
<td>15-Jan-73</td>
<td>15-Jul-74</td>
<td>14-Jan-95</td>
<td>2-Sep-95</td>
<td>NO</td>
</tr>
<tr>
<td>Iran</td>
<td>6-Aug-63</td>
<td>5-May-64</td>
<td>1-Jul-68</td>
<td>2-Feb-70, 16-Feb-70, 5-Mar-70</td>
<td>16-Apr-72, 15-Nov-72</td>
<td>22-Aug-73, 27-Aug-73</td>
<td>13-Jan-95</td>
<td>2-Sep-95</td>
<td>24-Sep-96</td>
</tr>
<tr>
<td>Iraq</td>
<td>6-Aug-63</td>
<td>5-May-64</td>
<td>1-Jul-88</td>
<td>26-Oct-69</td>
<td>11-May-72</td>
<td>19-Jun-91</td>
<td>NO</td>
<td>20-Aug-96</td>
<td>NO</td>
</tr>
<tr>
<td>Israel</td>
<td>6-Aug-63</td>
<td>28-Jan-64, 15-Jan-64, 8-Oct-64</td>
<td>NO</td>
<td>NO</td>
<td>NO</td>
<td>NO</td>
<td>NO</td>
<td>NO</td>
<td>25-Sep-96</td>
</tr>
<tr>
<td>Japan</td>
<td>14-Aug-63</td>
<td>15-Jan-84</td>
<td>NO</td>
<td>NO</td>
<td>10-Apr-72</td>
<td>8-Jun-82, 16-Jun-82</td>
<td>13-Jan-95</td>
<td>15-Sep-95</td>
<td>24-Sep-96</td>
</tr>
<tr>
<td>Pakistan</td>
<td>14-Aug-63</td>
<td>3-Mar-65</td>
<td>NO</td>
<td>NO</td>
<td>10-Apr-72</td>
<td>23-Sep-74, 3-Oct-74</td>
<td>13-Jan-95</td>
<td>29-Oct-97</td>
<td>NO</td>
</tr>
<tr>
<td>Republic of Korea (South Korea)</td>
<td>30-Aug-63</td>
<td>24-Jul-84</td>
<td>1-Jul-88</td>
<td>23-Apr-75</td>
<td>10-Apr-72</td>
<td>25-Jun-87</td>
<td>14-Jan-83</td>
<td>28-Apr-97</td>
<td>24-Sep-97</td>
</tr>
<tr>
<td>Syria</td>
<td>13-Aug-63</td>
<td>1-Jun-64</td>
<td>1-Jul-88</td>
<td>24-Sep-88</td>
<td>14-Apr-72</td>
<td>NO</td>
<td>NO</td>
<td>NO</td>
<td>NO</td>
</tr>
<tr>
<td>United States</td>
<td>5-Aug-63</td>
<td>10-Oct-63</td>
<td>1-Jul-68</td>
<td>5-Mar-70</td>
<td>10-Apr-72</td>
<td>26-May-75</td>
<td>13-Jan-95</td>
<td>25-Apr-97</td>
<td>24-Sep-96</td>
</tr>
</tbody>
</table>

WMD Agreement Membership Status and Cooperative Contestation

A state’s membership status in an agreement is a very poor indicator of cooperative contestation for many reasons. Again, the international agreement process is cooperative by design. Since most states belong to the WMD agreements, they obviously have cooperated to obtain these agreements. If significant blocs of states participate in the treaty process but do not belong to agreements, and they cooperate in that boycotting, we can deduce that they are cooperating to contest the agreement. The reasons for that contestation will still have to be explored, and are discussed in detail in the next chapter.

Contestation is much easier to evaluate via analyzing WMD membership status. The assumption here is that states that have not signed and/or ratified the agreement are contesting the agreement in general. ²⁹⁰ Most states are at least signatories to WMD agreements, which have obligations associated with them as discussed in Chapter 2. Of those that refuse to become signatories, most, such as France, India, and Israel, abide by the non-use principle. On the other hand, states that do sign, ratify, or accede to agreements contest norms in an agreement via other means. North Korea, Iran, and previously Iraq all fall into that category, as has Egypt in the past, and Syria on occasion. Given that, membership status alone does not tell the complete story; states’ behavior must be supplemented by qualitative assessment of their stated reasons for their status. States may also have multiple reasons, some unrelated to contestation, for their membership status in agreement. These are discussed briefly below to highlight the need for further information from the state on its status. With regard to specific agreements, I have included data regarding the sixteen states selected for closer scrutiny to illuminate how poor an indicator membership status is of contestation.

²⁹⁰ States can contest WMD agreements by refusing to sign, ratify, or accede to WMD agreements.
The following are states of the sixteen that have signed and ratified the following agreements. If signature and ratification are assumed to be acceptance of the critical norms in the agreement or enough of the norms in the agreement, then signature and ratification should be signs that states do not contest the norms in an agreement.

- PTBT: Egypt, India, Iran, Iraq, Israel, Japan, Libya, Pakistan, Republic of Korea, Russian Federation, Sudan, Syria, United Kingdom, United States
- NPT: Egypt, Iran, Iraq, Libya, Republic of Korea, Russian Federation, Syria, United Kingdom, United States
- BTWC: India, Iran, Iraq, Japan, Pakistan, Republic of Korea, Russian Federation, United Kingdom, United States
- CWC: China, France, India, Iran, Japan, Pakistan, Republic of Korea, Russian Federation, United Kingdom, United States
- CTBT: France, Japan, Libya, Republic of Korea, Russian Federation, United Kingdom

If membership status were a good indicator of contestation, with regard to the sixteen states selected for scrutiny here, these states should be the least likely to contest the norms in the corresponding agreements. However, recent activity in the United Nations Security Council would likely not support a conclusion that posited Iran’s membership status was indicative of its acceptance of the norms in NPT. Unease over Russian pushback to the United States’ proposal to put a missile defense system in Europe might also raise questions as to whether Russia’s signature and ratification of all five WMD agreements was an indicator of Russia’s acceptance of the norms in the agreements.\footnote{David Charter, “Russia Threats Response to US Missile Defence Deal,” \textit{The Times Online} (9 July 2008), \url{http://www.timesonline.co.uk/tol/news/world/europe/article4295309.ece}, accessed 28 February 2010.} Closer examination of state behavior, as presented in the next
chapter, demonstrates how nuanced contestation is, especially amongst states that sign and ratify an agreement.

If accession is the equivalent of signature and ratification after an agreement has entered into force, then the conclusions about contestation and these states would be similar to those of states that had signed and ratified an agreement.

- PTBT: None
- NPT: China, DPRK, France
- BTWC: China, DPRK, France, Libya
- CWC: Iraq, Libya
- CTBT: None

Drawing conclusions about the meaning of accession rather than signature and ratification of an agreement is an even more tenuous proposition. Accession occurs when a state is not an original signatory to an agreement. This can occur for several reasons, but the most common are that the state did not exist at the time of the signing, or that it initially had an objection to some part of the agreement that it later dropped. Since all of these sixteen states were in existence at the time of the signing of these agreements, the delay in accession to an agreement might be a likely indicator of contestation of the norms therein. China and France waited three years beyond the NPT’s entry into force to join the agreement, and the DPRK waited nearly six years to join. The wait for China, DPRK, France, Libya, and Sudan to join the BTWC was significantly longer – with accession lagging from between five to twenty-eight years after the BTWC entered into force. Consequently, late accession, especially if the state is active in the United Nations, and in China’s case a member of the P5, may signal contestation of
norms. Accession is a reasonably good indicator of initial contestation of norms if the state was in existence at the time the agreement entered into force.

Signing but not ratifying an agreement constitutes ambiguous behavior on the part of the state.

- PTBT: None
- NPT: None
- BTWC: Egypt, Syria
- CWC: None
- CTBT: China, Egypt, Iran, Iraq, Israel, United States

Signing without ratifying\textsuperscript{292} an agreement may be an indicator of the state’s rejection of the norms in an agreement, although it is more similar to having a split personality. The state signals that it is in agreement for a need for an agreement, but does not or cannot politically obtain that agreement at the national level. By withholding ratification, states may be signaling contestation of some of the norms in the agreement or a reluctance to consent to be bound by some of the principles or norms. States may also be signaling a desire to bargain further on some aspect of the agreement. States might indicate general concurrence on the need for an agreement, yet not agree with the principles or norms of the agreement. Amongst the sixteen states here, the obvious example of national second thoughts are most easily seen in the CTBT. Significant delays in ratification appear also to be an indicator of state dissatisfaction with norms in the agreement. In terms of concern over international security and state behavior, the data here for the sixteen selected states would indicate that the UNSC should be worried about the

\textsuperscript{292}Caveat: While the Vienna Convention on the Law of Treaties allows agreements to define how states consent to be bound (signature, ratification, acceptance, and accession), some states do not require separate ratification to consent to be bound.
behavior of two of the P5 members – China and the United States – as well as those states that have records of flaunting or skirting the norms of other nuclear agreements in the past – Egypt, Iran, Iraq, and Israel. The United States, China, Israel, Egypt, and Iraq are not under particular scrutiny for nuclear norm violations at this point in history, meaning that the application of these indicators as indicative of nuclear violations may not be valid.

The United Nation’s statistics demonstrate that, at the date this data was collected, the following of the sixteen selected states have signed but not yet ratified or acceded the five principal WMD agreements as shown on the next chart. More than other membership statuses, non-signatories appear to clearly contest some principle or norm in an agreement.

- PTBT: China, DPRK, France
- NPT: India, Israel, Japan, Pakistan
- BTWC: Egypt, Israel, Syria
- CWC: DPRK, Egypt, Israel, Syria
- CTBT: China, DPRK, Egypt, India, Iran, Iraq, Israel, Pakistan, Syria, United States

The meaning of signature alone is difficult to deconstruct. There is a logical assumption that states are “…under no duty to perform the obligations stipulated, prior to the coming into force of the treaty with respect to that State; under some circumstances, however, good faith may require that pending the coming into force of the treaty the State shall, for a reasonable time after signature, refrain from taking action which would render performance by any party of the obligations stipulated impossible or more difficult.”

Similarly, there is a logical assumption that states that are “…signatories are under no legal duty to perform the obligations created by

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the treaty, and it may be added, they are not entitled to claim any rights stipulated for their benefit therein.” 294 Finally, there is a “…view frequently expressed that a treaty which must be ratified as a condition of its coming into force is only a projet which has no obligatory force until this condition has been fulfilled.” 295 This is not universally true. Thus, “…there may be exceptional cases and special circumstances where good faith may require a State, for a reasonable time after signing a treaty and pending the treaty’s coming into force with respect to it, to refrain from taking action which would render performance by any party of the obligations stipulated in the treaty impossible or more difficult in case it subsequently ratifies.” 296 This is due to an assumption that “…ordinarily [the treaty] will proceed to ratification, and that in the meantime [the State] will not adopt a policy which would render ratification useless or which would place obstacles in the way of the execution of the provisions of the treaty, once its ratification has been given.” 297 Hence, there is an assumption of good faith, i.e., that signature prior to either ratification by the state or prior to the entry into force means that the signatory will not act in contravention the principles and norms of the treaty (agreement).

States that do not sign, ratify, or accede to an agreement would seemingly indicate a rejection of the norms in the agreement. Not signing and ratifying or not acceding to an agreement may be the clearest signal of refutation of norms in an agreement. Like all forms of rejection, a patent “no” appears to indicate that the agreement is untenable for the state. However, states may not sign an agreement because they do not have the capability in question or they do not seek it. The cost of belonging to a WMD agreement also may be more than the

294 American Society of International Law, 779.
295 Ibid.
296 Ibid, 780.
297 Ibid, 781.
benefit. States may also not wish to divulge a strategic advantage they hold. The following states have not signed, ratified, or acceded to the following WMD agreements.

- PTBT: China, the DPRK, and France
- NPT: India, Israel, Japan, and Pakistan
- BTWC: Israel
- CWC: DPRK, Egypt, and Syria
- CTBT: DPRK, India, Pakistan, Syria

It is difficult overall to draw conclusions from membership status in an agreement alone. Consequently, a state’s status for an agreement is not a valid and reliable indicator of whether a state accepts the norms or will contest the norms in a WMD agreement; other data will demonstrate that States Parties to agreements regularly contest norms in the agreements. However, non-signature of a WMD agreement seems to be indicative of rejection of the norms in the agreement or serious concerns about being bound to those norms. Yet this is a tenuous conclusion, since some nonmembers are states without WMD capability; belonging to a WMD agreement is moot for them, and thus this behavior is not a consistent indicator of contestation. This breakdown does not expand the understanding of contestation behavior significantly. Of those the UN’s site shows as signed but not ratified, and of concern here, are Egypt and Syria; of those not yet signed but identified as states of concern is Israel, which is not a state of concern for the UNSC (although is often brought up amongst states in the region as a threat). Of states that have made the headlines over suspected biological activity, namely Iraq and the DPRK, both are States Parties to the BTWC. The Iraqi threat did not prove out, but the DPRK remains a concern. The bottom line is that a detailed understanding of membership status in the BTWC does not improve our understanding of contestation behavior of the BTWC.
BTWC Status as an Indicator

Of more specific interest here, however, is whether the breakdown of the BTWC membership and their membership status expands the understanding of whether there is a pattern in contestation of norms in the BTWC, and one that might shed some light on state contestation behavior overall. The United Nations Office of Disarmament’s Biological and Toxin Weapons Convention Website shows the membership of the BTWC is as follows: 298

163 Members

Signatories Only = 13

Non-Signatories = 19

The OPBW’s website, which was last updated in June 2005, breaks out signature, ratification, accession, and non-signature statuses. It shows slightly different statistics: the information on the website allows the sorting of whether the state entered via signature or ratification: 299

Number of Signatories = 171

Number of Ratifications and Accessions = 155

Number of Signatories that have not Ratified = 16

Number of Non-Signatories = 23

Sorting out the OPBW’s statistics yields the following

Total Number of Signatories = 109

Total Number that have Signed and Ratified = 92


States Acceding = 63
Signatories Only = 13

What muddies the data and analysis here is that being a member of a WMD agreement may offer an even better opportunity to contest the norms in an agreement, as appears to be in the case of the BTWC, and as will be discussed later. The agreement itself has a fairly high level of membership, with only Israel of the sixteen selected here completely rejecting joining the agreement, and Egypt and DPRK ultimately signing but not ratifying it. Moreover, there is the consideration, which will come out in the discussion section, that states appear to be more concerned with terrorist use of biological agents than state-versus-state use of biological warfare; the BTWC cannot legally address this, outside of requiring states, in their implementation agreements, to be responsible for their nationals’ actions with regard to biological agents or to punish behavior otherwise prohibited by the BTWC. Given that membership in the BTWC may facilitate or validate contestation, and given the concern over state-versus-state biological warfare, membership in the BTWC is not a valid or reliable indicator of anything with regard to BTWC norms except that biological warfare is anathema. Add to this that states can further complicate analysis by signing and ratifying or acceding to an agreement but then obfuscating it, or not implementing it once ratified or upon accession, and the membership status of a state for an agreement becomes almost irrelevant, except if a state verifiably fails to meet the obligations of an agreement. Membership status is therefore a red herring; a logical conclusion that is a fallacy.

**Quantifiable Data Points and Cooperative Contestation**

To evaluate whether other indicators of contestation capture the nuances of state behavior, I will employ the following methodology:
• First, in order to establish a broader baseline for discussion of WMD norms, I extract and catalogue all specific principles and norms in the five principal WMD agreements\(^\text{300}\) to get a complete picture of all principles and norms across all of the agreements.

• Second, I select sixteen states for closer scrutiny and then cull quantitative data for all WMD agreements and examine these to assess what they reveal about contestation or cooperative behavior.

• Third, I extract and examine qualitative data from all WMD agreements for these select sixteen states to determine what they divulge about contestation and cooperative behavior.

• Fourth, I discuss the patterns, nuances, or trends found in the data regarding contestation and cooperative behavior.

• Fifth, I examine official texts of BTWC meetings (conference opening statements, working group papers, Meetings of States Parties documents, Council of Experts statements, etc.) for indications of contestation and cooperative behavior for these sixteen states, as well as for states that fall more broadly into either “the haves” or “the have nots” factions.

• Sixth, I offer possible explanations for the contestation and cooperative contestation of specific principles and norms, with particular regard to the BTWC, using evidence from the official texts.

\(^{300}\) While this study focuses on the BTWC, relevant data on state behavior with regard to other WMD agreements is included as necessary to reinforce a point or demonstrate similar contestation of another WMD agreement.
Quantitative Data Points and Cooperative Contestation

Quantifiable data are not good indicators of cooperative contestation. They are even worse indicators of the reasons (i.e., equality, equity, and equanimity) for cooperative contestation. Because the percentage of states that are party to the BTWC is very high, quantitative measures are unlikely to describe the contestation of discrete norms, which is what is required to capture the nuances of cooperative contestation. While quantitative data can be consolidated and evaluated, qualitative data, especially the text of states’ statements at BTWC meetings, offers the richest source of indicators of contestation. With regard to cooperation especially, both quantitative and qualitative data are required to compose a more accurate picture.

To demonstrate the paucity of quantitative data, I identify quantitative data points here, and discuss whether they might serve as valid and reliable indicators of contestation and cooperative contestation of the principles and norms in the BTWC.

1. Catalogue and typology of norms from five principle WMD agreements
2. Number of words in the agreement
3. Number of states submitting reservations\(^{301}\) to the agreement
4. Number of amendments to agreement submitted
5. Number of States Parties withdrawing from agreements
6. Formation of cartels or blocs based on geographical, social, political, or economic criteria
7. Formal statements regarding discrete norms in the WMD agreements

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A summary of the characteristics of the agreements themselves, can be found at the beginning of table 3, which focuses specifically on extracting and comparing principles and norms across the five principal WMD agreements. This discussion is followed by a summary of qualitative data points, as listed below.

**Catalogue and Typology of WMD Agreement Norms**

Other criteria such as attendance at meetings and conferences are possible to track, but not useful in this study. I eliminate them here from consideration since a cursory review of States Parties statements indicate that participation is likely economically driven is evident in the reduction of intersessional meetings from two weeks per year to one week. Furthermore, the assumption, especially in the more qualitative indicators, is that states generally speak to their fears or frustrations, and thus that these expressions may provide a more valid description of cooperative contestation behavior as well as a more complete explanation of the contestation of discrete norms. Contestation of discrete principles and norms is more likely revealed in qualitative data.

Understanding cooperative contestation means exploring principles and norms not associated with disarmament, nonproliferation, declaration, and verification and which “the have nots” have sought to have enforced, and which “the haves” resist. These include the Peaceful Uses Principle, the Benefit to Mankind Principle, the Right to Science Norm, the Cooperation Norm, and the Economic and Technological Development Norm. As will be evident, “the have nots” are as interested in the enforcement of these norms because they do not have WMD programs, though they do want access to the advanced scientific and technological knowledge from these programs to expand their economics. Examining how and why states cooperate strategically to attach these principles and norms is key to understanding cooperative
contestation. The first step in this process is to identify the norms in the WMD agreements in order to have a framework for the overall analysis and to otherwise characterize the agreements and the behavior of the sixteen select states.

To do so, I leverage Kelle’s typology of BTWC and CWC norms, expanding it per my read of the five principal WMD agreements to give a broader picture of the general normative inclusions in these agreements. From the BTWC, Kelle extracts the following norms:  

- **Non-Acquisition** norm—States parties have the right to defense against the threat or use of biological warfare; unlike nonproliferation norms, this clause is widely interpreted to apply *erga omnes* so as not to divide the world into “haves” and “the have nots”
- **Disarmament** norm—destroy or divert biological *weapons* (italics mine) to peaceful purposes
- **Non-Transfer** norm—prohibition on sharing of capability with anyone seeking to create a biological warfare
- **Cooperation** norm—“representing…the point of view of many BTWC states parties mostly from the developing world the flip side of the non-acquisition and non-transfer norms; ensures states’ the right to acquire and transfer biological capabilities for peaceful purposes”  
- **Assistance** norm—states will assist each other in case of use of biological warfare against one of them
- **Consultation** norm—states agree to cooperate in solving any problems which may arise in relation to the objective of or in the application of the BTWC

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• **Continuation** norm – negotiating a chemical weapons treaty

• **Harmonization** norm – states to guide AG state behavior and share information on “suspicious requests” to other states parties

Most notable for Kelle, however, were the norms excluded from the BTWC that had heretofore been included in the other WMD agreements, namely:

• **Declaration** norm – states to submit information describing biological and biotechnology research and development to database

• **Inspection** norms – the agreement of states parties to allow other states to conduct unannounced inspections of facilities suspected of producing biological weapons or precursors

The Chemical Weapons Convention and Norms

In his analysis, Kelle identifies several principles from which the CWC norms derive:\textsuperscript{304}

• The *CW taboo principle* which contends that the use of chemical weapons (CW) “constitutes an abhorrent act of warfare.

• The *Civilian-Uses principle* which recognizes the legitimacy of the peaceful uses of chemistry.

• The *Self-Defense principle* which states that the right to defend one’s state against the threat or use of chemical weapons principles constitutes “a legitimate undertaking.”

• **Verification Principle** which infers the right of other states to substantiate other states’ compliance with the agreement but which also imparts the responsibility to states parties to keep up with advances in the life sciences so that this can be accomplished.

The Compatibility Principle prevents state parties to the CWC from interpreting anything in the CWC that would be incompatible with the obligations states have undertaken under the 1925 Geneva Protocol.

Kelle also identified the following specific norms in the CWC:

• **Disarmament** norm (Article I) – states which possess CW must destroy their stockpiles completely

• **Non-Acquisition** norm (Article I) – CW states and non-CW states must commit not to (re-)acquire CW

• **Non-Use** norms (Article I) – states parties agree never to use CW

• **Non-Transfer** norm (Article I) – states agree never to transfer CW materials or technology to aid a third party in CW production

• **Declaration** norm (Article III) – all states parties must submit information related to CW and the chemical industry – “where applicable” – to the OPCW

• **Inspection** norm (Article V) – states parties must allow the OPCW’s verification branch to substantiate the veracity of states parties declarations regarding their progress in CW destruction and other required actions through on-site inspections

• **Cooperation** norm (Article VI) – the implementation of the CWC must not impede civilian applications and free trade in chemicals for purposes not prohibited under the CWC

• **Assistance** norm (Article X) – in the case of the threat or use of CW against a state party, states able to provide assistance to other states parties must do so

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305 Alexander Kelle, "Norm Contestation," 8-10.
306 Note that the transfer of knowledge is glaringly absent here.
• **Internalization** norm – requires states parties to integrate the stipulations of the CWC into their national legal systems

• **Adaptation** norm – states parties are obligated to keep the CWC current with regard to advances in science and technology relevant to the CWC

Consequently, although it is informed by Kelle’s methodology and findings, the analytical approach here departs from and expands on Kelle’s methodology in several ways. First, in order to determine whether the contestation of WMD norms lies beyond disarmament, declaration, and verification, necessitates examining the five principal WMD agreements to extract and catalogue norms which are not related to disarmament, declaration, or verification, in those agreements. To begin, first the extraction and typification of norms from the principal WMD agreement.
Table 4. The Bigger Picture – Beyond Disarmament, Nonproliferation, Declaration, and Verification Norms

<table>
<thead>
<tr>
<th>PTBT(^{307})</th>
<th>NPT(^{308})</th>
<th>BTWC(^{309})</th>
<th>CWC(^{310})</th>
<th>CTBT(^{311})</th>
</tr>
</thead>
<tbody>
<tr>
<td>113 UN Members in 1963(^{312})</td>
<td>126 UN Members in 1968(^{313})</td>
<td>145 UN Members in 1975(^{314})</td>
<td>185 UN Members in 1994(^{315})</td>
<td>188 UN Members in 1999(^{316})</td>
</tr>
<tr>
<td>106 Signatories</td>
<td>92 Signatories</td>
<td>108 Signatories</td>
<td>165 Signatories</td>
<td>181 Signatories</td>
</tr>
<tr>
<td>94% Signature Obtained</td>
<td>73% Signature Obtained</td>
<td>75% Signature Obtained</td>
<td>89% Signature Obtained</td>
<td>96% Signature Obtained</td>
</tr>
<tr>
<td>924 words in English</td>
<td>2,270 words in English</td>
<td>1,735 words in English</td>
<td>53,869 words in English</td>
<td>26,911 words in English</td>
</tr>
<tr>
<td>26 States with Reservations</td>
<td>29 States with Reservations</td>
<td>18 States with Reservations</td>
<td>18 States with Reservations</td>
<td>4 States with Reservations</td>
</tr>
<tr>
<td>125 Deposited Agreements</td>
<td>190 Deposited Agreements</td>
<td>163 Deposited Agreements</td>
<td>188 Deposited Agreements</td>
<td>151 Deposited Agreements</td>
</tr>
<tr>
<td>192 UN Members in 2006(^{317})</td>
<td></td>
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</tbody>
</table>

\(^{307}\) Formally entitled the “Treaty Banning Nuclear Weapon Tests in the Atmosphere, in Outer Space and Under Water”

\(^{308}\) Formally entitled the “Treaty on the Non-Proliferation of Nuclear Weapons”

\(^{309}\) Formally entitled the “Convention on the Prohibition of the Development, Production and Stockpiling of Bacteriological (Biological) and Toxin Weapons and on their Destruction”; also known as simply the “BWC”

\(^{310}\) Formally entitled the “Convention on the Prohibition of the Development, Production, Stockpiling and Use of Chemical Weapons and on Their Destruction”

\(^{311}\) Formally entitled the “Comprehensive Nuclear-Test-Ban Treaty”

\(^{312}\) United Nations Office at Geneva (UNOG), “Member States: Growth in United Nations Membership, 1945- Present,” United Nations Online, http://www.un.org/en/members/growth.shtml, accessed 8 March 2010. Note that I used the year that the agreement entered into force in general to calculate the number of UN Member States. However, note also that there were no entries for the years 1997 and 1998, so I used data from 1994 and 1999 to give an estimate of the number of Member States so that a percentage of States Parties v. Signatories could be calculated for the year the agreement entered into force.

\(^{313}\) Ibid. Note that I used the year that the agreement entered into force in general to calculate the number of UN Member States. However, note also that there were no entries for the years 1997 and 1998, so I used data from 1994 and 1999 to give an estimate of the number of Member States so that a percentage of States Parties v. Signatories could be calculated for the year the agreement entered into force.

\(^{314}\) Ibid. Note that I used the year that the agreement entered into force in general to calculate the number of UN Member States. However, note also that there were no entries for the years 1997 and 1998, so I used data from 1994 and 1999 to give an estimate of the number of Member States so that a percentage of States Parties v. Signatories could be calculated for the year the agreement entered into force.

\(^{315}\) Ibid. Note that I used the year that the agreement entered into force in general to calculate the number of UN Member States. However, note also that there were no entries for the years 1997 and 1998, so I used data from 1994 and 1999 to give an estimate of the number of Member States so that a percentage of States Parties v. Signatories could be calculated for the year the agreement entered into force.

\(^{316}\) Ibid. Note that I used the year that the agreement entered into force in general to calculate the number of UN Member States. However, note also that there were no entries for the years 1997 and 1998, so I used data from 1994 and 1999 to give an estimate of the number of Member States so that a percentage of States Parties v. Signatories could be calculated for the year the agreement entered into force.

\(^{317}\) United Nations Office at Geneva (UNOG), “Member States: Growth in United Nations Membership, 1945- Present.” Note that I used the year that the agreement entered into force in general to calculate the number of UN Member States. However, note also that there were no entries for the years 1997 and 1998, so I used data from 1994 and 1999 to give an estimate of the number of Member States so that a percentage of States Parties v. Signatories could be calculated for the year the agreement entered into force.
<table>
<thead>
<tr>
<th><strong>65% are States Parties to Date</strong></th>
<th><strong>99% are States Parties to Date</strong></th>
<th><strong>85% are States Parties to Date</strong></th>
<th><strong>98% are States Parties to Date</strong></th>
<th><strong>79% are States Parties to Date</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>Complete WMD Disarmament Principle – General and complete disarmament of all kinds of weapons, including nuclear ³¹⁸</td>
<td>Prevention of Proliferation Principle – Prevention of wider dissemination of nuclear weapons reduces the danger of a nuclear war and recalls the intent to end the nuclear arms race at the earliest possible date ³¹⁹</td>
<td>Complete WMD Disarmament Principle – “a view to achieving effective progress toward general and complete disarmament, including the prohibition and elimination of all types of weapons of mass destruction” ³²⁰</td>
<td>Complete WMD Disarmament Principle – “a view to achieving effective progress towards general and complete disarmament...including the prohibition and elimination of all types of weapons of mass destruction” ³²¹</td>
<td>Nuclear Disarmament Principle – States Parties are not to encourage, participate in, cause, or carry out any nuclear weapon test explosion or any other nuclear explosion, are and to prohibit and prevent any such explosion on any of its territories or in places it controls ³²²</td>
</tr>
<tr>
<td>Test Ban Principle – Complete discontinuance of all nuclear test explosions within or beyond States Parties’ jurisdictions including underground or space, and the elimination of contamination of environment by radioactive substances</td>
<td>Non-Proliferation Principle – Nuclear states (“one which has manufactured and exploded a nuclear weapon or other nuclear explosive device prior to 1 January 1967”) ³²³ not to transfer any nuclear weapons or supporting capabilities to nonnuclear states ³²⁴</td>
<td>BW Taboo Principle – “Determined, for the sake of all mankind, to exclude completely the possibility of bacteriological (biological) agents and toxins being used as weapons” ³²⁵</td>
<td>CW Taboo Principle – States Parties undertake never to develop, produce, otherwise acquire, stockpile, retain, use, or prepare for military use of CW ³²⁶</td>
<td>Test Ban Principle – Confirms the aspirations to discontinue all nuclear weapon testing expressed in the 1963 Treaty Banning Nuclear Weapon Tests in the Atmosphere, Outer Space and Under Water ³²⁷</td>
</tr>
<tr>
<td></td>
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<td></td>
<td>Civilian Uses Principle – Implementation of CWC must not impede civilian applications and free trade in chemicals for</td>
<td></td>
</tr>
</tbody>
</table>

³²³ United Nations (UN), *NPT*, “Article IX.”
³²⁴ Ibid, Article I.
³²⁵ United Nations (UN), *BTWC*, “Preamble.”
³²⁶ United Nations (UN), *CWC*, “Article I.”
³²⁷ United Nations (UN), *CTBT*, “Preamble.”
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</thead>
<tbody>
<tr>
<td>“the benefits of peaceful applications of nuclear technology...should be available for peaceful purposes to all Parties to the Treaty, whether nuclear-weapon or non-nuclear weapon States”</td>
<td>“[c]onvinced that such use would be repugnant to the conscience of mankind and that no effort should be spared to minimize this risk”</td>
<td>“achievements in the field of chemistry should be used exclusively for the benefit of mankind”</td>
<td>Nuclear disarmament and the prevention of nuclear weapon proliferation enhance international peace and security</td>
</tr>
<tr>
<td>Peaceful Uses Principle – States Parties recognize the legitimacy of peaceful uses of nuclear technology</td>
<td>Peaceful Uses Principle – States Parties recognize the legitimacy of peaceful uses of the biosciences, namely prophylactic, protective, or other peaceful purposes, and in quantities consistent with those uses; States Parties undertake to never develop, produce, stockpile, or otherwise acquire or retain microbial or other biological agents, or toxins of types and in quantities that have no justification for prophylactic, protective, or other peaceful purposes</td>
<td>Peaceful Uses Principle – States Parties recognize the legitimacy of peaceful uses of chemistry</td>
<td>Peaceful Uses Principle – States Parties recognize the possibility of nuclear explosions for peaceful purposes</td>
</tr>
</tbody>
</table>

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328 United Nations (UN), CWC, “Article VI.”
329 United Nations (UN), NPT, “Preamble.”
330 United Nations (UN), BTWC, “Preamble.”
331 United Nations (UN), CWC, “Article I.”
332 United Nations (UN), CTBT, “Preamble.”
333 United Nations (UN), NPT, “Preamble.”
334 United Nations (UN), BTWC, “Article I.”
335 United Nations (UN), BTWC, “Article I.”
336 United Nations (UN), CWC, “Article II” and “Article V.”
337 United Nations (UN), CTBT, “Article VIII.”
<table>
<thead>
<tr>
<th>Principle</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Free Trade Principle</td>
<td>“Desiring to promote free trade in chemicals”(^{338})</td>
</tr>
<tr>
<td>Self-Defense Principle</td>
<td>States Parties have the right to defend against the threat or use of CW(^{339})</td>
</tr>
<tr>
<td>Verification Norm</td>
<td>Non-nuclear weapon States Parties will accept safeguards and verification by the International Atomic Energy Agency. Also, any transfer of peaceful nuclear technology to non-nuclear parties is subject to verification and safeguards.(^{340})</td>
</tr>
<tr>
<td>Verification Principle</td>
<td>States have the right to substantiate other states’ compliance with the CWC as well as to keep up with advances in life sciences so that they can revise the CWC(^{341})</td>
</tr>
<tr>
<td>Verification Norm</td>
<td>All parties will participate in verification measures (seismological, radionuclide, hydroacoustic, and infrasound monitoring) and cooperate on the development and exchange of verification technology.(^{342})</td>
</tr>
<tr>
<td>Compatibility Principle</td>
<td>“Nothing in this Convention shall be interpreted as in any way limiting or detracting from the obligations assumed by any State under the Protocol for the Prohibition of the Use in War of Asphyxiating, Poisonous or Other Gases, and of Bacteriological Methods of Warfare, signed at Geneva on June 17, 1925.”(^{343})</td>
</tr>
<tr>
<td>Compatibility Principle</td>
<td>“this Convention reaffirms principles and objectives of and obligations assumed under the Geneva Protocol of 1925,(^{344}) and the Convention on the Prohibition of the Development, Production and Stockpiling of Bacteriological (Biological) and Toxin Weapons and on their Destruction signed at London, Moscow and Washington on 10 April 1972”(^{345})</td>
</tr>
<tr>
<td>Non-Acquisition Norm</td>
<td>Non-nuclear weapon States Parties undertake never to CW and non-CW states must not (re-</td>
</tr>
<tr>
<td><strong>Promises</strong></td>
<td><strong>Nuclear and Biological Weapons</strong></td>
</tr>
<tr>
<td>-------------</td>
<td>----------------------------------</td>
</tr>
<tr>
<td>promise not to seek or accept control of nuclear weapons, nuclear explosive devices, or assistance in their manufacture</td>
<td>develop, produce, stockpile, and otherwise acquire or retain biological warfare agents, their production methods, weapons, or “means of delivery designed to use” biological weapons in a hostile manner or in armed conflict</td>
</tr>
<tr>
<td>Non-Transfer Norm – States Parties nuclear weapons parties promise not to transfer or in any way assist, encourage, or induce directly or indirectly, the development of nuclear weapons or nuclear explosive devices in non-nuclear weapons states, or to accept such</td>
<td>Non-Transfer Norm – States Parties undertake not to transfer or in any way assist, encourage, or induce directly or indirectly, any item specified in Article</td>
</tr>
<tr>
<td>Internalization Norm – States Parties must integrate national measures to put basic BTWC obligations into effect</td>
<td>Internalization Norm – States Parties must integrate the stipulations of the CWC into their national legal systems</td>
</tr>
</tbody>
</table>

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346 United Nations (UN), NPT, “Article II.”
347 United Nations (UN), BTWC, “Article I.”
348 United Nations (UN), CWC, “Article I.”
349 United Nations (UN), NPT, “Preamble” and “Article VI.”
350 United Nations (UN), BTWC, “Article II.”
351 United Nations (UN), CWC, “Article I.”
352 United Nations (UN), CTBT, “Preamble.”
353 United Nations (UN), NPT, “Article I.”
354 Ibid, “Article II.”
355 United Nations (UN), BTWC, “Article III.”
356 United Nations (UN), CWC, “Article I.”
| Declaration Norm – States Parties must submit information related to CW and the chemical industry to OPCW.  |
| Declaration Norm – States parties will, on a voluntary basis, provide prior notification of any chemical explosion using 300 tons of TNT (or greater)-equivalent blasting material detonated as a single explosion on its territory or anywhere under its jurisdiction. |
| Inspection Norm – States Parties must allow inspection to verify compliance with CWC. |
| Inspection Norm – States parties are subject to on-site inspections if a request is submitted. |

**IMPLIED IN VERIFICATION NORM**

| Consultation Norm – States Parties to cooperate in solving any problems arising from the objective of the BTWC or its implementation. |
| Reporting Norm – States Parties may lodge a complaint with the UNSC if it discovers another state party in breach of BTWC obligations; and States Parties undertake to cooperate with resulting UNSC investigations. |
| Assistance Norm – In case of biological warfare threat against a state party, other States Parties undertake to provide assistance. |
| Assistance Norm – In case of CW threat against a state party, other States Parties must provide assistance. |

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357 United Nations (UN), *BTWC*, “Article IV.”
358 United Nations (UN), *CWC*, “Article VII.”
359 United Nations (UN), *CTBT*, “Article III.”
360 United Nations (UN), *CWC*, “Article III.”
361 United Nations (UN), *CWC*, “Article IV.”
362 United Nations (UN), *CTBT*, “Protocol to the CTBT, Part II.”
363 United Nations (UN), *BTWC*, “Article V.”
364 United Nations (UN), *BTWC*, “Article VI.”
<table>
<thead>
<tr>
<th>Modification Norm – Any States Party may propose amendments to the PTBT&lt;sup&gt;370&lt;/sup&gt;</th>
<th>Modification Norm – Any States Party may propose amendments to the NPT&lt;sup&gt;371&lt;/sup&gt;</th>
<th>Modification Norm – Any States Party may propose amendments to the BTWC&lt;sup&gt;372&lt;/sup&gt;</th>
<th>Modification Norm – Any States Party may propose amendments to the CWC&lt;sup&gt;373&lt;/sup&gt;</th>
<th>Modification Norm – States any party may propose amendments to the CTBT&lt;sup&gt;374&lt;/sup&gt;</th>
</tr>
</thead>
<tbody>
<tr>
<td>Adaptation Norm – No more than five years after its entry into force, the BTWC will be reviewed to ensure that its objectives are being realized and to consider modifications with regard to new, relevant scientific and technological developments&lt;sup&gt;367&lt;/sup&gt;</td>
<td>Adaptation Norm – States Parties must keep CWC current with regard to advances in CWC science and technology in order to effectively implement the CWC&lt;sup&gt;368&lt;/sup&gt;</td>
<td>Adaptation Norm – Obligation to consider and review scientific and technological developments that could affect the operation of this Treaty&lt;sup&gt;369&lt;/sup&gt;</td>
<td>Assurance Norm – States Parties are obligated to assure that chemicals produced are used for things not prohibited by CWC&lt;sup&gt;375&lt;/sup&gt;</td>
<td>Economic &amp; Technological Development Norm – The provisions of this Treaty shall be implemented in a manner which avoids hampering States Parties’ economic or technological development for further development of the application of atomic energy for peaceful uses or other purposes. “Promote free trade in chemicals as well as international cooperation and exchange of scientific and technological information.”</td>
</tr>
</tbody>
</table>

<sup>365</sup> United Nations (UN), CWC, “Article X.”
<sup>366</sup> Ibid, “Article VII.”
<sup>367</sup> United Nations (UN), BTWC, “Article XII.”
<sup>368</sup> United Nations (UN), CWC, “Article VII.”
<sup>369</sup> Ibid, “Article VII.”
<sup>370</sup> United Nations (UN), CTBT, “Article II.”
<sup>371</sup> United Nations (UN), NPT, “Article VIII.”
<sup>372</sup> United Nations (UN), PTBT, “Article II.”
<sup>373</sup> United Nations (UN), NPT, “Article VIII.”
<sup>374</sup> United Nations (UN), BTWC, “Article XI.”
<sup>375</sup> United Nations (UN), CWC, “Article XV.”
<sup>376</sup> United Nations (UN), CWC, “Article VI.”
<sup>377</sup> United Nations (UN), NPT, “Article III” and “Article IV.”
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<td>– The PTBT is of unlimited duration; States Parties have the right to withdraw from the treaty&lt;sup&gt;380&lt;/sup&gt;</td>
<td>– The PTBT is of unlimited duration; States Parties have the right to withdraw from the treaty under defined circumstances&lt;sup&gt;382&lt;/sup&gt;</td>
<td>– The BTWC is of unlimited duration; States Parties retain the right to define the duration of the applicability of the treaty as well as to withdraw from the treaty under defined circumstances&lt;sup&gt;383&lt;/sup&gt;</td>
<td>– States that the CTBT is of unlimited duration. States parties have the right to withdraw from the treaty &quot;if it decides that extraordinary events related to the subject matter of this Treaty have jeopardized its supreme interests.&quot; A conference will convene in 10 years ('after the entry into force of this Treaty') to review the operation and effectiveness of the CTBT. Reviews will be conducted in intervals of 10 years thereafter.&lt;sup&gt;384&lt;/sup&gt;</td>
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<sup>378</sup> United Nations (UN), *CWC*, “Preamble” and “Article XI.”
<sup>379</sup> United Nations (UN), *CTBT*, “Article IV.”
<sup>380</sup> United Nations (UN), *PTBT*, “Article IV.”
<sup>381</sup> United Nations (UN), *NPT*, “Article X.”
<sup>382</sup> United Nations (UN), *BTWC*, “Article XIII.”
<sup>383</sup> United Nations (UN), *CWC*, “Article XVI.”
<sup>384</sup> United Nations (UN), *CTBT*, “Article IX.”
<sup>385</sup> Ibid, “Article VIII.”
<sup>386</sup> United Nations (UN), *CWC*, “Article VI, Part IX.”
| Continuation Norm – States Parties to seek to continue negotiations in order to discontinue all test explosions of nuclear weapons in the atmosphere, outer space and underwater | Continuation Norm – States Parties agree to continue negotiating a CW treaty  
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|---|---|---|
| Sovereignty Norm – States Parties must refrain from the threat or use of force against the territorial integrity or political independence of any state  
389 | Sovereignty Norm - Members of the inspection team must respect the laws and regulations of the inspected State Party or Host State and, to the extent consistent with the inspection mandate, must not interfere in the internal affairs of that State  
390 |  |
| Right to Science Norm – States Parties have the “inalienable right” to develop research, production, and use of nuclear energy for peaceful purposes in conformity with the NPT  
391 | Right to Science Norm – States Parties have the “right” to participate in the fullest possible exchange of equipment, materials, and scientific and technological information for the use of bacteriological (biological) agents and toxins for peaceful purposes  
392 |  |
| Cooperation Norm – States Parties “are entitled to participate in the fullest possible exchange of scientific information for, and Cooperation Norm – “States Parties in a position to do so shall also cooperate in contributing individually or  
393 |  | Cooperation Norm – States that the CTBT will not be interpreted to restrict the international exchange of data for scientific  
394 |

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387 Ibid, “Article IX.”  
388 United Nations (UN), BTWC, “Article IX.”  
389 United Nations (UN), NPT, “Preamble.”  
390 United Nations (UN), CWC, “Privileges and Immunities.”  
391 United Nations (UN), NPT, “Article IV.”  
392 United Nations (UN), BTWC, “Article X.”
to contribute alone or in cooperation with other States to, the further development of the applications of atomic energy for peaceful purposes. States Parties will ensure that "potential benefits from any peaceful applications of nuclear explosions will be made available to non-nuclear weapon States Parties Party to the Treaty on a non-discriminatory basis." 

Privacy of Information Norm – The OPCW shall conduct its verification activities in the least intrusive manner possible, will request only relevant information and data, and will protect the confidentiality of information on civil and military activities and facilities with particular regard to the provisions set forth in the Confidentiality Annex.

Privacy of Information Norm – "For the purposes of this Treaty, no State Party shall be precluded from using information obtained by national technical means of verification in a manner consistent with generally recognized principles of international law, including that of respect for the sovereignty of States." Each State Party retains the right to protect sensitive installations, prevent disclosure, and protect the confidentiality of information and data not related to the Treaty and or information related to civil and military activities and facilities. Verification will be conducted in the least intrusive manner possible, will request only relevant information and data.

| 393 United Nations (UN), NPT, “Article IV.” |
| 394 Ibid, “Article V.” |
| 395 United Nations (UN), BTWC, “Article X.” |
| 396 United Nations (UN), CWC, “Article VIII” and “Confidentiality Annex.” |
| 397 United Nations (UN), CTBT, “Article IV.” |
| Harmonization Norm – States Parties may create regional treaties that assure the total absence of nuclear weapons in their respective territories. | Harmonization Norm – States to coordinate with Australia Group on trade behavior and share information on “suspicious requests” with other states parties | Harmonization Norm – States Parties may create bi- or multilateral agreements with the stipulation that it keep the UN informed |

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398 Ibid, “Article II.”

399 United Nations (UN), NPT, “Article VII.”

400 United Nations (UN), CWC, “Article IV.”
Number of Words in an Agreement

While the number of words in an agreement may seem like an odd data point, it is worth noting several characteristics with regard to the size of the agreements and other data points. First, the number of words in agreements has increased significantly since the drafting of the BTWC. The CWC is thirty-one times longer than the BTWC, and the CTBT is nearly sixteen times longer than the BTWC. Both the CWC and the CTBT contain declaration and verification protocols within the agreements, but both have also met with mixed fates. It is entirely plausible that the lack of additional declaration and verification protocols to the BTWC was a contestation by the States Parties to some of the norms in the CWC. Equally curious is that the longer the agreement, the greater the number of signatories. While the vagueness of the agreements, i.e., those with fewer numbers may leave states wondering what they are signing up for; the failure of the CTBT to enter into force is clearly unrelated to the extraordinarily high percentage of signatories to the Treaty.

The number of words in the agreements appears unrelated to the number of reservations entered against the agreements. Reservations are the states’ opportunity to air specific comments about the norms or some other aspect of implementation of an agreement, yet the number of reservations is rather static across the WMD agreements – regardless of the number of words – with the exception of the CTBT, where few reservations were entered in spite of the fact that the agreement has yet to enter into force. Thus, the relationship between the reservations and the number of words in the agreements appears unrelated to general contestation of an agreement, although it is decidedly an indication of discrete contestation of specific norms, per the discussion in the Reservations section. In conclusion, there is no consistent relationship between contestation or cooperative contestation with regard to the number of words in an agreement.
Number of States Submitting Reservations to a WMD Agreement and Specifics of Reservation

Reservations to an agreement are another means for states to contest the principles and norms in an agreement. Even though most states submitting reservations in the signature process generally go on to ratify the agreement, until retracted, the reservations remain on record as formal contestation. Refer to table 3 for the breakdown of reservations. Discrete analysis of reservations to the various WMD agreements is below. Statements qualifying a state’s participation in a particular agreement are not uncommon, and they often reveal objections to specific assumptions or norms in the agreements, or the failure of certain norms to be implemented. While the percentage of reservations should be telling, generally only states that sign agreements submit them. Consequently, they are not indicative of general contestation; rather they reflect only the contestation of states that are likely signatories. Some reservations express reasons (e.g., equality, equity, equanimity) for contestation. Some indicate cooperative contestation, but only taken together with other states’ reservations and statements regarding the same principles or norms. Excerpts entered by the sixteen states under special scrutiny here and notations of the type of contestation follow:

Reservations to the BTWC

Several of the sixteen states entered reservations, but only those with relevance to norms not addressing disarmament are included here. These are evidence of contestation to specific norms in the BTWC, but tell us nothing about cooperative contestation.

China

The basic spirit of the Convention on the Prohibition of Biological Weapons conforms to China's consistent position and is conducive to the efforts of the world's peace-loving countries and peoples in fighting against aggression and maintaining world peace. China once was one of the victims of biological (bacteriological) weapons. China has not produced or possessed such weapons and will never do so in future. However, the Chinese Government considers that the Convention has its defects. For instance, it fails to provide in explicit terms for the prohibition of the use of biological weapons and the concrete and effective measures for supervision and verification; it lacks forceful measures of sanctions in the procedure of complaint against instances of violation of the Convention. It is the hope of the Chinese Government that these defects maybe made up or corrected at an appropriate time.

Beyond its claims to compliance before the fact with the norms of the BTWC, China argues for “forceful measures of sanctions…against instances of violation of the Convention,” and a “complete prohibition and thorough destruction of chemical weapons.” In other words, the China supports Declaration and Verification protocols – which have not been adopted – backed by forceful sanctions for noncompliance. This, as will be seen via other reservations and states’ statements in the next chapter, supports cooperative contestation of the BTWC. While its public reasoning is that this is because it has been a victim of biological weapons, recent figures on the percentage of graduate students participating in advanced biotechnology programs in universities in the United States and recently collected information on China’s program and funding priorities confirm China’s interest in harvesting advanced knowledge of biological science and
biotechnology at any cost.\textsuperscript{402} Thus, while China’s reservation may be truthful, it may also indicate intent to ensure that \textit{all} norms in the BTWC are equally enforced, particularly those contained in Article X.

India

India has stood for the elimination of both chemical and bacteriological (biological) weapons. However, in view of the situation that developed in regard to the discussions concerning biological and chemical weapons, it became possible to reach agreement at the present moment on a Convention on the elimination of biological and toxin weapons only. Negotiations would need to be continued for the elimination of chemical weapons also. It has been recognised that, both in regard to the Convention on biological and toxin weapons and in respect of future negotiations concerning chemical weapons, the Geneva Protocol of 1925 should be safeguarded and the inseparable link between prohibition of biological and chemical weapons should be maintained.

India’s position on the Convention on biological and toxin weapons has been outlined in the statements of the representative of India before the Conference of the Committee on Disarmament (CCD) and the First Committee of the General Assembly.

The Government of India would like to reiterate in particular its understanding that the objective of the Convention is to eliminate biological and toxin weapons, thereby excluding completely the possibility of their use, and that the exemption in regard to biological agents or toxins, which would be permitted for prophylactic, protective or

other peaceful purposes would not, in any way, create a loophole in regard to the production or retention of biological and toxin weapons.

Also, any assistance which might be furnished under the terms of the Convention would be of medical or humanitarian nature and in conformity with the Charter of the United Nations.

India's support of the Convention on biological and toxin weapons is based on these main considerations. It is India's earnest hope that the Convention will be adhered to by all States, including all the major Powers, at a very early date.

India confirms adherence to a total elimination of both chemical and biological weapons, which it also balances with a caveat that any assistance it might furnish – that is, anything resulting from its own biological, chemical, or biotechnology research and development which might ultimately be used to counter the effects of such attacks – should not be considered offensive in any way. In doing so, India may be inadvertently admitting to working on advanced biological and chemical research and development, which may be impossible to distinguish as defensive rather than offensive in intent. While adhering to the BTWC norms, India seeks to preserve its Article X rights as well, especially the free exchange of science and technology that might allow it to leap forward quickly in the fields of advanced biotechnology and nanotechnology with biological applications that it is known to be working on. India hopes to achieve this by pre-empting contestation by other States Parties of the Economic and Technological Development Norm and the Right to Science Norm. This tracks with other
states’ statements that contest the lack of robustness of the BTWC and a cooperative contestation of the lack of declaration and verification norms in the BTWC.

**Reservations to the CWC**

Several of the sixteen states entered reservations, but only those with relevance to norms not addressing disarmament are included here.

**China**

China has consistently stood for the complete prohibition and thorough destruction of all chemical weapons and their production facilities. The Convention constitutes the legal basis for the realization of this goal. China therefore supports the object and purpose and principles of the Convention.

The Convention should effectively facilitate trade, scientific and technological exchanges and cooperation in the field of chemistry for peaceful purposes. All export controls inconsistent with the Convention should be abolished."

China has always stood for complete prohibition and thorough destruction of chemical weapons. As CWC has laid an international legal foundation for the realization of this goal, China supports the purpose, objectives and principles of the CWC.

CWC should play a sound role in promoting international trade, scientific and technological exchanges and operation for peaceful purposes in the field of chemical industry. It should become the effective legal basis for regulating trade and exchange among the state parties in the field of chemical industry." Again, while China affirms its complete support of the norms in the CWC, China also seeks to ensure that its chemical trade is not impacted per the CWC’s Free Trade

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Principle, as well as ensuring the enforcement of the Right to Science Norm, and the Economic and Technological Development Norm. China again exhibits the seeking the distinction of science, technology, and trade from research and development that produce chemical weapons and the trade of chemicals which in and of themselves are benign (nonweapon) trade items but which in combination with other chemicals and technology might be used for nefarious purposes. In other words: do not impede our ability to do research and develop chemicals, or to trade them if they are not intended to be used as weapons.

In a preview of many state’s problems with the BTWC, China outlines how various principles and norms in the CWC impact its economy. This pattern is repeated in states’ statements on the BTWC as seen in the next chapter, and is indicative of cooperative contestation.

Iran
1. The Islamic Consultative Assembly (the Parliament) of the Islamic Republic of Iran approved the bill presented by the Government to join the [said Convention] on 27 July 1997, and the guardian Council found the legislation compatible with the Constitution and the Islamic Tenets on 30 July 1997, in accordance with its required Constitutional process. The Islamic Consultative Assembly decided that: "The Ministry of Foreign Affairs must pursue in all negotiations and within the framework of the Organization of the Convention, the full and indiscriminate implementation of the Convention, particularly in the areas of inspection and transfer of technology and chemicals for peaceful purposes. In case the aforementioned requirements are not materialized, upon the recommendation of the Cabinet and approval of the Supreme
National Security Council, steps aimed at withdrawing from the Convention will be put in motion.”

2. The Islamic Republic of Iran attaches vital significance to the full, unconditional and indiscriminate implementation of all provisions of the Convention. It reserves the right to withdraw from the Convention under the following circumstances:
--- non-compliance with the principle of equal treatment of all States parties in implementation of all relevant provisions of the Convention;
--- disclosure of its confidential information contrary to the provisions of the Convention;
--- imposition of restrictions incompatible with the obligations under the Convention.

3. As stipulated in article XI, exclusive and non-transparent regimes impeding free international trade in chemicals and chemical technology for peaceful purposes should be disbanded. The Islamic Republic of Iran rejects any chemical export control mechanism not envisaged in the Convention.

4. The Organization for Prohibition of Chemical Weapons (OPCW) is the sole international authority to determine [sic] the compliance of States Parties regarding chemical weapons. Accusations by States Parties against other States Parties in the absence of a determination of non-compliance by OPCW will seriously undermine the Convention and its repetition may make the Convention meaningless.

5. One of the objectives of the Convention as stipulated in its preamble is to ”promote free trade in chemicals as well as international cooperation and exchange of scientific and technical information in the field of chemical activities for purposes not prohibited
under the Convention in order [sic] to enhance the economic and technological development of all States Parties.” This fundamental objective of the Convention should be respected and embraced by all States Parties to the Convention. Any form of undermining, either in words or in action, of this overriding objective is considered by the Islamic Republic of Iran a grave breach of the provisions of the Convention.

6. In line with the provisions of the Convention regarding non-discriminatory treatment of States Parties:

-- The OPCW should maintain its international character by ensuring fair and balanced geographical distribution of the personnel of its Technical Secretariat, provision of assistance to and cooperation with States Parties, and equitable membership of States Parties in subsidiary organs of the Organization.

Interestingly, Iran signals its willingness to withdraw – i.e., contest the entire CWC – if “the full and indiscriminate implementation of the Convention, particularly in the areas of inspection and transfer of technology and chemicals for peaceful purposes” is not observed. This is a common theme for Iran and others with regard to other WMD agreements as well, and indicative of cooperative contestation on this point. Furthermore, this applies directly to “the have nots’” contestation of the implementation – or lack thereof – of Article X. Like China, it strongly insinuates that other States Parties have contested the Free Trade Principle and the Economic and Technological Development Norm in stating that these norms should be recognized as “a fundamental objective of the Convention.” But Iran goes a step further in stating that States Parties contestation of (“undermining” of) these norms should be considered as grave a breach as that of any other norm in the CWC. This essentially constitutes a call for
cooperative contestation. Finally, Iran seeks “equitable membership of States Parties” in the OPCW – a clear insinuation that “the haves” contest the explicit sovereignty and equality of States Parties in asserting their dominance of the UNSC and the nuclear oversight agencies.

Pakistan

The objectives and purposes of the Convention must be strictly adhered to by all states. The relevant provisions on Challenge Inspections must not be abused to the detriment of the economic and security interests of the States parties unrelated to chemical weapons. Otherwise, the universality and effectiveness of the Convention is bound to be jeopardized.

Abuse of the verification provisions of the Convention, for purposes unrelated to the Convention, will not be acceptable. Pakistan will never allow its sovereignty and national security to be compromised.

The Convention should effectively facilitate trade, scientific and technological exchanges and cooperation in the field of chemistry for peaceful purposes. All export control regimes inconsistent with the Convention must be abolished.

Pakistan appears to be seeking the equal application of the norms in the CWC to all States Parties. Oddly, this is a means of implying that other States Parties in a position to do so have contested the equal application of those norms in the past, especially the Economic and Technological Development and the Free Trade Principle. Pakistan also strongly insinuates that other States Parties have contested the Verification Norm by seeking verification of activities in
Pakistan for “purposes unrelated to the Convention.” Finally, Pakistan implies that States Parties have contested Pakistan’s sovereignty by violating the Verification Norm as well. Other states’ statements will confirm this general impression of a bifurcation of the application of various norms in not only the CWC but other WMD agreements, particularly those which impact states’ economies. They are good examples of cooperative contestation when taken as a whole, as statements in the next chapter will illuminate.

United States
Subject to the condition which relates to the Annex on Implementation and Verification, that no sample collected in the United States pursuant to the Convention will be transferred for analysis to any laboratory outside the territory of the United States.

In effect, the United States is contesting the Verification Norm in its reservation. While it seems plausible that this is for industrial, proprietary reasons, Kelle points out that in its objections to the Declaration and Verification protocols for the BTWC, the United States could also be seen as preventing its advanced chemical weapons research and development from being made “available” via analysis and vulnerable to backwards engineering. Likewise, the United States could also be seen as possibly hiding advances it has made in chemical or toxin development through its chemical and toxin countermeasures research and development. Ironically, but consistent with the theory here, the United States is contesting norms that would compromise its economy. This is the mirror image of “the have nots’” contestation. However, this behavior will also be seen as cooperative when the similar objectives of other western states are discussed in the next chapter.
Reservations to the NPT

Several of the sixteen states entered reservations, but only those with relevance to norms not addressing disarmament are included here.

Egypt

Egypt's commitment by virtue of the provisions of the Non-Proliferation Treaty to refrain, in any way, from acquiring or manufacturing nuclear weapons shall not impair its inalienable right to develop and use nuclear energy for peaceful purposes, in conformity with the provisions of Article IV of the Treaty, which affirms the inalienable right of all the parties of the Treaty to develop research, production and the use of nuclear energy for peaceful purposes without discrimination. The stipulation of that right in the Treaty itself is, in fact, a codification of a basic human right, which can neither be waived or impaired.

From this premise, Egypt also views with special attention the provisions of Article IV of the Treaty calling on the Parties of the Treaty who are in a position to do so to cooperate in contributing to the further development of the application of nuclear energy for peaceful purposes, especially in the territories of non-nuclear-weapon States Party to the Treaty, with due consideration for the needs of the developing areas of the world.

Embarking on a number of construction projects of nuclear power reactors to generate electricity in order to meet its increasing energy needs so as to promote the prosperity and welfare of its people, Egypt expects from industrialized nations with a developed nuclear industry a wholehearted assistance and support. This would be in consonance

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with the letter and spirit of Article IV of the Treaty, in particular since Egypt has committed itself to the application of the safeguards system of the International Atomic Energy Agency as regard the peaceful nuclear activities carried out within its territory, in accordance with the provisions of Article III of the Treaty.

Within the framework of the rights provided for in the Treaty for all Parties thereto in as far as the use of nuclear energy for peaceful purposes is concerned, Egypt wishes to refer to the provisions of Article V of the Treaty, which state that potential benefits from any peaceful applications of nuclear explosions will be made available to non-nuclear-weapon States Party to this Treaty. Though such application pose presently certain difficulties, particularly in view of their detrimental environmental effect, Egypt nevertheless deems that this should not relieve the nuclear-weapon States Party [sic] to the Treaty from their responsibility to promote research and development of these applications, in order to overcome all the difficulties presently involved therein.

In its reservations, Egypt clearly signals its understanding that the NPT confers an “inalienable right” – and in its statement, a basic human right – to peaceful development of nuclear energy, thereby inferring that this right has been contested by other States Parties. At the same time, Egypt highlights contestation by States Parties via discriminatory behavior (i.e., contestation) of the observance and enforcement of the norms in the NPT, especially the Right to Science Norm, the Economic and Technological Development Norm, and Peaceful Uses Norm for Egypt. Specifically, Egypt states that difficulties in implementing these norms “should not relieve the nuclear-weapon States Party [sic] to the Treaty from their responsibility to promote
research and development of these applications,” implying that “the haves” had heretofore been contesting these norms. Egypt’s reservation responds to that contestation with its own statement about how norms affecting research and development that potentially lead to economic development are substantiated in statements in the next chapter, and can be seen as cooperative when taken together with other states’ statements.

**Reservations to the CTBT**

Several of the sixteen states entered reservations, but only those with relevance to norms not addressing disarmament are included here.

**China**

All nuclear weapon states should pledge their support to proposals for the establishment of nuclear-weapon-free zones, respect their status as such and undertake corresponding obligations.

Sometimes contestation consists of promoting alternative norms different from those contained in the WMD agreements. Here China is promoting, as we will see from other UN documents from other States Parties, “nuclear-weapon-free zones,” which moves far beyond the norms of the CTBT, and which, oversimplifying the agreement, essentially beefs up the test ban treaties. China has the most robust nuclear energy program in the world, with 11 operable reactors as of May 2009, twelve more under construction in the same month, 33 more nuclear reactors planned, and another eighty reactors proposed.

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Reservations, then, can signal various types of contestation – some against norms in agreements, some identifying states that are contesting the full implementation of the norms in the agreements, and some that offer alternative norms. This pattern will be further enforced in the review of States Parties’ statements of BTWC proceedings, as will be seen in the Analysis Section, and will be shown as cooperative as whole regions seek to make entire zones WMD or nuclear free.

**Number of Amendments to WMD Agreements as Cooperative Contestation**

The number of amendments to agreement submitted and the specifics of amendments to agreements can be indicative of contestation. States Parties may amend a WMD agreement through a procedural means. The amendment process appears to be passed over as a useful tool in contesting norms, and the only evidence that exists is when amendments submitted seek to strengthen the agreement in question, rather than to weaken it. However, it does not appear that any of the WMD agreements have been amended to date, although careful review of the BTWC shows that Iran has submitted an amendment, which is discussed below. If several states enter the same amendment or agree on the amendment via other statements, this can be indicative of cooperative contestation.

**Number of States Parties Withdrawing from WMD Agreements as Cooperative Contestation**

States may also withdraw from a WMD agreement through specified procedural means, although the general interpretation is that the State must not only have justifiable reasons, but it must have permission from the other States Parties to do so. The DPRK withdrew from the NPT
in 2003, and Iran has established reservations to the CWC that would justify its withdrawal from the CWC as well. While reservations can signal specific contestation of norms in a WMD agreement, the states generally go on to ratify the agreement, indicating that they generally agree with either the need for the agreement or the core norms therein. Withdrawal from a WMD agreement is an obvious indicator of rejection of the norms in a WMD agreement or its implementation, although it is almost unused as a strategy for contestation; mass withdrawals, which would be cooperative contestation, have not occurred.

**Implementation of the WMD Agreements**

Whether or not states fulfill implementation obligations contained in WMD agreements constitutes another indicator of a state’s acceptance or contestation of the norms in an agreement. Patterns of state implementation of behavior are indicative of contestation, and likely cooperative contestation.

The history of the implementation of the nuclear agreements and the CWC has been thoroughly documented and will not be covered in detail here, except where there is a significant overlap in an implementation issue with the implementation of the BTWC. Suffice it to say that the PTBT, NPT, and CWC all have watchdog organizations that track and report both their compliance and implementation efforts, specifically their declarations and their verification submittals.

The UN has interpreted “implementation” for the BTWC as deriving from Article IV, which, the UN states, “requires each State Party to take any necessary measures to prohibit and prevent the development, production, stockpiling, acquisition, or retention of the agents, toxins,

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weapons, equipment and means of delivery specified in Article I of the Convention, within the
territory of such State, under its jurisdiction or under its control anywhere.” 408 As concerns the
BTWC, according to the UN’s Disarmament website:

States Parties are obliged to translate the international obligations found in the
Convention into effective national action. Some of the commitments undertaken by States
Parties are derived from the Convention itself. Others can be found in the outcomes of
subsequent review conferences. These obligations include:

- Designating national contact points
- Reporting
- Response to proposal to amend the Convention
- Confidence-Building Measures (CBMs)
- Provision of assistance
- Universality

According to de Jonge,

Other than the 1993 Chemical Weapons Convention, the BWC did not provide for the
establishment of a specialized UN agency under Article 57 of the Charter to review
implementation. Neither there is [sic] any form of Secretariat or any permanent body to
guide the review process or promote the biological BWC. Where observance of the
CWC is both promoted and verified by the OPCW, the biological BWC lacks not only an
organisation, but also any form of Confidence Building Measures. The only specific
mechanisms provided for in the BWC, are Review Conferences at a five-year interval. In

408 United Nations Office at Geneva (UNOG), “Disarmament: Implementation,” UNOG Online,
1986 the States Parties agreed on the voluntary composing of implementation reports as a form of CBM, but few states did actual deliver a [sic] report.409

Nevertheless, United Nations Disarmament site houses the Confidence Building Measures for the BTWC and tracks compliance with them. The OPBW collects the documents produced by the annual Meetings of Experts, the Meetings of States Parties, and the Review Conferences as well as supporting documents on strategies to strengthen the biological BTWC. The United Nations’ Disarmament website also collects data for the National Implementation Database (NID), which explicates in detail the measures in force in each State Party to the Convention to implement the BTWC at the national level, and the Compendiums of National Approaches (CNAs) that describe how those measures are operationalized. Of the sixteen states identified as critical to BTWC, fifteen have registered implementation measures in the NID, although the specific measures vary considerably given the constraints of national law:

1. China
2. Egypt
3. France
4. India
5. Iran (Islamic Republic of)
6. Iraq
7. Israel
8. Japan
9. Libya
10. Pakistan

11. Republic of Korea  
12. Russian Federation  
13. Syrian Arab Republic  
14. United Kingdom  
15. United States of America  

The DPRK has not registered NID measures although it is a State Party to the BTWC; Israel, Egypt, and Syria, which are not States Parties, have implementation plans on record at the UN. Not filing an NID certainly indicates contestation, but more important is the content of the NIDs, since filing may simply be checking a box. Thus, contestation of Article IV can take two forms. As a measure of cooperative contestation, though, NIDs have limited value without being able to compare the detail in the submissions, which is beyond the scope of this study.

Identification of Norms Under Contestation Unrelated to Disarmament

While Article IV of the BTWC speaks directly to implementation, foundational to implementation is whether states fulfill obligations laid out in other norms, specifically norms associated with specific rights to knowledge and technology, science, reporting and cooperation requirements (even if they are not related to disarmament). For the BTWC these norms are implied in Article V, VI, and X, and chart # shows where these norms occur in other WMD agreements; the relevance of this relationship will be noted in the discussion that follows. The CWC and the CTBT both contain Declaration Norms that are supported by clearly defined Inspection Norms to verify their compliance. Even though Kelle argues that the BTWC does not contain declaration and verification norms as traditionally understood – that is, that there are formal processes or protocols within the agreement itself to obligate the declaration of biological warfare or supporting technologies, and an organization to verify whether the declarations were
complete and accurate. However, in this case, NAM and some of the Eastern Group States Parties without advanced scientific and technological capability – “the have nots” – appear to have interpreted Article V, VI, and Article X as proxies for a Declaration Norm for the BTWC. This appears especially due to the “have nots”’ desire to have access to the latest biotechnology, and biological research and development rather than out of fear of other states attacking them with biological weapons. Hence, the contestation in this case comes from “the haves,” as Kelle documents in the case of the United States, going against their obligation to provide “the have nots” with specific cutting edge scientific knowledge and technology, which they do out of the fear that obligation will compromise their market position in biotechnology.

Critical to the “have nots’” success in confronting this contestation by “the haves” are the Right to Science and Cooperation norms in the NPT and the BTWC. Finally, the BTWC, even though it lacks a specific Inspection Norm, contains what I have labeled a Reporting Norm in Article VI. Taken together with the norms laid out in Article X, these norms adequately substitute for Declaration Norms and Inspection Norms, although “the have nots” interpret these norms as different from the way they are applied in the other WMD agreements. Curiously, the absence of explicit Declaration and Verification norms (or protocols) in the BTWC might also imply that states assume that other states do not have biological warfare in the traditional sense. This brings the value of the BTWC into question. While outside of the scope of this study, it is worth noting as a possible reason for the absence of specific Declaration and Verification norms in the BTWC.

The Interpretation of the Meaning of Some Norms and Cooperative Contestation

A critical component of the BTWC version of a declaration norm is cooperation. Article V of the BTWC states that States Parties “undertake to consult one another and to cooperate in
solving any problems which may arise in relation to the objective of, or in the application of the provisions of, the Convention.\textsuperscript{410} This not only identifies cooperation as a norm, but also insinuates the type of cooperation that States Parties should expect from one another. States Parties have interpreted cooperation here in diverse ways, however, since the meaning of “cooperation” has not been explicitly defined. This has left states to read it rather parochially, reinforcing Kelle’s observation regarding CWC norms: that the meanings of norms can depend on states’ interpretation of them.

With specific regard to the Cooperation Norm, the NPT and the BTWC contain wording that entitles States Parties to access cutting edge scientific information and technology for peaceful purposes, and the CTBT declares that States Parties will not be restricted in exchanging data for scientific purposes. “The have-nots” hence interpret “cooperation” as a form of declaration of “the haves”’ scientific knowledge and technological capability. This interpretation of the BTWC is not based on concerns about other states using their knowledge and technology against “the have-nots,” but rather as a right accorded by the BTWC to have access to scientific knowledge and technology. With regard to the BTWC, States Parties have interpreted cooperation in disparate ways. First, as expected, they have interpreted cooperation in a rather traditional way, meaning that states should cooperate in the organization of regular meetings to discuss the status of the BTWC, possible violations that States Parties should be aware of, and problems that require States Parties’ attention. For “the have-nots,” as further evidence will show, “cooperation” has also come to mean cooperating to attain rights afforded in norms embedded particularly in Article X, specifically the Right to Science and economic advancement.

under the Economic & Technological Development Norm, that is, cooperative contestation of the implementation of Article X. However, States Parties’ experience with regard to the enforcement of the Cooperation Norm has been that NAM and Eastern Group States Parties have been selectively excluded from such information, although they do believe that the Western Group is cooperating to some degree in sharing such information with select military allies. Consequently, “the have-nots” believe that “cooperation” has been discriminatory, making membership status in the BTWC somewhat meaningless, especially since they are not particularly fearful of a biological attack by another state.

This alternate interpretation of “cooperation” has not been lost on “the haves,” especially the United States, as Kelle identified in his paper on the contestation of the BTWC. With specific regard to the BTWC, Article X states that, “Parties to the Convention in a position to do so shall also cooperate in contributing individually or together with other States or international organizations to the further development and application of scientific discoveries in the field of bacteriology (biology) for prevention of disease, or for other peaceful purposes.” Basically, this requires “the haves” to divulge proprietary information and technology to the “have-nots.” As Kelle points out in his analysis, highly competitive and lucrative industries such as pharmaceuticals or biotechnology have reacted fairly strongly to this norm, since it is easily conceivable that such knowledge and technology sharing might reduce their global comparative advantage for their products. Given the failure of the States Parties – mainly “the have-nots” – to implement the additional protocols which would have incorporated stronger and clearer Declaration and Verification Norms, it appears that “the have-nots” are leveraging Articles V, VI, and X norms to achieve a similar result. At the same time, without the Declaration and Verification Norms in place for the BTWC, it appears that other “haves” have aligned with the
US position in contesting the enforcement of the same norms that require states with less
developed biological and biotechnology programs to have the right to benefit from the transfer of
biological knowledge and technology from more developed states. This contestation also
includes the right to participate in the fullest possible exchange of equipment, materials, and
scientific and technological information for the use of biological agents and toxins for peaceful
purposes. Without specific norms and enforcement mechanisms, the process in place for
fulfilling the obligations in the BTWC’s Articles V, VI, and X norms – reporting via the CBMs –
has not been effective in achieving the hoped for result as described in this set of BTWC norms.

**The Right to Science, Economic & Technological Development, Reporting, and
Cooperative Contestation**

Both the NPT and the BTWC contain Right to Science Norms that complement the
Cooperation Norms by specifying the rights States Parties have via these particular WMD
agreements with regard to research and development, production, exchange, and use of advanced
scientific knowledge and technology for the nuclear and biological fields. While admittedly
slightly redundant, given the Economic & Technological Development Norm, States Parties have
the right to essentially develop, research, produce, or use nuclear energy for peaceful purposes,
or to fully participate in the exchange of equipment, materials, and scientific or technological
information for biological and toxin development, again for peaceful purposes. Statements by
States Parties are strongly indicative that this norm, as well as the others which allow them or
give them the right to equal access, are not being enforced. The noncompliance by “the haves”
again signals clear contestation on their part against this right, and is explicated in both the NPT
and the BTWC. There are two possible conclusions here with regard to contestation of these
norms in select WMD agreements: one, that “the haves” are at least passively contesting the
Cooperation and Economic & Technological Development norms; two, that formally organized or not in this contestation, the impression to “the have nots” is one of a cartel cooperating against them in fulfilling the obligations and rights outlined in these norms.

With regard to any of the WMD agreements, while there is a mechanism – the CBM Database – to track CBM submissions that report some of the advanced scientific knowledge and technology, there is no specific or even feasible way to track advances in scientific knowledge and technology in real time per the obligations in NPT or BTWC Cooperation Norm or the Economic & Technological Development Norm. The only option lies in independent research from state-to-state academic or industry cooperation to share scientific knowledge and technology, which produces little hard data directly associated with acceptance of BTWC norms. However, an independent study underway for the Department of Defense on interstate cooperation on cutting edge biotechnology⁴¹¹ is currently assessing scientific and technical cooperation, with preliminary results showing most cooperation occurring at the interstate industry to industry level, although the details of that information and technology sharing is highly proprietary and difficult to detail.

Furthermore, similar wording in the Economic & Technological Development Norm in all but the PTBT provides that the WMD agreements will not be implemented in a manner that impedes economic and technological development. Moreover, Article X states that the BTWC …shall be implemented in a manner designed to avoid hampering the economic or technological development of States Parties to the Convention or international cooperation in the field of peaceful bacteriological (biological) activities, including the

international exchange of bacteriological (biological) agents and toxins and equipment for the processing, use or production of bacteriological (biological) agents and toxins for peaceful purposes in accordance with the provisions of the Convention.\textsuperscript{412}

Taken together with the rights and obligations of “the have,” this would normally result in a science and technology transfer to “the have nots” that would theoretically amount to something akin to Mutually Assured Destruction if used for nefarious purposes.

Again, though, “the have nots” believe that the agreements have been implemented in such a way as to impede economic and technological development with regard to nuclear, chemical, and biological sciences. More specifically with regard to the BTWC, the implementation of the BTWC is not to be done in a way to hamper international cooperation in such activities, as long as the development is for peaceful purposes. The result has been a continual concern on the part of “the have nots” that the “the have” are selectively discriminating with regard to which States Parties get to participate in advanced scientific research and development activities, and they are actively lobbying for enforcement of this norm that “the have” are contesting via inaction or selective action. Moreover, “the have” have not been keen on submitting the information required by the CBMs – the BTWC’s mechanism for capturing the state of knowledge of biological science and technology, as described below.

According to the UN’s website,

The Second Review Conference (1986) agreed to introduce Confidence-building Measures "in order to prevent or reduce the occurrence [sic] of ambiguities, doubts and suspicions and in order to improve international co-operation in the field of peaceful biological activities". [sic] The CBMs were elaborated at a meeting of scientific and technical experts in 1987, and were modified and considerably expanded by the Third

\textsuperscript{412} United Nations (UN), \textit{BTWC}, “Article X.”
Review Conference in 1991. They have not been modified since, although the Sixth Review Conference in 2006 agreed on various improvements to the mechanisms for submission and distribution.

As agreed at the Third Review Conference, the CBMs consist of seven measures, A to G:

CBM A  Part 1: Exchange of data on research centres and laboratories;
         Part 2: Exchange of information on national biological defence research and development programmes.

CBM B  Exchange of information on outbreaks of infectious diseases and similar occurrences caused by toxins.

CBM C  Encouragement of publication of results and promotion of use of knowledge.

CBM D  Active promotion of contacts

CBM E  Declaration of legislation, regulations and other measures.

CBM F  Declaration of past activities in offensive and/or defensive biological research and development programmes.

CBM G  Declaration of vaccine production facilities.

States are supposed to submit CBMs, using the agreed upon forms, to the ISU in Geneva by 15 April every year. Responses should cover information from the previous calendar year. The Sixth Review Conference developed a mechanism for the electronic submission and distribution of CBMs to facilitate the submissions. Nevertheless, until two years ago, reporting rates averaged approximately 35% each year, with little consistency in the States Parties reporting. Information submitted on the CBM forms is
not posted publicly unless allowed by the State Party.\textsuperscript{413}

\begin{figure}
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\includegraphics[width=\textwidth]{cbm_submissions.png}
\caption{Number of CBM submissions per year between 1987 and 2008\textsuperscript{414}}
\end{figure}

According to the Research Group for Biological Arms Control, “The CBM regime has received little attention since the Sixth BTWC Review Conference in November/December 2006. Furthermore, they are not on the list of issues to be discussed during the intersessional process meetings between 2007 and 2010.”\textsuperscript{415} In addition, “The last five years have seen a substantial improvement in CBM participation after a low of 33 CBMs submitted in 2003, the year after the Fifth Review Conference. As of 24 November 60 states have submitted a CBM. This is still a far cry from universal participation for a Convention which boasts 162 Member States. 101 countries have submitted a CBM one or more times since 1987, while 61 Member States have yet to submit their first CBM.”\textsuperscript{416} Consequently, if the CBMs are one vehicle for sharing advanced scientific knowledge and technology, the success depends more on which

\begin{thebibliography}{9}
\bibitem{note414} Research Group for Biological Arms Control, “CBM Reader on Publicly Available CBMs 2008,” University of Hamburg (December 2008), 2.
\bibitem{note415} Ibid, 1.
\bibitem{note416} Research Group for Biological Arms Control, 2.
\end{thebibliography}
states are submitting the CBMs than the percentage of states complying. For the states selected for special consideration in this study, the following information has been pulled from the United Nations to give a sense to what has been provided by these critical sixteen states with regard to their biological warfare programs, even if the detail of the submissions is unknown. Records of the sixteen states’ data on CBM submissions are below. While onerous, the pictorial representation of the submissions offers insight into the pattern of a state’s submission and how the submissions have changed over time.

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Without access to the discrete information that States Parties have submitted, it is impossible to evaluate whether they are reporting complete or near real time data. Researchers involved in tracking and analyzing the state of knowledge of biology and biotechnology globally
would be most interested in CBM A, C, F, and G, as would “the have nots,” since they reveal research and development capabilities, past and current knowledge, the direction of research and development programs, and where the cutting edge in research and development is for biology and biotechnology. This material would also offer some insight as to what offensive threats States Parties are anticipating from others, or what offensive options they might be exploring in developing vaccines such as prophylaxis or countermeasures for researchers working the programs.

Notable is the prolific use of “Nothing to declare,” or “Nothing more to declare,” especially for CBM A (Part 1 and Part 2), which recommends the exchange of data on research centers and laboratories, as well as the exchange of information on national biological defense research and development programs, and CBM B, which recommends the exchange of information on outbreaks of infectious diseases and similar occurrences by toxins. Though CBMCM A Part 2 only recommends that “the States Parties will declare whether or not they conduct such programmes. States Parties agreed to provide, annually, detailed information on their biological defence research and development programmes including summaries of the objectives and costs of effort performed by contractors and in other facilities. If no biological defence research and development programme is being conducted, a null report will be provided.”

Given the pace of growth in bioscience and biotechnology in general, and the

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418 Note that the discrete information submitted is archived in an area of the database restricted to other States Parties. According to the website, “The more detailed summary will be updated annually in preparation for the Meeting of States Parties,” that is, by reviewing individual States Parties’ statements from Meetings of Experts or from the Annual Meeting itself.
movement of western pharmaceutical companies and biotechnology plants to China, it is difficult to believe that China had little or nothing to report for recent years for CBM A, Part 2.

CBM C’s recommendation that “… basic research in biosciences, and particularly that directly related to the Convention should generally be unclassified and that applied research to the extent possible, without infringing on national and commercial interests, should also be unclassified,” should be noted because, in spite of its good intentions, it is likely self-destructive. The term “directly related to the Convention” has been left open to the submitting state to define, and in the age of patent infringement and reverse engineering, states without active offensive biological warfare programs can easily justify that almost nothing directly relates to the Convention. A small form of contestation, but one nevertheless. This is also a form of contestation that is likely cooperative, given the formal and informal bilateral or multilateral exchanges of information between “the haves” and their allies.

What is important to note here is that CBM obligations are not being observed universally or consistently according to those that have seen the discrete data, which signals contestation on the part of all States Parties who do not submit the information. Interesting, though, is that the P5 has largely been compliant in submitting reports, although it is impossible to tell from the data provided how detailed their submissions are. Hence, they are able to argue that they are cooperating. What is certain is that it is impossible for the P5, as well as others with active research programs such as India and Israel, to claim that they would be able to capture in detail each and every program that might “qualify” for reporting here. Also certain is that that data would be highly valuable to “the have nots,” since it would assist them in developing their

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intelligence programs for both the state and business, as well as knowing what not to waste their efforts on in terms of filling a market space.

Finally, in terms of contestation, anything short of complete disclosure on the part of a State Party could be considered contestation, especially for the CBMs identified above. It is also telling that the United States’ contestation of additional Declaration and Verification norms belies the possibility that the United States is not in total compliance with the information required by the CBMs, and it is equally plausible that other states with cutting edge biology and biotechnology programs would be equally reluctant to submit more information than necessary to say that they had complied with the CBMs. “The have nots” realize how compromising allowing access to the CBM information would be, and are cooperatively contesting to the lack of access even to the detail that “the haves” are submitting. “The haves” are cooperatively contesting to keep them from that data by not allowing them access to it.

**Reporting and Cooperative Contestation**

Article VI of the BTWC states that States Parties *may* lodge a complaint with the UNSC if it discovers another State Party in violation of BTWC obligations. Though this norm is clearly aimed at reporting State Party violations in acquiring biological warfare capability or technology, since it contains an concomitant evidentiary clause (and again reinforcing the impression that the Disarmament, Declaration, and Verification Norms are the most important elements of the WMD agreements), it could also theoretically be applied to violations of other obligations such as those contained in Articles V and X. Interestingly, Article VI of the BTWC has never been invoked – for any reason – even in spite of US claims in 2002 that the DPRK, Iran, and Iraq comprised the Axis of Evil with regard to the possession of WMD of all kinds. Likewise, no State Party has invoked Article VI due to lack of compliance with Articles V and X of the BTWC either. Either
states do not believe that other states still maintain biological warfare programs, they do not believe that they will use them if they do have them, and/or they do not believe that States Parties will react to a charge of a violation of norms that do not involve disarmament, declaration, or verification. Even though “the haves” might be contesting Articles V and X of the BTWC, “the have nots” are not – or cannot due to lack of evidence – file an Article VI complaint. Regardless, the issues of “the haves” and “the have nots” has been a concern since the inception of the BTWC and the issues surrounding the BTWC and other WMD agreements will be more closely examined in the Analysis Section. In any event, states should be invoking Article VI if they believe that other states are violating it, and should be doing so cooperatively. Yet they are not doing so.

The Formation of Cartels or Blocs: Regional Groups

The formation of various geographical or political groups facilitates contestation behavior, and is indicative of cooperative contestation. Even in the absence of hegemons, such as were present in the Cold War, States Parties continue to align with regard to specific issues on the WMD agreements. Curiously, while the United Nations breaks down the groups into the Western Group, Eastern Group, and Non-Aligned Movement (NAM), contestation behavior and the contestation of contestation behavior appear to follow patterns of “the haves” and “the have nots” more than geopolitical boundaries or aging political links. Cooperative contestation follows political values rather than strict geographical boundaries.

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Of these groups, NAM and the use of the term “non-aligned” alone signals a perception by this group that the other two groups generally vote in blocs. While the study of this behavior is beyond the scope of this study, it is interesting to note that the former bipolar alliances, with a few significant exceptions, have largely been maintained. Note that Israel, Egypt, and Syria do not belong to any of the regional groups, since none are BTWC members.

The Eastern European Group is comprised of 28 States Parties, including the Russian Federation, a member of the P5. Not surprisingly, it also contains much of the former client states of the Soviet Union, thus appears largely politically aligned with the ideology of the Russian Federation. More importantly, several of the States Parties have or are conducting cutting edge biological or biotechnological research and development. The foremost include the Russian Federation, and the Republic of Georgia, and Poland, which leads the world in the understanding of bacteriophage morphology and function, including profound understanding of bacteriophage attachment mechanisms which can be utilized for both beneficial and nefarious purposes. The Non-Aligned Movement (NAM) consists of 99 States Parties, including China, the DPRK, India, Iran, Iraq, Libya, Pakistan, and Sudan – half of the states singled out for scrutiny in this study, and China, which is the only member of the P5. With regard to biological or biotechnological research and development, China is making rapid advances in the understanding of the modification of various cell functions for alternate purposes (e.g., modifying toxins), and India may soon lead the world in the understanding of nanotechnology and how it may be applied to biotechnology. Finally, the Western Group has 32 States Parties, including France, Japan, Republic of Korea, the United Kingdom, and the United States, of which three are in the P5.

NAM obviously encompasses almost two-thirds of the BTWC States Parties, including China, and the majority of “the haves nots” in terms of advanced knowledge and technology of
biology and biotechnology. The power of this bloc lies in its size. Since the beginning of the BTWC “the have nots” have cooperatively pushed for equal recognition and equal enforcement of all the norms, especially other than those associated with disarmament, and have strongly advocated for declaration and verification protocols for the BTWC in order to access advanced scientific knowledge and technology. This is clearly due to the inequality in how “the have nots” are treated with regard to the distribution of science and technology, and the equanimity the “the have nots” seek with regard to how the non-disarmament norms have been applied across the WMD agreements. In contrast, “the haves” are cooperatively contesting these as they impact their economic bottom line. This will be examined in detail in the next chapter.

**In Their Own Words: States and Contestation of WMD Norms**

In the next chapter I analyze textual data drawn directly from the States Parties’ formal statements at BTWC meetings in order to support cooperative contestation of specific norms, especially those related to those in Article X of the BTWC: the Right to Science, Economic & Technological Development, and Cooperation. While I specifically examine States Parties’ statements with regard to Article X, I expand the discussion as applicable to other WMD agreements. I present this data in chronological order to demonstrate the history of the concerns with non-disarmament norms, which began prior to the end of the Cold War and continued through 2008 – the last data available for the BTWC.
Overview

In the previous chapter, I established the following:

- A comprehensive baseline of the principles and norms in the five principal WMD agreements to present a comprehensive picture of all norms across all the agreements
- An assessment of data points generally associated with contestation and cooperative to determine whether any were valid and reliable indicators of cooperative contestation with regard to WMD agreements

I concluded that none alone or together described, explained, or predicted cooperative contestation. I also concluded that without explicit explanations of the reasons for their contestation of WMD norms from the states, any claim that these indicators did so would be spurious.

In this section I identify the norms unrelated to disarmament that are under contestation and present data from United Nations’ documents that support my conclusion that cooperative contestation exists and that the reasons for it are directly related to equality, equity, and equanimity issues. I present this data in chronological order to demonstrate the history of the concerns with non-disarmament norms, which began prior to the end of the Cold War, through 2008, the last data available for the BTWC. Statements by the select sixteen states or by groups that represent them, e.g., NAM, receive special scrutiny, where they exist and are relevant. In
the final chapter, I discuss the implications of cooperative contestation of the BTWC on international relations, international law, and the future of international agreements.

In The Beginning: My Norm Is As Important As Your Norm

Not all BTWC meetings are created equal. The Convention established that it would hold Review Conferences every five years to discuss the general state of the BTWC itself, to discuss diverse agenda items as well as to update all representatives on activities of States Parties related to the BTWC, with Ad Hoc Meetings to support the implementation of the BTWC. However, beginning in 2002 after a suspended, contentious 2001 Review Conference related to the United States’ abandonment of its support for Additional Protocols for declaration and verification that it had drafted and in the global wake of the Amerithrax attack in the United States, the Convention ramped up its established conferences with a series of four Annual Meetings of Experts and Annual Meetings of States Parties. These meetings were designed to address specific topics: the adoption of specific national implementation measures, disease surveillance, biosecurity, international biological event response and investigation, and other measures to strengthen the implementation of the BTWC at the national level and international cooperation. Thus, in terms of identifying contestation by states, the Review Conferences are richer sources since States Parties tend to be less confined to a specific topic. States also tend to be more expressive regarding issues of equality, equity, and equanimity during the more general Review Conferences. Thus, except for an occasional statement by one of “the have nots” which is woven into the fabric of the topic of discussion at either an expert or annual meeting, the documents from Review Conferences are more useful.
1980 Conference of Parties (First Review Conference)

From its entry into force, States have expressed concern about inequality, inequity, and the lack of equanimity in how the norms in the WMD agreements have been enforced. In the 1980 Conference of Parties, the final report states:

Several participants noted that in view of the fact that Parties to the Convention had different levels of technical and scientific capabilities it was necessary to ensure the dissemination, through the United Nations Centre for Disarmament, of information on the new developments relevant to the Convention, as provided by the States Parties.422

And furthermore, that, with regard to Article VI:

One participant, supported by a number of others, proposed that an amendment be considered to prevent what, in their view, amounted to unequal treatment of States Parties under the present complaints procedures.423

The document goes on to imply that the general concern was that Article VI would essentially become a means to harass various states or, perhaps, to gain access to particular states to “discover” what biological research and development programs were in place, and wanted to prevent spurious intrusion. Whatever the motivation, the State Party sought to prevent abuse of Article VI based on unsubstantiated complaints.

As concerns Article X,

…many participants urged an increased exchange of information amongst States, and technical assistance to the developing countries for the use of toxins and microbial agents for peaceful purposes, and the promotion of the fullest possible international co-operation

423 Ibid, 3.
in this field. Parties to the Convention, in a position to do so, should co-operate in
contributing, individually or collectively, with other States and international
organizations, to the further development of these applications, with due consideration
for the needs of the developing countries. In this connexion, one participant noted that
since the entry into force of the Convention, the international community had devoted
increased attention to the relationship between disarmament and development, and
proposed with the support of other participants, that for future reviews of the Convention
a document, for the information of States Parties, should be prepared on the
implementation of the provisions of Article X, particularly with a view to promoting
economic and social development. The developed countries, it was suggested, should
share their knowledge in this field to a greater extent and in a more systematic manner.\textsuperscript{424}

Moreover,

The Conference notes that since the entry into force of the Convention, increasing
importance has been attached by the International community to the principle that the
disarmament process should help promote economic and social development, particularly
in the developing countries. Accordingly, the Conference calls upon States Parties,
especially developed countries, to increase, individually, or together with other States or
international organizations, their scientific and technological co-operation, particularly
with developing countries, in the peaceful uses of bacteriological (biological) agents and
toxins. Such co-operation should include, inter alia, the transfer and exchange of

\textsuperscript{424} First Review Conference, \textit{Report of the Committee of the Whole} (BWC/CONF.I/7), 5.
information, training of personnel and transfer of materials and equipment on a more systematic and long-term basis.”

The norms singled out in these statements as typified by The Bigger Picture – Beyond Disarmament, Declaration, and Verification Norms chart, coincide with the Reporting Norm and Right to Science Norm, the Economic & Technological Development Norm, and the Cooperation Norm. This pattern is repeated throughout the following defense since the equal enforcement of the norms has been an issue between “the have” and “the have nots” since the BTWC entered into force. Obvious even in the 1970s was that the biological sciences were making unprecedented discoveries, mainly in understanding the function of cell structures, DNA, and the DNA replication process. The discovery of new antibiotics was burgeoning, as were advances in microtechnology. The record shows that States Parties were contesting these norms from two directions: first, “the have” (and perhaps the suspect) appear not to want specious accusations to lead to hunting expeditions of advanced bioscience and biotechnology within sovereign states per Article VI; second, “the have nots” strongly imply that “the have” would likely contest Article X norms without a systematic means for advanced information and technology exchange. So, from the entry into force, “the have nots” expressed concern that they were not being treated as equals, and that they could not obtain equity in bioscience and biotechnology without technology transfer as specified by the BTWC from “the have.” “The have” were concerned that “the have nots would utilize Article VI as an excuse to obtain information that would actually fulfill rights outlined in Article X that would offer them some equity.

1986 Conference of Parties (Second Review Conference)

The story continued in 1986, with the added concerns that the scope of the BTWC did not adequately encompass the rapidly expanding field of biotechnology. The final report issued a blanket statement that, “The Conference concludes that the scope of Article I covers scientific and technological developments relevant to the Convention.” This is not insignificant. “The have” expressed concerned whether the scope of Articles I (scope), II (disclosure), and III (transfer) covered emerging developments in microbiology, genetic engineering, and biotechnology including all natural or artificially created microbial or other biological agents or toxins regardless of their origin or method of production due to concerns that such would set off an arms race in spite of the prohibition of biological weapons by the BTWC. “The have nots” assumed that, were those particular elements not included specifically in the BTWC, “the have” would have an excuse to hide information they believed they had the right to access via Article X. “The have nots” appeared just as concerned about the contestation of the inequality of the Convention in enforcing Article V (consultation) and Article X norms (science, economic and technological development, and cooperation). This clearly demonstrate “the have nots” association of Article V as foundational to the enforcement of Article X. Some states described this dissociation of the two norms as problematic since “the have” were already reluctant to meet their obligations under Article X. The CBM template ultimately improved explicit requirements regarding the types of information to be shared, which included information “the have nots” wanted included to improve access to advanced scientific knowledge and technology. Conferees also encouraged publication of biological research and development.

428 Ibid, 6-7.
research “directly related to the Convention” in peer-reviewed scientific journals which would be available to States Parties, a transparent allegation that this norm was being contested, by “the haves.” Also according to the 1986 Review Conference report,

The Conference emphasizes the increasing importance of the provisions of Article X, especially in the light of recent scientific and technological developments in the field of biotechnology, bacteriological (biological) agents and toxins with peaceful applications, which have vastly increased the potential for co-operation between States to help promote economic and social development, and scientific and technological progress, particularly in the developing countries, in conformity with their interests, needs and priorities. The Conference, while acknowledging what has already been done towards this end, notes with concern the increasing gap between the developed and the developing countries in the field of biotechnology, genetic engineering, microbiology and other related areas. The Conference accordingly urges States Parties to provide wider access to and share their scientific and technological knowledge in this field, on an equal and non-discriminatory basis, in particular with the developing countries, for the benefit of all mankind.” The text goes on to outline discrete data points, and request that this exchange take place on a “systematic and long term basis,” and that it should include not only technical co-operation but training, and that multilateral agreements should be “mutually advantageous, equal and non-discriminatory” with UN oversight to ensure this.

Thus, “the haves’” contestation against Article X norms (and Article V by association) have existed since the BTWC entered into force, as has their contestation of the rights of “the have

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nots” to equal access to science and technology so that that could achieve an equitable position in knowledge and technology.

1991 Review Conference (Third Review Conference)

The list of concerns that Article I covered continued to grow, as demonstrated by The Preamble to the 1991 Review Conference. Similar in content to the 1986 Preamble, it added, “The Conference notes that experimentation involving open-air release of pathogens or toxins harmful to man, animals or plants that has no justification for prophylactic, protective or other peaceful purposes is inconsistent with the undertakings contained in Article I.” In addition it stated, “The Conference emphasizes the vital important of full implementation by all States parties [sic] that compliance with Articles I, II and II has been, in their view, subject to grave doubt in certain cases and that efforts since the Second Review Conference to resolve these problems have not been successful,” and urged full compliance lest non-compliance undermine confidence in the Convention. In other words, states had serious doubts that all of “the haves” had fully disclosed their biological weapons programs, or worse, fully dissembled them, in direct contestation of Articles I, II, and III. In addition, there was unease that States Parties were not implementing law at the national level to address Article I, II, and III. Of particular concern was that that States Parties were not adopting or imposing penalties for contravention of these Articles in their national implementation plans. Again, contestation; again, by “the haves,” albeit largely with regard to disarmament norms. Early on, though, this was a two-edged sword since failure to apply Articles I, II, and III also meant that the information required by Article X norms could not be fully met. Over time it would become clear that enhancing domestic

431 Ibid, 4.
implementation would be complicated by the absence of international law penalties and absent BTWC specific declaration and verification norms.

At the same time, “the haves” realized that Article V was being interpreted as a “declaration norm” in effect by “the have nots.” In other WMD agreements, declaration norms generally supported disarmament or nonproliferation by requiring States Parties to reveal the details of their WMD programs. But declaration was generally aimed specifically at weapons, or offensive programs. The wording of all of the agreements reflects this. With biological agents, research, and development, the difficulty is in distinguishing offensive programs from nonoffensive ones. This includes the development of medical therapeutics or prophylaxis for naturally occurring disease, which in some regions can be anthrax or ebola, or for presumed biological warfare agents, for which there is a fairly lengthy list. So, for “the haves,” while having insight through declaration and verification would allow them to improve their own defensive biological warfare programs, it would also expose the state of knowledge of their research, and perhaps their strategic defensive advantage, in revealing details of their own defensive programs.

In any case, and in an effort to respond to comments at the Second Review Conference in 1986 and the Ad Hoc Meeting held in 1987 on the need to strengthen the implementation of Article V, some States Parties submitted information, and urged others to do the same in the future. At the same time, the number of data points in the CBMs was expanding in hopes of making the requirements Articles V and X more robust. Functionally, the CBMs were designed as a declaration protocol, albeit submissions were voluntary.432 As the years passed, the scope of the data requested by the CBMs has expanded and specificity of the data increased. Without

verification in place as to monitor what was being reported in the CBMs and without direct access to review the content of the CBMS, it was and remains difficult to discern the degree of transparency in state reporting with regard to what is known about their programs.

In March-April 1992, the BTWC assembled an Ad Hoc Group of Governmental Experts open to all States Parties tasked to “identify and examine potential verification measures from a scientific and technical standpoint”\(^\text{433}\) in order to strengthen the process for utilizing Article V consultation. They were complete their tasking by December 1993. Specifically, the group was asked to identify measures which could determine whether a State Party was violating Article I, including the ability to differentiate between prohibited and permitted activities, as well as any impact such measures would have on the State’s ability to conduct scientific research, scientific cooperation, industrial development and the implications for confidentiality of commercial proprietary information. This was a massive task given that the now Former Soviet Union was in the process of shutting down its offensive biological research program and the rapid advances taking place in genetic research at this point. Worse, it was the fox guarding the henhouse approach to verification.

Though the BTWC requested that states assemble their best and brightest – which had their own proprietary research information to protect – to tell them what verification measures should be and what data should be included in the CBMs and which would impact their own work, the opening of the Ad Hoc Group to all states put “the have nots” on more equal footing in the BTWC. The Conference revealed its concern with “the have’s”\(^\text{434}\) compliance with Article I in reminding states to “deal seriously with compliance issues”\(^\text{434}\) to avoid undermining the BTWC,


\(^{434}\) Ibid, 9.
and the arms control and disarmament process in general. Most importantly, “the haves” realized the potential impact of the CBMs on “the have nots’” access to proprietary information. Thus, the line between proprietary information and what must be reported was grayed, with states not required to report proprietary information. The Conference also recommended that several additions—“Nothing to declare,” “Nothing new to declare,” “Declaration of legislation, regulations and other measures,” “Declaration of past activities in offensive and/or defense biological research development programmes,” and “Declaration of vaccine production facilities” be added to the proposed CBMs. These new options essentially gave States Parties the ability to contest through compliance if they so chose, a strategy that remains actively in play by “the haves” to this date. This strategy essentially ensures that equity cannot be obtained by “the have nots” by denying them access to complete, unfiltered information.

It was also noted that to this point, Article VI obligating states to report any breach in the BTWC had never been invoked. There was some insinuation that States Parties were dodging using it, that is, in some way contesting its need or its inferred application. Given the path that the UN was headed down this point with the CBMs, it is conceivable that states did not want to initiate and hence invite reprisal by lodging a complaint of suspicion of contravention of the BTWC. States Parties likely considered this devious since the effect would have been one of forcing open a state’s entire bioscience and biotechnology industry to international scrutiny. It would have also had the unintended consequence as to how the accusing state would have been able to recognize such activity in the first place. For “the haves” in particular this would have brought down the wrath of the private commercial sector on the government—an untenable

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435 Note the association of compliance here with arms control and disarmament.
political situation in states where the industry comprised a significant portion of national production and international trade.\textsuperscript{436}

Article X issues continued to grow as well, with the Conference acknowledging that the gap between “the haves” and “the have nots” was increasing rather than decreasing as expected under the Article. Again, the Conference states, “while acknowledging what has already been done towards this end, notes with concern the increasing gap between the developed and the developing countries in the field of biotechnology, genetic engineering, microbiology and other related areas. The Conference urges all States Parties actively to promote international cooperation and exchange with States Parties in the peaceful uses of biotechnology, and urges the developed countries possessing advanced biotechnology to adopt positive measures to promote technology transfer and international cooperation on an equal and non-discriminatory basis, in particular with the developing countries, for the benefit of all mankind.”\textsuperscript{437} This is recognition that information sharing was taking place, although on a highly selective basis, that is, without equanimity being applied per Article X. The Conference suggested that the establishment of a world data bank under UN supervision would be an appropriate vehicle for facilitating the flow of information for advances in biology and for enhancing cooperation and providing the transparency required by the BTWC.\textsuperscript{438} “The have nots” contestation of the lack of Article X enforcement continued in spite of UN efforts to improve Article X via the CBMs. “The have nots” continued to maintain that the norms were being enforced in a discriminatory way, implying a lack of equanimity which resulted in a lack of equity in “the have nots” ability to benefit from advanced science and technology. Thus, structural equality – “the have nots”

\textsuperscript{437} Ibid, 12.
\textsuperscript{438} Ibid, 13.
participating in the development of the CBMs – did not result in either equity or equanimity, insinuating that the three are ultimately linked.

1996 Review Conference (Fourth Review Conference)

Missing from the Conference’s overall understanding of the lack of progress on the BTWC was insight or consideration as to what was happening concurrently with the development of the CWC and the CTBT. Lessons learned from their experience with the development and implementation of the BTWC, States Parties had taken a different approach with both, building the declaration and verification protocols along with stringent implementation criteria into each. Both the CWC and CTBT were similar in content, and the impact of disarmament and nonproliferation norms in both were essentially null on “the have nots” since they did not have nor seek chemical or programs. However, “the haves” with chemical weapon capability were about to experience the cost of implementing the CWC as well as to get a much clearer notion of what the UN and “the have nots” intended with regard to the broader BTWC norms of sharing of science and technology for peaceful purposes, both of which influenced how “the haves” weighed the impacts of expanding the BTWC.439 So, while “the have nots” continued to advocate for stronger compliance with BTWC Article V and Article X norms as well as for declaration and verification protocols, the cost of compliance with those same norms for the CWC was being calculated by “the haves.” For “the haves” the cost of compliance with the CWC and potentially declaration and verification protocols for the BTWC them in a potentially difficult economic position that had political fallout associated with it.

To support the development of declaration and verification protocols, the BTWC established the Ad Hoc Group by the Special Conference in 1994.\footnote{Note that over the years, the BTWC has established several “ad hoc” committees. Unlike previous ad hoc groups, this committee was intended to be a standing committee.} The Conference designed the Ad Hoc Group with the responsibility to develop measures to investigate alleged breaches of Article VI of the BTWC.\footnote{Fourth Review Conference of the Parties to the Convention on the Prohibition of the Development, Production and Stockpiling of Bacteriological (Biological) and Toxin Weapons and on their Destruction (25 November - 6 December 1996), \textit{Final Document} (BWC/CONF.IV/ 9 Part II, Part III). (Geneva, 1996), 9.} So even for its purportedly intended primary use, the norm was being roundly contested by states simply through nonuse.\footnote{Ibid, 7.} The BTWC found it curious that seventeen years after entering into force, a year after the first Gulf War, and not long after admission by the Russian Federation that it only ended the former Soviet biological weapons offensive program in 1992, there were still no Article VI violations reported. The Conference minutes reflect that the states never conceived of Article VI as applying to anything except for the reporting of intentional violations of the BTWC. The Ad Hoc Group read verification into Article VI, however, and assessed this interpretation would not only reinforce the BTWC which all States Parties still saw as incomplete or weak, but fully support the enforcement of Article X to “facilitate economic and technological development and International [sic] cooperation in the field of peaceful biological activities.”\footnote{Fourth Review Conference, \textit{Final Document} (BWC/CONF.IV/ 9 Part II), 2.} This was seen as a means to apply norms more equitably, although its fate lay years ahead.

Furthermore, the Conference “once more” emphasized the increasing importance of the provisions of Article X, especially in the light of recent scientific and technological developments in the field of biotechnology, bacteriological (biological) agents and toxins with peaceful applications,” which it sees as vastly increasing the potential for cooperation between States. It also reiterates its concern about the increasing “have-have nots” gaps, and encourages
States to exchange information on advances on a “non-discriminatory basis, in particular with the developing countries.”\textsuperscript{444} This strongly insinuates that while there had been some exchanges (and the data in the Data Section supports this), they had not been with equanimity and did not result in equity, both critical aspects of Article X norms. “The have-nots” were decidedly continuing to exert pressure to enforce the Article X norms in particular but not making the headway they had envisioned. Since the disarmament norms did not apply to them, their stake in the BTWC was increasingly what they could extract from it economically through the enforcement of these norms. Indeed, “the have-nots” memory of the lack of enforcement of the Cooperation Norm embedded in the NPT and the draft CTBT, and its exclusion in the CWC, piqued their pursuit of its enforcement at this point. The speed at which the Human Genome Project had been progressing since 1990 coupled with the increasing possibility of moving from microtechnology to nanotechnology and the potential applications to the biological sciences were compelling enough to encourage them to continue to pressure the Convention for equitable enforcement of these norms. “The have-nots,” whose focus had heretofore been on the disarmament norms and who strongly associate declaration and verification with offensive programs, did not interpret the reading of the BTWC in the same way – or Article X with the same importance – and continued to contest Article X enforcement via what “the have-nots” saw as minimal compliance.

\textbf{2001 Review Conference (Fifth Review Conference)}

By 2001, States Parties were becoming increasingly more active and vocal in voicing their discontent about both the lack of (“the have-nots”) or the addition of (“the have-nots”) of additional protocols for declaration and verification. The 2001 Conference was held on 7\textsuperscript{444} Fourth Review Conference, \textit{Final Document} (BWC/CONF.IV/ 9 Part II), 11.
December 2001 – in the disarray of the United States abandoned of its own draft declaration and verification protocols in July of 2001, and a mere three months following 9/11. In a plenary session States Parties decided by consensus to adjourn and reconvene from 11 – 22 November 2002 to regroup. Oddly, most stinging to the process was the “dire prospect of stalemate and deadlock” when the United States sandbagged efforts to develop rigorous declaration and verification protocols for the BTWC. When push had come to shove with regard to strengthening the Convention through a protocol, “years of negotiations had failed to achieve a consensus. Deep and bitter divisions had threatened to bring the collective efforts against biological weapons to a permanent halt.” Kelle thoroughly addresses this in his work on the BTWC, so that will not be revisited here. Most importantly here, with the United States leading “the haves” in total contestation of Article X and Additional Protocols that would impact their economies significantly, equality, potential equity, and equanimity of the “have nots” were set back to zero.

When the Conference did reconvene, it decided to hold three annual meetings of the States Parties of one week duration each year beginning in 2003 until the Sixth Review Conference in 2006 to ensure the following:

1. Adoption of national measures, including penal measures, to implement prohibitions;
2. Institute national mechanisms to establish and maintain the security and oversight of pathogenic microorganisms and toxins;

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446 Ibid.
3. Enhance international biological or toxin response, investigation, and mitigation capabilities;

4. Strengthen and broaden national and international institutional level efforts for surveillance, detection, diagnosis, and combating of infectious diseases affecting humans, animals, and plans; and to

5. Draft the content of and promulgate codes of conduct for scientists.

The 2002 agenda was clearly aimed at state concerns about terrorist activity, indicating that the majority of States Parties had dismissed the possibility of a state versus state attack, and not so subtly was aimed at injecting new norms at a level that the United Nations legally has no jurisdiction over: the individual terrorist and the individual scientist. The implication was that States Parties needed to drastically speed up their implementation process, and to do a better job of translating international disarmament and nonproliferation norms into state-level legislation more quickly. More significantly, “the have nots” efforts to obtain equality, equity, and equanimity via Article X enforcement were severely set back by the contestation of “the haves” via the United States and the global post 9/11 fears of states.

2003 – 2006 Annual Meetings

As expected, the 2003 Annual Meeting of States Parties elicited a flurry of reports on individual States Parties’ measures to implement the BTWC at the national level. In addition, States Parties voiced strongly measures that they believed would improve the implementation of the BTWC and achieve the principles and norms laid out in the Convention. “The haves” and “the have nots” seriously disagreed over how Article X norms and cooperation impacted international security.

China laid out “the have nots” position clearly:
The security challenges faced by the international community have been pluralized whereas uncertainties for world security are on the rise. Non-traditional security threats, such as terrorism, proliferation of weapons of mass destruction, transnational crimes, are intertwined with traditional ones. The depending of mutual-dependency between States in terms of security requests a new security concept featured by mutual trust, mutual benefit, equality and coordination.\textsuperscript{448}

In emphasizing mutuality, equality, and coordination, China re-dredges the notion that international security can only be achieved by ensuring that states can only be protected by the Convention via equal enforcement of the norms – both disarmament and economic benefit at the state level, and by creating new norms that link states together against individual threats. In other words, depriving “the have nots” of adequate knowledge about biological threats and the means to counter them left the entire world vulnerable. This is a clear petition for equality, equity, and equanimity, but one largely ignored over other concerns.

Iran, however, most clearly articulated the case for the equal enforcement of all norms in the BTWC, iterating the laundry list of what comprised the Cooperation Norm in Article X:

In order to promote the capabilities of the States Parties on biosafety, we encourage the publication, exchange and dissemination of information on research and development on the peaceful uses of microbial or other biological agents and toxins, biosafety, prophylactic and protection, biotechnology, Good Laboratory Practice and current Good Manufacturing Practice, and diagnosis, surveillance, detection, treatment as well as prevention of diseases caused by microbial and other biological agents and toxins.\textsuperscript{449}


\textsuperscript{449} Ibid, 70.
Iran provided further clarification stating:

1. Narrow interpretation of the Convention only in terms of Articles I and III without referring to their relation with Article X is not in conformity with the objective and purposes of the Convention. In our view, any interpretation of the Convention shall consider all provisions and Articles of the Convention, which are the combination of the basic rights and obligations. This explicitly means any national implementation of the prohibitions based on Articles I and III shall also consider the consistency of any national measures with the objects and purposes of the Convention.

2. In accordance with Article X, States Parties have the right to participate in the fullest exchange of equipment, materials and related technologies for peaceful purposes.

3. Based on explicit provisions of Article X, any measures for implementation of the Convention, including national measures, shall not hamper the economic or the technological development of States Parties for peaceful purposes.\textsuperscript{450}

Taken together, the implications are obvious: states cannot separate Articles I and III from Article X and expect to achieve global biosecurity; States Parties are not treated equally because international organizations are reducing their sovereignty; and States Parties are not treated equitably when it comes to access to science and technology which is their right according to the BTWC because “the haves” are not keeping their end of the bargain. “The have nots” stated that increased transparency and cooperation between states on the state of knowledge of the biological sciences and biotechnology might have exposed the perpetrator(s) of the biological attack against the United States. However, this might have been a convenient excuse to push their Article X agenda forward and to obtain equity with regard to access to scientific

information. More than twenty years into the BTWC the States Parties still not moved past a focus on the Disarmament Norm – here in the BTWC but implied in the others as well – to recognition that Article X enforcement makes disarmament possible through transparency. The United States would have supported Article X transparency had that been the case. Instead the overriding suspicion on the part of “the haves” was that “the have nots” arguments had more to do with economics than international security.

Nevertheless, the Meeting of States Parties in 2004 stuck to the agenda of pursuing the Codes of Conduct for Individual Scientists. But China continued to carry Iran’s line of reasoning forward on the need to break the cartel of contestation of “the haves” against Article X, saying, “The international community should promote cooperation in disease surveillance… Competent States Parties should provide assistances to other States Parties in the form of technology exchanges, personnel training, and financial support as well as international or regional seminars, (all of which should be conducted) on the basis of equality, cooperation and mutual respect.” China also reiterated the need for the notions of equality, cooperation, and mutual respect – indications that, again, “the haves” are not applying equality, equity, or equanimity when it comes to implementing the BTWC norms, and their contestation of Article X norms in particular appears to be evidence enough for China to indirectly indict “the haves” on these points.

**2006 Review Conference (Sixth Review Conference)**

By 2006 it is clear from States’ Parties statements that terrorism had replaced state versus state BW threat. The 2006 Annual Conference added terrorists to its list of those that should be prevented from developing, producing, stockpiling, or otherwise acquiring or retaining biological agents, toxins, equipment, or means of delivery of agents or toxins for non-peaceful purposes.

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Absurdly, terrorists’ role in ensuring the full and effective implementation of UNSCR 1540 was also recognized. However, as a state-level organization, the UN has, as many observed, no influence over terrorists even at the policing level. Article IV goes on to encourage States Parties to “apply within their territory, under their jurisdiction or under their control anywhere and apply, if constitutionally possible and in conformity with international, to actions taken anywhere by natural or legal persons possessing their nationality.” In other words, the States Parties are now responsible for the actions of the actions of their citizens with regard to BW. Article IV also places obligations on the States Parties to abide by UNSCR 1540, and to coordinate national implementation of the BTWC with other States Parties and relevant international organizations.

Article V issues were reaffirmed as well, with especially strong wording that States Parties should comply with the CBMs agreed to at the Second and Third Review Conferences. The Conference was particularly concerned with the low CBM submissions and the need to increase compliance in completing full and timely declarations in spite of the lack of verification mechanism or even a declaration norm embedded in the BTWC. Yet again, to date, Article VI not yet ever been invoked. Now long past Operation Iraqi Freedom and accusations by the United States that Iraq, Iran, and North Korea (DPRK) had WMD including biological and chemical weapons, nothing formal had been filed with the UN. By now, though, the Secretary General had established an investigation mechanisms in A/44/561, which had been endorsed by the General Assembly in United Nations General Assembly Resolution 45/57. Article VII had

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453 Ibid, 14.
454 Ibid, 15.
455 Ibid, 16.
never been invoked either, although after the Amerithrax incident and the rhetoric leading up to Operation Iraqi Freedom many states began cooperating outside of the UN to achieve essentially the same result. So again, contestation on the part of the accusers present, although the reasons are unclear from the UN documents.

Ever present in the BTWC Conference wish list was the notation that full implementation of the BTWC should facilitate economic and technological development, and international cooperation in the field of peaceful biological activities, but in the list that came under States Parties’ concern over terrorism. Article III, however, was now re-interpreted as “sufficiently comprehensive to cover any recipient whatsoever at the international, national or sub-national levels,” and called for “appropriate measures, including effective national export controls…to ensure that direct and indirect transfers relevant to the Convention, to any recipient whatsoever, are authorized only when the intended use is for purposes not prohibited under the Convention,” and “…to ensure that biological agents and toxins relevant to the Convention are protected and safeguarded,” as well as “…scientific knowledge, technology, equipment and materials under Article X.” No specifics as to how that might be done were given, however, although the inference that States Parties will hold other States Parties responsible for deliberate or perhaps even incidental transfer of such to other than states. Yet again, it is confirmation that “the haves” continued to successfully contest full enforcement of Article X. This was more evidence that a lack of equality, equity, and equanimity required by Article X was a Conference reminder that States Parties have a “legal obligation to facilitate and have the right to participate in the fullest possible exchange of equipment, materials and scientific and technological information for the use of bacteriological (biological) agents and toxins for peace purposes and not to hamper

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\(^{458}\)Ibid, 14.
the economics and technological development of States Parties.”

“The have nots” continued to pound on their Article X rights. Yet with Conference recognition that the CBM “band-aid” was not effective, little was changing. One positive change was increased exchange of information on infectious disease surveillance and control as well as expanded collaboration across human, animal, and plant health communities since the BTWC Annual Meetings in 2004.

State Parties agreed on the importance of, inter alia, improving national and regional capabilities and supporting and strengthening existing networks of relevant international organizations, but actions speak louder than words, and as confirmed in future statements by States Parties, the contestation by “the haves” of Article X continued, as did “the have nots’” contestation of its lack of enforcement.

The big push of the 2006 Review Conference was universal adherence to the BTWC by 2011, qualified by the statement that, “The fight against biological weapons must be a shared effort, seeking coherence among national mechanisms, confidence-building among States parties and synergy between international organizations, scientists, civil society and the private sector. In that respect, the Conference represented an opportunity to overcome the paralysis that had stymied disarmament efforts in recent years.” In other words, there was paralysis understood here to be caused by contestation of an array of noncompliance – none of which had anything to do with Articles I, II, and III. The Conference believed that key to resolving the political impasse were workarounds to differences: to elicit equality, equity, and equanimity amongst the States Parties. These involved innovative programs that drew on the knowledge and experience of multiple global communities – legal, scientific, security, public health, and law enforcement –

461 Ibid, 9.
462 Sixth Review Conference, Summary Record (Partial)* of the 1st Meeting (BWC/CONF.VI/SR.1), 3.
to reduce the risk of the development of biological weapons. This has been broadly typified as “how multilateralism should be: flexible, responsive, creative and dynamic; and above all, focused on overcoming obstacles and delivering results.”

In addition, the acceleration of advances in technology and a transformed political environment “meant that the Convention could no longer be viewed in isolation, as simply a treaty prohibiting States from obtaining biological weapons. Rather, it must be looked at as a part of an interlinked array of tools, designed to deal with an interlinked array of problems. Certainly, it was necessary to deal with disarmament and non-proliferation in the traditional sense, but terrorism and crime at the non-State and individual levels must also be addressed, with responses encompassing public health, disaster relief and efforts to ensure that the peaceful uses of biological science and technology could safely reach their potential.” While “the haves” might continue to question “the have nots;” motivations in invoking equal enforcement of Article V and Article X norms, the reality of the statement competes with the suspicion that the invocation might be self-serving. Contagion in particular, and transmission, both make biological events potentially global. States have little defense against natural biological threats until they are known. Without knowing where the cutting edge is in research and development of biological science and biotechnology, states are even more vulnerable. So, while “the haves” might have good economic reason not to want to reveal trade secrets, there was an increasing sense at the Sixth Review Conference that States Parties needed access to a certain amount of information, although it was indefinable. The Conference recognized, nevertheless, that this required a coherent strategy, needed to include all stakeholders – industry, science, public health, governments, and the public at large to manage the risk, and resulted in calling for a “pooling of

464 Ibid.
capacities” that included treaties as well as other actions that “were complementary and mutually reinforcing.\footnote{Sixth Review Conference, \textit{Summary Record (Partial)* of the 1st Meeting} (BWC/CONF.VI/SR.1), 5.}

Not surprisingly, and again confirmatory of the contestation that they were experiencing at this point, the Non-Aligned Movement and Other States submitted a statement that reads, “The importance of international cooperation in the field of peaceful use of bacteriological (biological) agents and toxins for the effective and comprehensive implementation of the Convention has been recognized since the inception of the BWC.”\footnote{Sixth Review Conference of the State Parties to the Convention on the Prohibition of the Development, Production and Stockpiling of Bacteriological (Biological) and Toxin Weapons and on Their Destruction (20 November – 8 December 2006), \textit{Working paper submitted by States Parties of the Non-Aligned Movement and Other States on the Review of the Operation of the Convention as Provided for in Its Article XII: Proposal for a Plan of Action on Implementation of Article X} (BWC/CONF.VI/WP.39). (Geneva, 8 December 2006), 1.} Moreover, Article X effectively states that “The States Parties to this Convention undertake to facilitate, and have the right to participate in, the fullest possible exchange of equipment, materials and scientific and technological information for the use of bacteriological (biological) agents and toxins for peaceful purposes. Parties to the Convention in a position to do so shall also co-operate in contributing individually or together with other States or international organizations to the further development and application of scientific discoveries in the field of bacteriology (biology) for the prevention of disease, or for other peaceful purposes. This Convention shall be implemented in a manner designed to avoid hampering the economic and technological development of State Parties to the Convention or international cooperation in the field of peaceful bacteriological (biological) agents and toxins and equipment for the processing, use or production of bacteriological (biological) agents and toxins for peaceful purposes in accordance with the provisions of the Convention.”\footnote{Ibid.}
More specifically, and consistent with their general strategy, Iran submitted the following statement: “The Conference believes that lack of proper implementation of Article X prevents the less developed and developing States Parties from fulfilling their plans to control and eradicate infectious disease.”  

Iran also states the case for a “multilaterally negotiated legally binding instrument to strengthen the implementation of the Convention” and to “strength the Convention through finalizing the negotiation on the draft Additional Protocol.”

Interestingly, The United States, which has never submitted a request for enforcement of the Article VI norm against Iran, the DPRK, and Syria, stated that it believed that, “the regime in Iran probably has an offensive biological weapons program in violation of the BWC. Similarly, the United States also believes North Korea has a biological warfare capability and may have developed, produced, and weaponized for use biological weapons, also in violation of the BWC. Finally, the United States remains seriously concerned that Syria – a signatory but not a party to the BWC – has conducted research and development for an offensive BW program.”

The United States also made it clear in its language that its technological assistance was limited to helping other states uncover noncompliance with the BWC which is not how “the have nots” have interpreted it given prior statements. This again is evidence of contestation of Article X and counter to the Conference’s and “the have nots” longstanding interpretation of the intent of those norms.


471 Ibid, 3.
Iran countered stating, “The BWC, as one of the significant instruments in the field of disarmament and non-proliferation, has a major loophole, namely, not to prohibit the use of biological weapons expressly and categorically. The Islamic Republic of Iran believes in a total ban on the use of biological weapons, which is explicit and devoid of judgmental interpretations and emphasizes on the urgent need for the States Parties to remove this loophole. Reviewing the preparatory work of the Convention reveals that the exigencies of the Cold War and prevalence of hostile military doctrines prevented, in the early years of 1970’s, the Convention from explicitly banning the use. That era has ended now and particularly following extensive and elaborate experience of the Chemical Weapons Convention the States Parties should proceed towards a comprehensive ban on the use of biological weapons.”

This is an obvious indication that Iran believed that the BTWC was being applied without equanimity, that is, that the P5 in particular may have been strongly influencing how the BTWC is applied. Iran went on to state on behalf of NAM that, “Each and every article of the Biological Weapons Convention bears the same value and importance. As such, a breach of Article X by a State Party is regarded as a violation of the Convention as a whole.” That is, Iran and NAM also want measures applied uniformly and universally rather than arbitrarily and motivated by political concerns.

Equality, equity, equanimity.

Argentina, Bolivia, Brazil, Chile, Colombia, Costa Rica, Ecuador, Guatemala, Mexico, Peru and Uruguay seconded Iran’s statement:

Scientific cooperation and technology transfer constitute important incentives for the universalization of the Biological Weapons Convention...[The States Parties] should

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474 Ibid, 3.
ensure scientific cooperation and technology transfer in peaceful activities such as those related to public health, agriculture, farming and animal husbandry; They should develop efficient coordination mechanisms between the specialized agencies of the United Nations system and international and regional organizations, in order to facilitate scientific cooperation and technology transfer.\footnote{Sixth Review Conference of the State Parties to the Convention on the Prohibition of the Development, Production and Stockpiling of Bacteriological (Biological) and Toxin Weapons and on Their Destruction (20 November – 8 December 2006), Working paper submitted by Argentina, Bolivia, Brazil, Chile, Colombia, Costa Rica, Ecuador, Guatemala, Mexico, Peru and Uruguay on Scientific Cooperation and Technology Transfer Article X (BWC/CONF.VI/WP.10). (Geneva, 20 October 2006), 1.}

These states also requested regular distribution of updated information collected from the States Parties, and the adoption of measures to “create networks between scientific communities and the academic sector regarding the peaceful use of biotechnology, genetic engineering, microbiology and other areas related to the Biological Weapons Convention.”\footnote{Ibid, 2.} France and the United Kingdom of Great Britain and Northern Ireland on behalf of the European Union also submitted recommendations for future topics for the BTWC amongst which was a program to include improving CBMs, and regional and subregional cooperation.\footnote{Sixth Review Conference of the State Parties to the Convention on the Prohibition of the Development, Production and Stockpiling of Bacteriological (Biological) and Toxin Weapons and on Their Destruction (20 November – 8 December 2006), Working paper submitted by France and the United Kingdom or Great Britain and Northern Ireland on Behalf of the European Union on The Intersessional Programme of Work: Its Utility and Contribution to Fulfilling the Object and Purpose of the Convention Between 2003-2005 and a Case for Further Intersessional Work After 2006 (BWC/CONF.VI/WP.8). (Geneva, 20 October 2006).}

So, as of 2006, “the have nots” efforts to obtain Article X rights has heated back up, with some limited support from at least one member of the P5 speaking on behalf of the European Union. Hope was on the horizon.

**2007 Meeting of States Parties**

It was also decided at the Sixth Review in 2006 to continue the intersessional process, with the next Review to be held in 2011. Hence, statements gleaned from 2007 and 2008 are
from the Meetings of States Parties or Meetings of States Experts in those years. At the
publication of this study, papers from the 2009 Meeting of States Experts and Meeting of States
Parties had not yet made available to the public. As to the 2007 meetings, “cooperation” was
one of the agenda items, and that theme comes through unmistakably in the statements by States
Parties. More telling was how “the have nots” attached themselves to the concept of cooperation
as “the haves” interpreted it and linked it back to Article X cooperation, and the context for the
following discussion emerges.

Algeria also fully endorsed NAM statements made by Cuba, and stated that its priority
was, “…the national application and subregional and regional cooperation…” and “…effective
and efficient application of the provisions – all the provisions – of the Convention in a complete
and well balanced manner without any discrimination must become a priority.”478 Again, the
theme of cooperation and reducing contestation to the complete, equitable implementation of the
BTWC was repeated, indicating the perception that “the haves” continued to contest the norms
that were most important to “the have nots.” At the same meeting, Australia came out strongly
for cooperation, especially at the regional level in order to “strengthen implementation and
universalisation of the BWC, particularly in our region,” and enhance biosecurity throughout
Australia, committing to “…encouraging and assisting Asia-Pacific states to accede to and
implement the BWC.”479 Japan, Australia, Canada, Republic of Korea, Switzerland, Norway,
and New Zealand recorded that they have seen an increase of cooperation at the regional and
sub-regional levels as critical, including the improvement, refinement, enactment and effective

478 2007 Meeting of the States Parties to the Convention on the Prohibition of the Development, Production and
Stockpiling of Bacteriological (Biological) and Toxin Weapons and On Their Destruction (10-14 December 2007),
Transcription of the Statement by Algeria to the 2007 Meeting of States Parties of the Biological Weapons
479 2007 Meeting of the States Parties to the Convention on the Prohibition of the Development, Production and
Stockpiling of Bacteriological (Biological) and Toxin Weapons and On Their Destruction (10-14 December 2007),
enforcement of national and sub-national legislative measures. They also believed that multiple stakeholder participation and cooperation was required to achieve effective BTWC implementation, including civil society and the private sector.\textsuperscript{480} In addition, regional and sub-regional cooperation should include the enactment of national legislation, export and import controls, and disease surveillance and especially CBMS were critical to the effort,\textsuperscript{481} all notions that had been raised for successful implementation of the BTWC in previous meetings by “the have nots” but now coming from major P5 allies.

Continuing on with the theme of cooperation, China makes several observations:

Currently, the international security situation is undergoing complex and profound changes. Adhering to multilateralism, enhancing the international cooperation and strengthening the international arms control and non-proliferation legal system, have become the broad consensus of the International Community, as well as one of the major means to safeguard the international security and effectively address these challenges.\textsuperscript{482} China saw the Convention as having an “irreplaceable role in the comprehensive prohibition, complete destruction, non-proliferation of biological weapons and prevention of bio-terrorism.” It stated, “…all States parties should make full use of the Convention as an important platform to strengthen cooperation and communication, promote implementation and other capacity of the Convention.”\textsuperscript{483} In addition, China proffered that, “States Parties should, in the principle of equality, cooperation and mutual respect, take active part in regional, sub-regional and bilateral

\textsuperscript{480} 2007 Meeting of the States Parties to the Convention on the Prohibition of the Development, Production and Stockpiling of Bacteriological (Biological) and Toxin Weapons and On Their Destruction (10-14 December 2007), \textit{JACKSNNZ Opening Statement: General Debate delivered by Ambassador Marius Grinius of Canada.} (Geneva, December 2007)

\textsuperscript{481} Ibid, 2.

\textsuperscript{482} 2007 Meeting of the States Parties to the Convention on the Prohibition of the Development, Production and Stockpiling of Bacteriological (Biological) and Toxin Weapons and On Their Destruction (10-14 December 2007), \textit{Statement by Mr. Wang Qun, Head of the Chinese Delegation.} (Geneva, 10 December 2007), 2.

\textsuperscript{483} 2007 Meeting of the States Parties, \textit{Statement by Mr. Wang Qun}, 2.
cooperation on implementation of the Convention. States parties should provide assistance to other States Parties in need, particularly to developing countries, with a view to promoting the international exchanges in biological field and raise the implementation capacity.\(^4\) Beyond the call for lobbying for the Cooperation Norm in Article X, China, which is part of the P5, also was experiencing the effects of Article X contestation by “the haves” in the biological sciences. That said, China has had another strategy in play since Nixon opened up trade with China in the 1970s, which will be discussed further on.

Cuba, speaking on behalf of NAM, stated that, “…the BWC is still an incomplete and perhaps even vulnerable instrument.”\(^5\) NAM “…believes that the only sustainable method of strengthening the Convention is through multilateral negotiations aimed at concluding a non-discriminatory, legally binding agreement, including on verification, dealing with all the Articles of the Convention in a balanced and comprehensive manner.”\(^6\) For NAM States Parties, it comes down to commitment, funding, and political will to implement the BTWC.\(^7\) To attain this, NAM encouraged consolidation of international cooperation activities under Article X of the Convention, “…as part of the cooperation for the national implementation of the Convention and the fullest possible exchange of equipment, materials, and scientific and technological information for the use of bacteriological (biological) agents and toxins for peaceful purposes.”\(^8\)

Beyond equality, equity, and equanimity which Cuba speaks directly to, lay the lessons learned from NAM’s experience with nuclear. The bottom line: universal means universal in all

\(^4\) 2007 Meeting of the States Parties, Statement by Mr. Wang Qun, 4.
\(^6\) Ibid.
\(^7\) Ibid, 3.
\(^8\) Ibid, 4.
things. NAM also wanted assurance that NAM states were not hampered economically or technologically in the development of biological agents and toxins for peaceful purposes, which was a continuation of the equal implementation of all articles of the BTWC theme begun at its inception. Even Germany stressed the need to “enact and enforce appropriate national legislative measures” to support the Convention since there are “binding obligations.” Germany was also concerned that although 61 States Parties submitted their annual CBM reports, there had been only a 35% compliance rate overall and that that figure had “prevailed” since the CBMs were put in place, and there was no progress in improving the CBMs during the Sixth Review Conference. Thus, now Germany, one of “the haves” and part of the P5+1, in addition to the United Kingdom, has begun to express frustration with the lack of enforcement of Article X norms. That said, the last chapter demonstrates at least overt compliance with the CBMs amongst “the haves.” But again, without knowing exactly what the state of knowledge in each country is with regard to biological science and biotechnology, it is impossible to gauge the degree to which states were actually complying – or contesting – Article V and Article X norms.

Curiously, India proposed where the edge of the state of knowledge might be – or at least where it was headed, stating that it sees a need to “strengthen the Convention to deal with the widening threat spectrum arising from possible malevolent uses of biotechnology, which is creating new ways of manipulating basic life processes.” While India has been perceived as a leader in the development of especially nanotechnology and possibly its applications to biology,

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490 2007 Meeting of the States Parties, Statement by H.E. Ambassador Bernhard Brasack, Permanent Representative of Germany to the Conference on Disarmament, 5.
India also agreed with NAM on the need for “a non-discriminatory, legally binding agreement, including on verification, dealing with all the articles of the Convention in a balanced and comprehensive manner. In the face of the emerging challenges, verification of compliance will be an important element in providing the assurance that all States parties are meeting their commitments and obligations.”

India is an appropriate spokesman for “the have nots” (or perhaps better said with regard to biological sciences and biotechnology, “the would like to haves”) given their own experience standing up their nuclear program. India’s direct experience with contestation from “the haves” in sharing nuclear science knowledge and technology, especially their attitude about equality, equity, and equanimity about the specific states that should get the knowledge, had a decided impact on India’s decision to create its own nuclear program from scratch. It comes as little surprise that India would advocate for the universal sharing of knowledge and technology. However, it must be recognized that India’s position was certainly self-serving since it India was not sharing its state of knowledge of biological science and biotechnology either. India went on to state in a later report, that “…it is imperative that the norms against biological weapons contained in BTWC are fully upheld and implemented, especially in the context of a growing threat of proliferation of biological weapons and bio-terrorism. Advances in biotechnology, genetic engineering and life sciences hold great promise and equally great risks. The intrinsic capacity for the development of biological warfare agents will expand at the same speed as the pace of civilian research.” In other words, if the Convention does not keep all States Parties in the loop on the state of knowledge, all risk being surprised given the rate of progress in the biosciences. So, while for the moment the state versus state biological warfare threat has neared

\[492\] 2007 Meeting of the States Parties, Statement by Jayant Prasad, Ambassador and Permanent Representative of India for the Conference on Disarmament, 3.

\[493\] Ibid.
zero, it threatens to resurface as other strategic weapons or even their defensive use become taboo.

Indonesia further explicated that, “…endeavors in strengthening the Convention should not hamper the rights of each Member State’s efforts to benefit from the development of biological agents for peaceful purposes. On the contrary, Member States should enhance international cooperation in the field of peaceful uses of biological agents, including the effort to combat infectious diseases.”

As an aside, but an important one here, was the emerging reality that antibiotic resistance had made the treatment of infectious diseases a reemerging issue in biological research and development, and ironically, knowledge of what other states are doing to address antibiotic resistance would likely expose the cutting edge of knowledge of bioscience and biotechnology. Nevertheless, the broader message is one of equity and equanimity in the sharing of that knowledge against a common enemy: nature. Consequently, Iran continued to press for a formal protocol for declaration and verification to strengthen the Convention, although again, its motivations could be interpreted in several ways.

Interestingly, the international organizations and nongovernmental organizations weighed in on this as well, giving supporting positions to “the have nots.” One, the Research Group for Biological Arms Control, University of Hamburg, Germany expressed concern that there was not decision to review the content of the CBMs at the Sixth Review Conference, nor during the intersessional process 2007-2010. It was also concerned about States parties decision to limit the availability of the CBMs by stipulating which information in the CBMs must not be circulated or

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made available beyond States Parties and the UN Office for Disarmament Affairs without express permission of the submitting State Party because it limits independent assessment of the CBMs by civil society. This is clearly an issue of equanimity for this NGO since the point of having the CBMs was allowing all States Parties access to the information in the CBMs rather than doling it out to select States Parties (with equanimity) as well as without controlling what information any particular State Party had access to, that is, in an equitable fashion. The Research Group for Biological Arms Control also expressed concern about the lack of teeth for the Implementation Support Unit (ISU) because there was no agreement on universality, national implementation, and implementation of Article X. Finally, they were concerned that the intersessional process “is weaker than the previous one.”; in their estimation, holding a one week meeting instead of a two week meeting each year weakens this process in spite of an increase in the number of topics needing to be covered.

Another NGO, Pax Christi, took a slightly different tack. While agreeing on the need to strengthen the BTWC, “Any strengthening of the BTWC should strike an optimal balance between preventing misuse and allowing as much as possible academic and scientific freedom for peaceful purposes as much as possible. This is in line with the concept of human security, which points to the responsibility of the international community to strive for the security of individual human beings and their communities. It respects State and homeland Security, but also imposes limits on the attempts of States to guarantee their own security.” Most

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496 2007 Meeting of the States Parties to the Convention on the Prohibition of the Development, Production and Stockpiling of Bacteriological (Biological) and Toxin Weapons and On Their Destruction (10-14 December 2007), Statement by the Research Group for Biological Arms Control at the University of Hamburg, Germany. (Geneva, 10-14 December 2007), 2.
497 Ibid, 2.
498 Ibid.
specifically, they believed that the optimal balance, and one that supported international as well as national state security requirements with regard to biological science was one that did not infringe on the individual scientist’s freedom to research and develop and rigorous reporting. Russia stated that its priority was a legally binding instrument to verify compliance with the BTWC, noting that 100 States Parties including those with advanced biotechnology research and development and laboratory facilities have not submitted declarations using the CBMs.

While perhaps with different intent that “the have nots,” Pax Christi unambiguously articulates their position, as well as one it believes will ensure peace and security, thus validating “the have nots’” position.

One of the most interesting and applicable statements on the pragmatism of a rigorously enforced declaration and verification protocol for the BTWC, however, was made by the Organisation for the Prohibition of Chemical Weapons (OPCW) itself. The model for the now nearly defunct OPBW, it brought insight and experience with implementation of treaties with rigid declaration and verification reporting requirements embedded in them with the implementation of the CWC in 1997 onward. The OPCW considered the BTWC and CWC together “a comprehensive prohibition against two of the three categories of weapons of mass destruction.” However, not all WMD are created alike, or so the OPCW implied, stating “...conclusions relating to similarities in the dynamics attending different legal instruments must

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501 Ibid, 3.

also take into account the differences between the respective subject-matter that they cover."\textsuperscript{503} That is, while related, the practical application of declaration and verification for the BTWC might be impossible. By Nov 2007 the OPCW had overseen more than 26,000MT of chemical warfare agents (about 37% of a total 71,331MT declared by six possessor states) "verifiably destroyed."\textsuperscript{504} The difference for the OPCW was in verifying an existing, physically verifiable, inspectable threat, as is nuclear and chemical weapons held by governments and their militaries versus comparing it to something less tangible – and rapidly expanding – like biological research and development programs and projects largely held by the private sector. At the same time, the OPCW also recognized the "…the increasing overlap between the chemical and biological sciences, the integration of chemical engineering into the life sciences, and the impact of micro-reactors and or emerging technologies, such as nanotechnology."\textsuperscript{505} All, they stated, have potential for abuse or hostile use, and advances in chemical manufacturing posed a potential risk for the CWC verification regime, as would continuing and rapid advances in bioscience and biotechnology.

The CWC solution was to move away from the use of the overly simplified use of the term "weapon" with the addition of a "General Purpose Criterion" forbidding the use of any toxic chemicals for purposes other than peaceful purposes. But this change imposes the same potential complexity to declaration and verification for chemical that biological already poses for the BTWC. The takeaway that the complexity of the nature of determining what to track in bioscience and biotechnology without a clear pattern of intended or actual use made physical verification infeasible for biological agents, and, decreasingly feasible for chemical agents as the

\textsuperscript{503} 2007 Meeting of the States Parties, \textit{Address by Ambassador Rogelio Pfrirter, Director-General of the Organisation for the Prohibition of Chemical Weapons}, 3.
\textsuperscript{504} Ibid.
\textsuperscript{505} Ibid, 5.
CWC moved past weapons and on to focusing on chemical research and development becomes. Furthermore, the OPCW stated, “Our message is rooted in the argument that if peace in the world is a collective responsibility then you cannot stand aside and not be a part of a common quest that is based on principles of equity and non-discrimination and requires for its sustenance the support of each and every member of the international community.”

So, although the CWC was moving in the same general direction as the BTWC in terms of the activities it needed to track, it also believed that WMD agreements offered equity to states that were legal equals, and that the sharing of information should be with equanimity because without an equitable impact of the application of the WMD agreements on all states such agreements would become obsolete.

Cooperation was one of the topics of the 2007 intersessional meeting, so many States Parties made very favorable statements about cooperation on the BTWC, but few discrete recommendations on what “cooperation” comprised, nor specifics on how to achieve it. The Republic of Korea (ROK) outlined its position as follows: “With regard to the second topic of this year’s intersessional work program, ‘Regional Cooperation on Implementation of the Convention,’ my delegation believes that the importance of cooperation at the regional and sub-regional level for the implementation of the Convention is greater than ever before, as biological weapons do not know national boundaries.” Explicit in the ROK’s statement is the clear distinction between nuclear and chemical versus biological weapons or biological events: biological events do not respect national boundaries. Therefore, logically, states should

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cooperate to prevent biological events since they can quickly expand into international events due to transmission and contagion.

Interestingly, the European Union (EU) plus its candidate countries Turkey, Croatia, Macedonia, Albania, Bosnia and Herzegovina, Montenegro, Ukraine, Republic of Moldova, Armenia, and Georgia, in speaking on behalf of the EU Plus confirmed their support of the Implementation Support Unit (ISU) responsible for assisting States Parties implement the BTWC at the national level. Even more, the EU had put several regional and sub-regional cooperative mechanisms in place to ensure the appropriate implementation of the BTWC, which included international organizations, and nongovernmental organizations, which the EU Plus believed essential for complete implementation of the BTWC.

In addition, as alluded to earlier, the introduction of new norms could be considered a new and unique form of contestation, and two new norms appeared to be emerging in the 2007 meetings: one, that regions or sub-regions can be declared WMD free zones; two, that ultimately it was the individual scientist – not the state – who was responsible for the success of the BTWC. Several regions – mostly consisting of “the have nots” – were currently seeking to become either nuclear free or WMD free zones, and at least one state – India – has refused to join the NPT because it believes that its norms for the management of its nuclear program exceed those in the current nuclear agreements. In addition, there is increased movement to make the individual researcher ultimately responsible for understanding and implementing the norms in the WMD agreements in his own code of ethics in order to prevent nefarious use of either scientific findings or the products of science. The OPCW supports the position that it is up to the

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509 Ibid, 5.
individual scientist ultimately, which is a new norm and one that brings the culpability of the state down to the individual level. “Scientists must establish norms that will stand the test of time and will anchor the chemical weapons ban in the conscience of all those that deal with these materials. I am aware that the need for similar consideration has been highlighted in the case of the BWC.”510 Another NGO, HSP, reported a need to bolster the BTWC with an international treaty criminalizing bioterror and individual offenses, and had drafted the Harvard Sussex Draft Convention which would “oblige each State Party to establish jurisdiction with respect to the specified crimes extending to all persons in its territory, regardless of the place where the offence is committed or the nationality of the alleged defender” as well as “…to prosecute or extradite any such alleged offender if satisfied that the facts so warrant.”511 This constitutes even more discrete evidence of a movement toward expanding WMD norms to include or apply to the individual, as well, at least in the latter case, to make the State Party responsible for the crimes of its nationals. Regarding these, “the haves” would certainly support equality in application of such a norms since their problems with biological warfare is terrorist driven, and assumed to be in the near future. In contrast, it would be unlikely that “the have nots” would support – or be able to support – such a norm given their inability to govern remote areas or to police laboratories and academic research centers.

In terms of improving on the norms in the WMD agreements – which could be interpreted as contestation of the current BTWC norms – several States Parties outlined specific efforts they have made in that direction. Saudi Arabia called for “…endeavours to ensure that the Middle East becomes a region free of weapons of mass destruction in keeping with the

recommendation made by the Arab Ministers of Foreign Affairs at their 101st session concerning the establishment of a Technical Committee of States parties at the Arab League to formulate a draft regional agreement comprising the States of the Middle East, including Israel and Iran, to make the Middle Eastern region free of weapons of mass destruction.”

The African Union noted that, “National action alone may not suffice in meeting the objectives of the convention although it is indispensable. It has to be backed and reinforced by concerted subregional and regional actions as well as international cooperation…”

Brazil, representing Argentina, Colombia, Chile, Ecuador, Guatemala, Mexico, Peru, Uruguay, Venezuela and itself reiterated their support of the Joint Mendoza Declaration of 1991 (originally signed by Argentina, Brazil, Chile and later expanded to include Uruguay, Bolivia, Ecuador and Paraguay) “not to develop, produce or acquire under any form, stockpile, or retain, directly or indirectly transfer, chemical or biological weapons.”

An additional agreement, the Declaration of the South American Peace Zone in 2002 was added to prohibit signatories to “place, develop, manufacture, possess, deploy, experiment with, or use any type of weapon of mass destruction, including biological and toxin weapons,…”

Other regional agreements include the Organization of American States (OAS) efforts to keep Latin America free from biological and chemical weapons. Stating, “We are convinced that efforts at the regional and sub-regional level allow for the identification of ways and means to improve scientific cooperation and technological transfer. This is vital for


515 Ibid.
the application of the Convention at the national level and in turn becomes an important incentive for it to become universalized,”

the OAS links, as have others, cooperation and technological transfer, which is consistent with their combined presence in Article X of the BTWC. Brazil et al. also remarked on “...the essential role to be played by civil society, particularly industry and the academic community, as well as the scientific community, non-governmental organizations, all of which have an important contribution to make in contributing to the understanding of the obligations undertaken in the context of the Convention. In order to make progress in the universalization of the Convention and application of all its obligations, we need a multidimensional and multisectoral effort to be undertaken.”

Thus cooperation amongst various groups and with regard to non-disarmament norms has been steadily materializing since 2007, and in contest to both the priorities of the current norms as well as the lack of equality, equity, and equanimity with which non-disarmament norms have been enforced.

China added that, “Promoting the comprehensive and forceful implementation of the Convention demands joint efforts of the international community. China supports cooperation on national implementation at international, regional, and sub-regional levels. State parties should, on the basis of equality, cooperation and mutual respect, provide assistance to those countries in need through technological exchange, financial support and regional workshop, to help improve implementation capacity.”

China clearly linked Article X norms with equality and equity here, pointing out the weak link in the BTWC for “the have nots.” China also claimed to have promoted cooperation by organizing several international seminars on biosafety and infectious disease surveillance, and through having had bilateral exchanges with the United

516 2007 Meeting of Experts, Statement Given By Brazil On Behalf of a Group of Latin American States, 2.
517 Ibid, 3.
States, Canada, ASEAN and EU, and authoring a working paper on cooperation. As for the EU, Germany speaking on its behalf, related that the EU had an EU-Russia Co-operation Programme with Russian Federation started in Feb 2006 for three years, which involved seminars, study visits to EU, legal review, capacity building, industry outreach, a reference guidebook, an internet information centre, a feasibility study on electronic processing, and an export control conference. Interestingly, while a good example of the type of Article X cooperation “the have nots” were seeking, the EU chose a specific partner for cooperation – one of the P5 and “the haves.” This could be considered a type of contestation of Article X as well in the sense that while States Parties might seek to share science and technology or to cooperate, they would do so selectively, which is in contravention to the BTWC. This is what “the have nots” were seeking, but not in a way that excluded them through rejecting the notion of equanimity in sharing knowledge and technology, etc.

2008 Meeting of States Parties

At the 2008 Meeting of States Parties, Pakistan reified and then qualified some of the movement it saw in the 2007 Meeting of States Parties. Specifically, Pakistan remarked that States Parties could not run the risk of delinking biosafety, biosecurity or oversight, education, awareness raising, and the code of conduct. However, it stated that the State Party alone could not be held responsible for the individual researcher. The responsibility of oversight for programs crossing the line from nonoffensive to offensive, “must be jointly shared by national

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520 2007 Meeting of Experts to the Convention on the Prohibition of the Development, Production and Stockpiling of Bacteriological (Biological) and Toxin Weapons and On Their Destruction (20-24 August 2007), Presentation, EU-Outreach Projects Implemented by BAFA, Germany (22 August 2007), slide 5.
authorities, scientific programme managers and investigators of life science projects.”

Furthermore, Pakistan contested the interpretation of any code of conduct for the individual scientist as a BTWC norm, stating, “a Code of conduct is a unique regulatory instrument that should not be mistaken with a treaty, guideline, or other procedures. The aim of code of conduct for the life sciences is to ensure that activities involving microbial or other biological agents or toxins, whatever their origin or method of production may be, is for prophylactic, protective or other peaceful purposes only.” Ignoring for the time being that Pakistan specifically limited any code of conduct to the “life sciences,” it appears instead that Pakistan was contesting a more universal approach in the form of a single code of conduct in favor of a what it considered a more rational approach. It proposed instead that a better approach “would be to encourage states, organizations and/or scientific bodies to develop and adopt their respective codes according to their specific circumstances…” with coordination for its development, implementation, review and monitoring of compliance done by professional scientific bodies…and with continuous review, updating, and assurance of proper implementation. So, States Parties should be responsible for their own oversight, but that the norms they implement for their nationals should be developed by the State Party and its nongovernmental organizations rather than by an international organization or as art of international law. In other words, Pakistan assessed the need to equalize the burden on “the have nots” via a counterproposal that would also allow states to retain their equality amongst other states.

In the same meeting, Cuba, speaking on behalf of NAM, reported that the Ministers of NAM conducted the XV Ministerial Conference of the Movement in Tehran in July 2008 at

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522 Ibid, 2.
which they “reaffirmed that the possibility of any use of bacteriological (biological) agents and toxins as weapons should be completely excluded, and the conviction that such use would be repugnant to the conscience of humankind, and also recognized the particular importance of strengthening the Convention through multilateral negotiations for a legally binding protocol and universal adherence to the Convention. They also reiterated their call to promote international cooperation for peaceful purposes, including scientific-technical exchange.”524 Again, this serves as an indication that compliance and cooperation were being contested by “the haves.” NAM also endorsed multilateral negotiations to draft a legally binding Protocol and seeks universal adherence to the Convention, seek to promote international cooperation for peaceful purposes, including scientific-technical exchange.525

Cuba went on to state that laws and regulations have a disproportionate impact on developing countries. Developing nation-states do not have the capacity to reduce risk or to address biological events caused by irresponsible research and development in other countries. They also do not have the capacity to prevent proliferation, do the reporting required, etc.526 In other words, the impact of the BTWC could not be enforced equitably without an opportunity to access Article X information and to leverage Article X cooperation because Article I generally did not apply to “the have nots.”

Summary of Findings

The data presented here support the hypothesis that both “the haves” and “the have nots” are indulging in contestation of the BTWC. “The have nots” believe that “the haves” are

525 Ibid, 1.
526 Ibid, 2.
actively contesting Article V and Article X norms. Furthermore, “the have nots” believe that the contestation by “the haves” of norms that are their priorities has resulted unequal status of “the have nots” as states. “The have nots” also do not believe that BTWC Article V and Article X are not being enforced equally, thus they are not equitably benefitting from the Right to Science, Economic and Technological Development, and Cooperation Norms. “The have nots” also have concluded that contestation by “the haves” of Article X norms in particular has resulted in inequity of the impact of the BTWC on their economies. In addition, “the have nots” have been impacted inequitably by the cost of basic compliance with the BTWC (meeting attendance, CBM reporting, etc.). Moreover, the contestation by “the haves” in applying Article X selectively and discriminatorily with regard to how they partner or share advanced scientific knowledge and technology is without equanimity. Finally, other forms of contestation are emerging, especially amongst “the have nots.” These norms center around strengthening the BTWC through the re-interpretation of current norms (e.g., understanding Article V and Article X together as surrogate declaration norms), or through the proposition of additional norms (e.g., specific declaration and verification norms, or via the addition of stricter norms at the regional or sub-regional levels). That the contestation appears to be cooperative on both “the haves’” and “the have nots’” sides. Both demonstrate patterns of norm contestation, with “the haves” centering their contestation on Article X. “The have nots” focus their contestation on how Article X is enforced. Both cooperate at the global, regional, and sub-regional levels through various groups, international organizations, and national organizations in this contestation. The meaning of these findings with regard to international law, international relations, and international agreements are discussed in the final chapter.
Chapter 7

How the West Was Won

"New global problems challenging humanity...can be solved only by all states acting together, by the common efforts of all nations..."

- Rein Mullerson

Introduction

I have often kidded with my children that one of the sayings that I want on my tombstone is “Nature Kills.” This remains the most truthful statement that we can make about the cause of death worldwide from the beginning of recorded history, and the most likely potential strategic threat we can envision in the near future. Even in war, the deaths from disease or accidents have historically far exceeded those caused by weapons of mass destruction. In spite of enormous gains in nuclear theory and technology, biological pathogens of all kinds – viruses, bacteria, fungi, protozoa, and helminths (worms), prions, or ectoparasites – may be re-emerging as the gravest threat to humanity, only this time enhanced by knowledge and technology that nuclear and chemical WMD could only hope to enjoy. With little control over nature, we pursue the elimination of manmade weapons of mass destruction, whether they are chemical, biological, radiological, or nuclear, to a degree unimagined before the inception of genuinely global warfare in WWI. Since then, we have tried using the only truly universal weapon that we have – law – to level the playing ground of war by eliminating certain weapons from our collective arsenals.


528 For those interested, others include but are not limited to: 1) My student loan balance, 2) “Law is for Lawbreakers,” and, 3) “See Ruby Falls.”
What The Data Tell Us

The proposition has been that although states generally comply with the BTWC and other WMD agreement norms, especially the Disarmament Norm, both “the haves” and “the have nots” are cooperatively contesting either specific norms in the BTWC or how norms in the BTWC are being enforced. Moreover, the reasons for this cooperative contestation are embedded in issues of equality, equity, and equanimity. Specifically, the data shows that:

- Norms from the WMD agreements can be catalogued and typed, and demonstrate three significant findings.

- Norms other than disarmament norms can be found in the BTWC and the other four principal WMD agreements.

- There is some commonality in the norms across the agreements, but total congruence does not exist for any of the agreements.

- Methodologically the cataloguing and typology only offer a point of departure for analysis of the norms each agreement contains.

- Quantitative data points in general do not appear to be valid or reliable indicators of WMD norm contestation except in the case of the complete rejection of the norms of a particular agreement.

- Qualitative data such as implementation behavior where participation can be tabulated as well as some quality of the results is indicated, and reservations to an agreement which explicate the reasons for the reservation, as well as information on the number and qualifying characteristics of cartels can be more indicative of contestation behavior or cooperative contestation.
• United Nations documents that capture states’ statements regarding the reasons for contestation or cooperation are the richest, most valid and reliable indicator of cooperative contestation of the BTWC norms.

• Typing of States Parties (or states) as “the haves” – States Parties that have WMD – and “the have nots” – States Parties that do not have WMD – can be valid and reliable indicator for predicting which norms the States Parties believe are being contested or the contestation of those norms.

• “The haves” are contesting specific norms in the BTWC beyond those related to disarmament, specifically Article V and Article X norms as well as the proposed addition of specific declaration and verification protocols (norms) to the BTWC.

• “The have nots” are contesting how Article V and Article X norms in the BTWC are being enforced.

• The specific principles and norms being contested in the BTWC are: the Peaceful Uses Principle, the Benefit to Mankind Principle, and Article V and Article X norms dealing with the Right to Science Norm, the Economic and Technological Development Norm, and the Cooperation Norm.

• States Parties’ (and non-States Parties for that matter) contestation of the BTWC appears to have increased since 1989.

• All reasons for contestation of the BTWC center around issues of equality, equity, and equanimity.

• The reasons for “the haves” contestation of the BTWC norms appear to derive from specifically from their concerns that the divulging of the advanced knowledge of the
biological sciences and cutting edge biological technology will negatively impact their global market share in the pharmaceutical and biotechnology sectors.

- “The have nots” reasons for contestation of the enforcement of the BTWC norms appear to derive from States Parties’ concerns that the lack of access of advanced knowledge of the biological sciences and cutting edge biological technology will negatively impact their ability to develop competitive markets or attain comparative advantage in the biological sciences and biotechnology sectors.

- That States Parties on both sides appear to be cooperating in the contestation of these norms in the BTWC

- Cooperation happens at the global, regional, and sub-regional levels through various groups, international organizations, and national organizations.

- States are contesting cooperatively in order to either acquire the gains afforded by the norms or to minimize the losses afforded by the norms in the BTWC.

- Other forms of contestation are emerging, especially amongst “the have nots” specifically in the direction of strengthening the BTWC through the re-interpretation of current norms (e.g., understanding Article V and Article X together as surrogate declaration norms), or through the proposition of additional norms (e.g., specific declaration and verification norms, or via the addition of stricter norms at the regional or sub-regional levels), expanded application of current norms (e.g., to the individual), or through the formation of regional WMD exclusion zones.

**What Has Changed Since 1989**

Perhaps from a more global point of view, it would be easier to ask what has not changed since 1989. As concerns this discussion, however, there appear to be several significant changes
in international political, economic, and socio-cultural conditions as well as in assumptions about state behavior that might lend perspective on the contestation of the BTWC or its enforcement.

First, international economic and political conditions have shifted significantly since 1989. With more independent states, economics have superseded military power in the state survival equation with not client state to rely on for trade or foreign aid. Law has become the predominant means of leveling the playing field to obtain equitable market share.

Second, both “the haves” and “the have nots” are beginning to modify their assumptions about other states’ behavior, particularly with regard to their perception of threat of WMD attack by other states. While “the haves” continue to worry over cheating by other “haves” and rogues (Iran, the DPRK), “the have nots” generally accept that now that they are no longer client states to either the United States or the Soviet Union that they are no longer realistic targets for WMD attack by another state. Moreover, all states have expressed, especially since 2001, their concern that WMD attacks are more likely to be perpetrated by terrorists and have been acting to quell the possibility. In addition, most states realize that trade cannot be conducted if there is war, so most assume away the threat if they are part of the international market. Furthermore, states appear to increasingly assume that they can trust each other not to use knowledge and technology against each other.

Third, states have become accustomed to collective processes and cooperation. This underwrites the conceptual basis for state cooperation of all kinds, including cooperative contestation. However, “the have nots” do not believe that they can obtain an equitable market share without equality in legal status and equanimity in how science and technology are distributed.
The proliferation of new states unsteeped and unpracticed in market theory (or benefits), but anxious to test drive them after 1989, and the availability of experienced scientists free(er) to study abroad or conduct independent research flooded the international market with both pent-up knowledge and pent-up demand for that knowledge that “the haves” had to compete for. Globalization was also spreading rapidly, with commercial industries in “the haves” taking knowledge and technology abroad to leverage cheap labor and these newly available sharp minds – and inadvertently transferring it in the process. A resurgence of an interest in sovereignty was feeding nationalistic cries for state autonomy and equality, resulting in both a new call for the legal recognition of states under international law as equal entities as well as the science and technology they had been deprived of prior to 1989 to catch up with “the haves” insofar as possible. The UN records clearly indicate that “the have-nots” strongly believed that they were not benefitting from the WMD agreements they belonged to even though most, the data bears out, sought access to knowledge and technology that they could leverage for purposes other than building WMD, and especially after 1989, began to ramp up their lobbying for equal recognition and enforcement of all norms in the BTWC. That is, they believed that the WMD regimes and norms would and should benefit them.

**Deconstructing Contestation: Equality, Equity, and Equanimity**

As the evidence indicates, both “the haves” and “the have-nots” are cooperatively contesting the BTWC. The contestation occurs in two forms, but in response to issues embedded in the same principles and norms in the BTWC: the Peaceful Uses Principle, the Benefit to Mankind Principle, and Article V and Article X norms dealing with the Right to Science Norm, the Economic and Technological Development Norm, and the Cooperation Norm. These norms all have two things in common. First, all extend to States Parties to the BTWC the right to
access to cutting edge bioscience knowledge and biotechnology. Second, all have the potential to impact state comparative advantage in products that derive from bioscience knowledge and biotechnology. Consequently, “the have nots” are seeking equality, equity, and equanimity through enforcement of these norms. Each is discussed below in order.

Equality via Enforcement

“The have nots” have two concerns regarding equality and the BTWC: one, that they are not being treated as equals in international law; two, that all norms in the BTWC are not being equally enforced. Moreover, the two are related. Though legal equals as sovereign states under international law, “the have nots” cannot obtain equality in reality without equal enforcement of international laws. If not accepted as legal equals, “the have nots” do not believe that the BTWC norms that benefit them most (Article V and Article X) are being enforced with vigor equal to those that benefit “the haves,” namely the principles in the Preamble and Article I.

“The haves” – of which the P5 comprise an important core – worry little about equality since theirs was institutionalized in the structure of the United Nations Security Council (UNSC). The UNSC, which was established to “maintain international peace and security” by “[ordering] measures that impose upon territorial integrity and political independence,” 529 resulted in a departure from what states traditionally assume to be sovereignty and resulted in what was assumed by many to be a reduction in that sovereignty. In other words, in allowing the UN to intervene in international security situations, states appeared to be willing to surrender some of what they believed was their sovereignty in exchange for security or humanitarian purposes. 530

In essence, equality for “the haves” has been irrelevant as a legal concept in the international

529 Henkin et al., 18.
530 Ibid.
arena since essentially they already had international legal guarantees of equality, especially with regard to the WMD agreements.

With regard to international relations more broadly, “the have nots” believe that their perceived unequal status which has been reinforced by the unequal enforcement of the BTWC norms they favor, threatens or reduces their own sovereignty. As a result, their legal status in the international system is invalidated, and their sovereignty further diminished. The loss of sovereignty is not acceptable to these newly-minted states, particularly given that many of “the have nots” have only begun to experience what that means now that they are no longer client states of either the Soviet Union or the United States. Furthermore, the requirement to equally implement the BTWC treaty prohibitions in Article I, as well as other articles in the convention, has had unintended consequences for “the have nots.”

When it comes to theory, Realism explains the existing power disparity in the states, states’ pursuit of equality, and the utilitarian use of regimes to seek economic power. Liberalism better explains weaker states’ use of international law to pursue equality, and their pursuit of economic power to ensure state survivability. Hegemonic Stability Theory, which links regime creation and maintenance to a dominant power, and thus, weakening regimes to a waning hegemony and a subsequent focus on economic stability and openness, better explains “the have nots’” contestation of the lack of equal enforcement of the BTWC norms. However, it does not account for the use of weakening regimes, e.g., the BTWC, by “the have nots.” Moreover, the Neorealist proposition that sovereignty is essentially pro forma due to “…unprecedented differentiation in underlying power capabilities between large and small states,” does not ultimately hold. Weak states have learned that cooperation, and here cooperative contestation to

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how BTWC norms important to them are being enforced, can utilize even weakening regimes as a strategy because it affords them a level of influence unavailable to them through dyadic interactions.532

Cooperative contestation of Article X of BTWC enforcement also challenges Neoliberal Institutionalism’s assumption that stronger states determine the rules of the game and dominate the weaker ones. While true that the “the haves” set the rules for the BTWC, “the have nots” have hijacked the rules and are using those rules against them. By forming an even larger, interest-based power bloc to cooperate in contestation of how the BTWC regime is being enforced, “the have nots” have reduced this domination by “the haves.” Co-opting International Organizations and Non-Governmental Organizations has enhanced “the have nots’” equality. Realism would have predicted the utilitarian approach to the cooperative behavior, but not to obtain economic results that would not likely be translated into military power by “the have nots.” “The haves” contestation against equal enforcement of the BTWC norms could be predicted by any of the theories. They are seeking or assume that others are seeking military power, they have had the power to control the development, institutionalization, implementation, and enforcement of the regime, and though the regime is weakening and focusing more on economic gains, “the haves” would still translate these gains into military power presumably.

Equity via Economics

Both “the haves” and “the have nots” are seeking parity in the impact of the BTWC on domestic economies, but have divergent perspectives on what that means. “The have nots” believe that failure to recognize all norms in the BTWC as equal and to enforce them equally has resulted in an inequitable impact of the BTWC on themselves. Specifically, “the have nots”

have concluded that failure to enforce Article X has resulted in unequal access to the cutting edge bioscience and biotechnology that would allow them to compete in the global market. “The have nots’” use of international regimes to obtain their interests via the WMD agreements has been markedly unsuccessful in the past. The rogue nuclear programs testify to that, especially India’s, Iran’s, and Pakistan’s – all of which have based their claims of pursuit of an independent nuclear program largely on “the haves”’ refusal to share nuclear science and technology. Witness global nuclear development history, which gives several examples of states pursuing their own nuclear programs instead of cooperating with other states to contest how the “right to science” norms in the nuclear agreements were enforced. The use of regimes to obtain science and technology at this point in history is novel, however. Even though Regime Theory provides the most fertile ground for understanding the prevalence of regimes – and norms – and the reasons states seek them, it is not clear that it would have predicted states’ leveraging regimes to obtain interests since Regime Theory also posits that changes in conditions may alter the strength of regimes. Regime theory would argue that states would leverage regimes to obtain interests if regimes were strengthening as an institution. However, WMD regimes are weakening. Thus, the curiosity is why weak states are using a weak regime to obtain their objectives.

Krasner elucidates, “Regimes that the hegemonic power initially creates to serve its own interests can be seized and restructured by other actors in the system.”\textsuperscript{533} This is the assumption that “the have nots” have been operating on since 1989 as they press their agenda of obtaining science and technology via leveraging the BTWC. With arguably only one functional and economically capable global hegemon after 1989, the influence of “the haves” began to wane as “the have nots” ramped up their contestation of the “the haves”’ control over which of the WMD norms are enforced across the agreements. By 1996-97, “the have nots” had consolidated their

\textsuperscript{533} Krasner, “Transforming International Regimes,” 138.
efforts more and stepped up their campaign to the point where the United States drafted Additional Protocols to the BTWC that “the have nots” believed would allow them access to bioscience and biotechnology. Though it would have been logical for the United States to continue to take up the promotion of those protocols again after 9/11 in the interest of international security, they chose not to for economic reasons. Today, though “the haves” continue to try to control scientific exchange at the state-to-state level, collaboration and cooperation at the academic and industry level globally increasingly functions as the way to transfer science and technology outside of the state’s purview for the most part. Years from now the scope of this collaboration may ultimately render such protocols obsolete since the information sought might likely already have been shared with “the have nots” without the enforcement of Article X of the BTWC.

In the interim, “the have nots” employ regimes – one tool that governments can utilize to manage “… interdependencies forged by science and technology.”534 More importantly, “by basically changing principles, norms, rules, and procedures that affect the movement of goods and factors in the world economy, the Third World can enhance not only its economic well-being but also its political control.”535 More specifically, Third World states are pursuing “economic growth, international political equality, influence in the international decision-making arena, autonomy, and independence, the preservation of territorial integrity from external invasion or internal fragmentation, the dissemination of new world views at the global levels, and the maintenance of regime stability.” 536 In the past, “the have nots” had been in a weaker position to demand equal enforcement of a regime. However, with the BTWC, “the have nots” have a much

stronger position and a clearer strategy for two reasons. One, they, too, see how advantageous a CWC-type implementation and enforcement would be to them if applied to biological science and biotechnology; and two, the numbers of “the have nots” has not only increased significantly and are cooperatively contesting current enforcement of the BTWC, but they have China, a P5 member but also part of NAM, to promote their cause.

Likewise, “the have” weight the importance of the norms in the BTWC and other WMD treaties with regard to their ability to achieve what they believe is the intent of the agreement, i.e., international security. Their priorities and interpretation of other norms in the BTWC, as mentioned in a previous chapter, center on the implementation and enforcement of disarmament and nonproliferation norms. “The have” also assume that possession of biological weapons or running programs that support research and development that might lead to such equals intent to use biological weapons. Furthermore, “the have” rely on their comparative advantage in the international market place to maintain their dominant position in the international power structure. Hence, they perceive their position in the international market place – and in the international power structure – threatened if “the have nots” attain equity via international law. Consequently, they assume that equitable implementation and enforcement of the BTWC especially would result in an inequitable impact on their economies and on their national security. As an example, the United States' bioscience and biotechnology sectors show the following revenue figures and growth since about 2004:\textsuperscript{537}


• The United States OTC pharmaceuticals market generated total revenues of $23.6 billion in 2008, representing a compound annual growth rate of 3.3% for the period 2004-2008.

• The US biotechnology market generated total revenues of $91.9 billion in 2008, representing a compound annual growth rate of 12.7% for the period 2004-2008.

• The US generics market generated total revenues of $105.4 billion in 2008, representing a compound annual growth rate of 10.4% for the period 2004-2008.

While given International Monetary economic Gross Domestic Product that amounts to approximately only 4% of the United States GDP, the growth rates, especially of the biotechnology market, tell the story. Similar growth in the same sectors in the select sixteen states would obviously have a much larger absolute impact, thus the motivation to seek access to advanced bioscience and biotechnology given the GDP numbers below:

Table 4: GDP in Current Prices in Billions of US Dollars, Select Countries

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<tbody>
<tr>
<td>China</td>
<td>3,382.45</td>
<td>4,327.45</td>
<td>4,757.74</td>
<td>5,263.33</td>
<td>5,843.57</td>
<td>6,524.23</td>
<td>7,287.76</td>
<td>8,283.35</td>
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<tr>
<td>Egypt</td>
<td>130.346</td>
<td>162.617</td>
<td>187.956</td>
<td>208.458</td>
<td>228.934</td>
<td>250.911</td>
<td>274.795</td>
<td>299.121</td>
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<tr>
<td>France</td>
<td>2,597.70</td>
<td>2,866.95</td>
<td>2,634.82</td>
<td>2,745.49</td>
<td>2,823.35</td>
<td>2,907.44</td>
<td>2,998.97</td>
<td>3,089.18</td>
</tr>
<tr>
<td>India</td>
<td>1,100.99</td>
<td>1,206.68</td>
<td>1,242.64</td>
<td>1,339.49</td>
<td>1,449.17</td>
<td>1,583.43</td>
<td>1,740.41</td>
<td>1,908.33</td>
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<td>Iran</td>
<td>285.932</td>
<td>335.233</td>
<td>331.757</td>
<td>358.878</td>
<td>382.976</td>
<td>403.811</td>
<td>427.594</td>
<td>454.918</td>
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<tr>
<td>Iraq</td>
<td>62.384</td>
<td>91.453</td>
<td>70.104</td>
<td>83.626</td>
<td>93.679</td>
<td>108.04</td>
<td>121.298</td>
<td>133.742</td>
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<tr>
<td>Israel</td>
<td>166.991</td>
<td>202.101</td>
<td>215.727</td>
<td>222.898</td>
<td>232.962</td>
<td>244.806</td>
<td>257.14</td>
<td>270.446</td>
</tr>
<tr>
<td>Japan</td>
<td>4,380.39</td>
<td>4,910.69</td>
<td>5,048.63</td>
<td>5,187.46</td>
<td>5,267.14</td>
<td>5,410.70</td>
<td>5,591.43</td>
<td>5,791.63</td>
</tr>
<tr>
<td>Korea</td>
<td>1,049.24</td>
<td>929.124</td>
<td>800.294</td>
<td>855.384</td>
<td>927.481</td>
<td>1,005.74</td>
<td>1,087.25</td>
<td>1,167.69</td>
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<tr>
<td>Libya</td>
<td>71.687</td>
<td>89.916</td>
<td>60.609</td>
<td>74.68</td>
<td>82.19</td>
<td>90.605</td>
<td>99.912</td>
<td>109.604</td>
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<td>Pakistan</td>
<td>143.203</td>
<td>164.557</td>
<td>166.513</td>
<td>178.723</td>
<td>184.151</td>
<td>194.27</td>
<td>205.926</td>
<td>219.322</td>
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<td>Russia</td>
<td>1,294.38</td>
<td>1,676.59</td>
<td>1,254.65</td>
<td>1,363.98</td>
<td>1,532.65</td>
<td>1,706.34</td>
<td>1,896.68</td>
<td>2,127.58</td>
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<td>Syria</td>
<td>40.556</td>
<td>55.024</td>
<td>54.352</td>
<td>61.289</td>
<td>67.716</td>
<td>74.323</td>
<td>81.836</td>
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<td>2,198.16</td>
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<td>2,611.27</td>
<td>2,758.80</td>
<td>2,919.12</td>
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<tr>
<td>United States</td>
<td>14,077.65</td>
<td>14,441.43</td>
<td>14,266.20</td>
<td>14,704.21</td>
<td>15,326.88</td>
<td>16,008.51</td>
<td>16,729.38</td>
<td>17,419.35</td>
</tr>
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</table>

Inequity Runs Upstream

Fresh in the minds of the United States and other Western States Parties to the BTWC, were, as Kelle argues, the realization of what implementation of the protocols might mean to their commercial industries. More interesting here, though, is that Kelle’s research on the BTWC shows that more notable US contestation of BTWC norms and NAM demand for compliance with Article X norms nearly coincides with the end of the Cold War, the development and implementation of the CBMs in 1991, the signing of the CWC in 1993, the opening of the CTBT for signature in 1996. While Kelle attributed US contestation to the rejection of the addition of declaration and verification norms to the Additional Protocols, the coincidence suggests that something more complex may be in play, especially given statements by other nation states after the collapse of the negotiations of the BTWC Protocols in July 2001. “The have nots,” while generally supportive of the protocols, were surely contemplative of how costly the implementation criteria embedded in the CWC had been to them, and therefore also had reason to contest the addition of protocols for declaration and verification. Nevertheless, “the have nots” stood to gain more from compulsory declaration and verification than the Western States Parties, especially if they could achieve the economic and scientific gains embodied in Article X. Thus, since 2001, a significantly stepped-up effort by “the have nots” to call out the contestation of “the haves” in order to achieve access to bioscience knowledge and biotechnology by cooperatively contesting how “the haves” were enforcing the Article X has been apparent.

The US position on the BTWC was clearly articulated by Ambassador Mahley in 2001:
The BTWC is primarily a counter-proliferation regime, the basic tenet of which is that member states “forswear biological weapons completely,” and that, “The United States does not view negotiations about a protocol to the BWC to be a discussion of trade access. It is a negotiation about national security and confidence in attempts to control and eliminate a particular weapon of mass destruction—biological weapons.” Moreover, Mahley went on to state that the United States recognized that export controls were “a lightning rod for disparate views of the underlying purpose of the negotiations themselves,” with country positions on competing issues and national positions attributing further to the stalling of the negotiations. Mahley maintained that the United States did not want to reveal details about its biodefense program to an international organization (for transparency) because such a revelation might provide a rogue state or terrorist with info on its vulnerability, and therefore weaken both US security as well as that of the countries that helped develop the biodefense program. However, this served as confirmation to those states contesting US contestation of Article V and Article X, as well as the addition of protocols explicit on declaration and transparency, that the United States was applying the BTWC without equanimity, that is, in a discriminatory manner. However, as Kelle surmised, and as Mahley alluded to, the real issue was the US comparative advantage in biotechnology. In his testimony Mahley stated,

The United States is the world’s leader in biotechnology. The cost of early research and development – including all the efforts that do not result in viable products – is enormous. Providing others with the means to avoid such sunk costs

\[540\] Ibid.
\[541\] Ibid.
or to obtain process information for unfair competition would endanger not only the industry, but the benefits that industry provides to the entire world. 542

Rather, he went on to say, the United States seeks “a balance that would achieve greater benefit in the non-proliferation and arms control objectives than costs to legitimate national security and commercial interests.” 543

The meaning of the US position was not lost on observers. Rissanen noted that in reiterating its rejection of the BTWC draft Additional Protocols and in proposing its own for endorsement by the Review Committee, “in the general estimation of delegates and observers, the statement illustrated the United States’ continued allergy to multilaterally negotiated legally-binding agreements.”544 Rissanen also said that Bolton’s stated reasons for the rejection of the negotiated protocols on 25 Jul 2001 were embedded in the US conviction that past arms control approaches would not work on current problems and further, would give proliferators a stamp of approval, and the United States would not enter into any agreement that would “allow rogue states or others to develop and deploy biological weapons.”545

More interesting and more applicable to the argument here is that Rissanen asserted that other states had privately told the United States that they had the same reservations despite their public criticism. She also contended that some countries had not fulfilled their commitments to the previous Conventions, so the likelihood that they would fulfill others was low as well.546

Taken together, Mahley’s and Bolton’s statements demonstrate that the United States not only likely contested the Additional Protocols for economic rather than security concerns, but that they were also selectively applying certain norms in the BTWC in a discriminatory way, and

542 Department of State Special Negotiator for Chemical & Biological Arms Control Donald A. Mahley, 14.
543 Ibid.
545 Ibid.
546 Ibid.
moreover, that they were not acting alone. What is not stated is that the United States would not have been able to hold this position on its own, especially with China siding with “the have nots” and as part of NAM. The United States and the rest of “the haves” had a lot at stake, but so did “the have nots.” Every party wanted a piece of the biotechnology pie and was using the BTWC to retain or gain what it felt was its rightful market share – by contesting Article X, or by contesting how it was being enforced – in a cooperative manner.

Equanimity via Equal Opportunity

Lastly, States are seeking to be treated without discrimination because they are legal equals, they have signed agreements that contain principles and norms of behavior regarding BW, and they have a role in international security as well as guarantees in the BTWC of opportunity to grow their knowledge and technology in order to benefit from it economically within the constraints of the BTWC. However, “the have nots” decry “the haves’” assessment that “the haves’” application of how they partner or share advanced scientific knowledge and technology per Article X norms lacks equanimity. That is, “the haves” apply the sharing of their advanced scientific knowledge and technology in a selective or discriminatory manner with hand-picked States Parties (and some non-States Parties) when according to the BTWC norms it should be shared with all States Parties. Furthermore, short of government or industrial espionage – or creative sharing arrangements which will be discussed later – without complete voluntary compliance with the CBMs and without verification norms, “the have nots” have few means available to them to know how complete or up-to-date the information they are getting via the CBMs is. Finally, some States Parties believe that the disarmament, declaration, and verification norms where they exist are applied without equanimity as well. “The haves” continue to partner on bioscience and biotechnology research and development selectively. They
also continue to comply selectively – or perhaps more fairly given their convictions of the intent of the BTWC objectives to achieve international and national security, in a priority and importance manner with the BTWC norms. “The have nots” have increased their contestation of the way “the haves” have and continue to implement the BTWC norms. They also continue to protest that lack of enforcement of the BTWC norms in an equitable manner.

“The haves” continue to assume that because they established the WMD agreements, and here specifically the BTWC, they continue to control how they are implemented and enforced. Consequently, the exceptions that “the haves” make with regard to whom they do or do not apply the BTWC norms continue to depend on their ability to impose their will on “the have nots.” Furthermore, the bifurcation in how “the haves” interpret WMD behavior indicates that they are not employing any single analytical framework consistently, but instead, appear to be interpreting state behavior on a case-by-case basis. If all WMD is created equal as indicated in the five principal WMD agreements, and if states were consistently applying a single theoretical framework to analyze state WMD behavior, “the haves” would be equally concerned about all states with WMD programs or with knowledge and technical capability that could lead to WMD. However, this has not been the case. Instead, “the haves” in particular appear to be interpreting state behavior on a case by case basis. Using whatever framework makes their argument work indicates that all have inadequacies, or that they have deliberately decided to apply different analytical frameworks to different states with the same behavior, i.e., the acquisition of WMD, in the interest of achieving some other objective. For example, states tend to rally against the pursuit of nuclear weapons by Iran or the DPRK, but reaction to Pakistan, Israel, and now India — all of whom have operationalized nuclear capability and four of which have suspected biological programs of some concern — has been muted or quelled. This results in a lack of
equanimity with regard to the application of norms which “the have nots” react to or reject. In contrast, “the have nots” interpret the WMD agreements, and especially the BTWC over which they have had more influence, as applying equally to all States Parties. Consequently, they have raised the bar of expectations with regard to the implementation and enforcement of the norms in the BTWC to a new level, especially since all states have bioscience and biotechnology programs.

Curiously, overall states’ assumptions about other states appear to have changed since 1989 as well, attenuating the lack of equanimity a bit if commercial joint venture and academic exchange data is examined. Given the rejection of the Additional Protocols by “the haves,” to some degree possession does not equal intent to use with regard to bioscience and biotechnology. Hence this may be one reason that there appears to be no pressing need to require declaration and verification protocols added to the BTWC. Indeed, the data indicates that States Parties – and non-States Parties for that matter – appear more concerned about BW terrorism than state-versus-state use of BW. How that posture will ultimately affect the course of the BTWC’s development is difficult to project given how quickly bioscience and biotechnology is being exported abroad without much equanimity. The only comparable situation is how the chemical industry and academic exchange of knowledge in chemistry has been managed.

At the end of the day, though, the point is that while states at the international relations and international agreement level continue to apply the BTWC without equanimity, industry and academia are less vigilant and selective, which may ultimately thwart “the haves”’ strategy for limiting the spread of bioscience and biotechnology. Interestingly, ameliorating the lack of equanimity in the global marketplace appears to have been the easiest go around for the States Parties (and non-States Parties) due to cooperative practices
in both academia and industry. While the study of that behavior is outside of the scope of this study, recent work\textsuperscript{547} demonstrates that there is significant and expanding cooperation on bioscience and biotechnology, especially in East Asia, that functions essentially as a way for “the have nots” to obtain equanimity regarding the opportunity to gain bioscience and biotechnology knowledge and exchange in order to profit economically from a rapidly expanding market sector.

Ironically, without improved declaration and verification protocols, and their stringent enforcement, this work-around is likely to continue and expand as a practice, with mixed commercial and international security issues emanating from it. On the commercial side, this industry to industry sharing will likely push companies to increase security of proprietary knowledge. In recent history this has meant shielding findings resulting from industry research and development and has resulted in less publishing in peer reviewed journals. It has also meant a suspected decrease in patent filings because most new knowledge and technology resemble intellectual property more than inventions, making it more difficult if not impossible to protect when it is exposed to public purview through the filing. On the international security side, it will move surveillance and security into the private sector as industry seeks to keep its new knowledge and technology out of the public space as well as away from terrorists. Both of these outcomes make cooperation more likely in the international private sector, but also make corporations more vulnerable to security breaches – and more responsible for the protection of knowledge and technology that might make biological agents and toxins both easier to weaponize and more deadly or debilitating.

Cooperation: Law is Not Only for Lawbreakers

While the general assumption of law is that it is for lawbreakers, “the have nots” have been consistent in their interpretation that law, especially WMD agreements, applies to the law abiding as well, and indeed that all norms are created equal in WMD agreements, as evidenced especially in the BTWC. “The have nots” point, in fact, appears to be that law is for law keepers since the BW lawbreakers – and other WMD lawbreakers for that matters – are exceptions rather than the rule, contrary to the assumptions of the WMD agreements and “the haves.” So, while “the haves” generally view law as a means to prevent States from perpetrating nefarious acts, “the have nots” also view law as a license to procure knowledge and technology. This essentially means that “the have nots” appear to be interpreting the letter of the law with regard to the BTWC in particular, which brings with it specific rights and guarantees that go beyond disarmament.

One of the outstanding questions was whether “the haves” or “the have nots” have been cooperating to contest the principles and norms in the BTWC. The answer is simply “yes.” States, regardless of whether they are “haves” or “have nots” obtain the benefits endowed by the norms in the BTWC via cooperation. The only significant difference is in the number of states it takes to make cooperation work. The data supports that states are decidedly formulating groups or cartels based on essentially a “have” or “have not” profile and pursuing their interests through that sort of cooperation. Furthermore, states are employing cooperation at the substate level – at the academic or industrial level – to obtain the knowledge and technology that the BTWC should afford them.

With regard to the utility of theory in predicting these outcomes, the story is mixed. Here states cooperate to leverage norms instrumentally, that is, to achieve their interests. However,
their interests with regard to the BTWC appear to be grossly economic rather than security-driven. While Realists might argue that states might be seeking economic gains to bolster their military power, Liberal theory, and especially Regime Theory explicates the role of norms in structuring the international environment and in facilitating international transactions, whether it be war (per Realist assumptions) or economic transactions (per Liberal assumptions). Constructivism enriches the explanation of the role of norms in international relations by tying them more closely to conditions in the international environment, including war and economy, and explaining how continual changes in these conditions impact changes in norms, and vice versa. Consequently, utilizing a single theory to explain the contestation of norms, or how they have been implemented or enforced in the case of the BTWC or other WMD agreements, does not appear to be an adequate approach.

Thus, while each theory might describe, explain, or predict various discrete components of this puzzle, none alone completely describes, explains, or predicts why states contest the BTWC norms or contest derisory implementation or enforcement or those norms. The same could be said for the success of theory in describing, explaining, or predicting cooperation. Again, States Parties appear to be utilizing cooperation instrumentally as Realists would predict, but again, the reasons for that cooperation appear to be purely economic, so Liberalism might be more explanatory. Furthermore, if cooperation is more economically driven, states are likely to seek rules to govern or facilitate transactions per Regime Theory, and are likely to seek to adjust those norms as conditions in the international environment change.

**How the West Was Won**

The curious notional convergence between the economic interests of “the haves” and “the have nots” has pushed them to implement the same cooperative contestation strategy, even if the
tactics are different. Interesting in all of this seems to be “the have’s”’ realization that the cost of being Party to a WMD agreement involves not only disarmament but compliance with knowledge and technology sharing norms – something that “the have nots” already seemed aware of since they have long incurred costs to comply with disarmament norms of other WMD agreements but benefitted little from compliance with Article X type norms across WMD agreements. The consequence of this contestation has ensured, for the moment, that the BTWC will not develop further until this impasse over whether all of the norms in the BTWC are created equal is settled. In the meantime, states will continue to execute an end run to obtain knowledge and technology, largely through academic and commercial knowledge and technology exchange. While this may not bring “the have nots” completely up to speed, the concurrent training of many of the world’s bioscience and biotechnology experts in the West will certainly speed this process up to the point where the BTWC may become irrelevant for national security purposes. Beyond that, the implications for international relations, international law, and international agreements might be significant. Consequently understanding the potential fallout of these two types of contestation is critical to projecting how this state behavior might impact each since the theories outlined here do not do an adequate job.

**Contestation and the Future of International Relations, International Law, and International Security Agreements**

The contestation of norms is problematic for international relations, international law, and the future of international agreements unless policy makers are aware of contestation strategies and possible impacts. While states have added to those impacts by shifting more concern toward the terrorist use of WMD in addition to environmental and economic difficulties which are now a reality, understanding the potential impacts of the contestation of the BTWC
norms by “the haves” and the contestation of their implementation and enforcement by “the have nots” on international relations, international law, and the future of international agreements, specifically WMD agreements, is important because whether signatories or not, such norms have an impact on the entire community, including persistent objectors. A pronounced bifurcation in how this particular set of norms, and the cooperative contestation of these norms or how they have been enforced, points to a critical need to assess the potential impact of cooperative contestation on international relations, international law, and the use of international agreements to shape state behavior.

**Impact on International Relations**

To some degree, all states party to international agreements believe that collective security, and therefore cooperation at some level, increases national security or, in the case of the BTWC and other WMD agreements, reduces proliferation even though, as pointed out above, that is not necessarily the reality. However, the uneven implementation and enforcement of the BTWC norms and similar norms in other WMD agreements might have an impact on international relations. A reluctance or failure to ensure the equality, equity, and equanimity of States Parties to the BTWC might increase contestation to the BTWC or to the way in which it is being implemented or enforced, resulting in several unintended consequences that impact international relations overall. First, successful contestation of the BTWC norms by “the haves” might encourage them to continue their strategy of intransigence that gives rise to perceptions (or the reality of) inequality, inequity, and the lack of equanimity for “the have nots,” who believe they are afforded the non-disarmament norms of the BTWC and other WMD agreements.

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Second, unsuccessful contestation by “the have nots” regarding how the non-disarmament norms of the BTWC and other agreements are being implemented or enforced might lead to the alienation and solidification of “the have nots” into a block large enough to impede the development, ratification, implementation, or enforcement of future security agreements. Both of these scenarios could reduce trust within the international arena, exacerbating the very problems that “the haves” seek to address through the BTWC and other WMD agreements.

Impact on International Law

First, the contestation of the norms in international agreements can undermine the authority of the agreement, and by extension, if done often enough, the authority of international law. In the current international environment, the sort of contestation that “the haves” have indulged in with regard to the non-disarmament norms in the BTWC may tacitly nullify the disarmament norms if “the have nots” decide to contest this behavior by vacating the clauses. Normally States Parties would have to withdraw from the agreement, but actions as States Parties, as seen in this study, can have a similar effect. The question would then become at what point the agreement would be totally nullified. Thus, states party to agreements should be aware that contestation of any norm may have a domino effect on the viability of the entire agreement or entire category of agreements. To some extent, this is already evident with regard to the BTWC, and palpable across the nuclear agreements. Likewise, contestation by “the have nots” regarding how the BTWC is being implemented and enforced could have a similar effect if “the haves” were provoked by their continuing hammering on the issue, and slip deeper into intransigence.

Second, without standards for interpretation or terms of reference that supersede intercultural boundaries, the divergent interpretations of norms will continue to plague the
understanding of international agreements, and complicate their implementation. These divergent interpretations ultimately bring the meaning of the term “norm” into question as well as its ability to act as a standard for state behavior or a tool to shape behavior. Bozeman has argued “that Western ideals of international law can never create more than a false sense of world unity” since the concept of law varies so widely across cultures. Extended, this reasoning may imply that norms may not be as universal as imagined, or hoped, in spite of appearances to the contrary, and may also imply that norms may not be as effective as Liberal and Regime Theorists imagine in structuring the international environment.

Third, “multilateral efforts to harmonize national legislation have always proved difficult to achieve, perhaps most noticeably with respect to WMD treaty implementing legislation,” even though there is an increasingly visible need to harmonize national law on treaty implementation. A number of factors, including the actual codification of norms that has been shown here states can utilize as a map to go around an agreement (e.g., A.Q. Khan) comprises only one roadblock to implementation. Other roadblocks include the cost of implementation to the state or intransigence on the part of the state. With no way to direct states to implement international law equally decidedly weakens the impact of international law. But in a world of sovereign states, this is a cost that, while it must be borne by the international community, the international community should also account for when assessing the success of international agreements.

549 Henkin et al., 9.
551 Ibid.
Impact on International Agreements

If “the have nots” succeed in holding “the haves” to explicit norms, this may translate into power that actually shapes the power structure instead of deriving from it. If this is what is actually happening with the BTWC it may be a harbinger of the future of the CTBT or other international security agreements. First, states may be more cautious in including norms that ensure “the have nots” access to advanced science and technology. This might have a residual impact on Realist theory as well since it might indicate that norms shape state decisions or that non-disarmament norms trump security norms, which Realism rejects. Given that the five WMD agreements were drafted largely in the Cold War era and under Realist assumptions regarding state power, this might be a serious blow to Realism. The triumph of norms could also increase the value of international agreements for “the have nots” and encourage their use to achieve their objectives or absolute gains. This might also provide a lesson to “the haves” on how to effectively use Liberal tools – norms, institutions, and cooperation – to achieve relative military gains. Ironically, this instrumental use of norms would reinforce Realist assumptions, bringing the theory full circle.

While “the haves” have dominated the content and implementation of international security agreements to date, especially the WMD agreements, it does not appear to be a given that they continue to do so. What will be interesting to watch is whether “the haves’” contestation of Article X in particular of the BTWC constitutes the beginning of the end for the WMD series of agreements. Already in the BTWC it is apparent that no progress will be made until the stalemate over Article X can be broken. In an age where biodefense should be an increasing concern for states, the only agreement to date, which prohibits states’ use of pathogens and toxins against other states, remains at less than 2,500 words. It appears that “the
have nots” have made and intend to hold to their argument that all of the norms in the BTWC need to be implemented with equal rigor if the UN expects the agreement to be viable. “The haves’” practice of seeking security gains while ignoring the promise of knowledge and technology gains to “the have nots” in exchange for compliance with Article I of the BTWC has now set the stage for other opportunities to press home the same point on other WMD agreements, as shown in the evidence presented.

Paradigms Aweigh

Recall that an earlier proposition was that the WMD norms, including the BTWC norms, were created when the international relations theory of Realism dominated. So one question here would be whether Realism adequately describes, explains, and predicts state contestation of the BTWC norms or state contestation of how those norms are prioritized, implemented, and enforced. Realism would predict that states are the primary unit of analysis in the international system and are unitary actors. State rhetoric confirms this given its penchant for equality and independence. However, Realism would miss state concerns over a terrorist group being a viable unit of analysis at the international level and as a unitary actor. Lake sees terrorists’ strategy as one designed to shift the balance of power in order to move the basis of bargaining toward their ideals, which Realism cannot accommodate. Consequently, any paradigm used to examine WMD needs to be able to accommodate all of the units of analysis possible in play.

Realism would also generally dismiss the seeking of relative gains without seeking them to enhance military power, which appears to be the case with “the have nots” and the BTWC norms. Realism would identify instrumentalism as the reason behind both state contestation of

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the BTWC non-disarmament norms as well as state contestation regarding how those norms were being implemented or enforced. Ironically, however, Realists would seek to check cheating by states, which would mean the addition of protocols for declaration and confirmation, which “the haves” ultimately opposed.

Realists would also be concerned about relative gains and relative power relating to WMD. However, that sentiment is not reflected in any of the WMD agreements. If anything, states are as concerned about one lone nuke, negating the relative gains concerns Realists usually indulge. Moreover, with regard to WMD, both absolute and relative gains matter to states, as demonstrated here, although the agreements limit those gains to a select few. That is, the WMD agreements guarantee the P5 relative gains while severely restricting absolute gains of nuclear, chemical, and biological knowledge and technology of member states. The ineffectiveness of the agreements in producing even absolute gains has provoked the states to pursue a cooperative strategy, which will allow them to attain at least absolute gains with regard to biotechnology.

While Realists should be worried about relative numbers of WMD, instead they are concerned about both relative and absolute numbers of WMD. This indicates a bifurcation in how the Realist paradigm is being applied. On the one hand, Realists consider the relative gains of “the haves” while considering the absolute gains of “the have nots,” but then not even consistently (witness the cases of India and Pakistan versus the cases of Iran and the DPRK). Another axis seems to have been added to the Realist paradigm, and that is the judgment of the intent of the state in question. Add to that the layer of concern over terrorists accessing Pakistan’s nuclear arsenal, and the analysis becomes more complex. The question becomes: when does Realism use its “absolute gains” yardstick versus its “relative gains” yardstick, and when does transition from one to the other take place?
One big miss by Realism would have been what contestation looks like. But, to repeat Hurd, “compliance and non-compliance have been treated in this debate as mutually exclusive opposites, with compliance leading to stronger international rules and non-compliance undermining them.”554 Here that has not been shown to be the case. States Parties can be in compliance and still contest international agreements as well as how agreements are implemented or enforce. Analysts generally offer two answers as to why states comply with treaties. Realists would tender that “the treaty coincides with the states’ interests,” 555 and Constructivists would argue that, “states have internalized norms that suggest that they should comply even when the obligation runs counter to their interests.” 556 In the case of the BTWC, neither explanation of compliance explains why states would contest norms in WMD agreements. Hurd concludes that in separating rationalist incentives and cost-benefit utilitarianism from constructivist cultural and ideational forces, analysts hit a dead end for both empirical research and conceptual framing. Rather, they should be combined. This approach is especially useful in understanding the strategic construction and interpretation of international norms, states’ justification of their decisions under international rules, and understanding the problem of hypocrisy in applying – or not applying – international norms. 557 In this study, it has also been helpful to combine theories in order to understand contestation and cooperation, and how the two might connect.

In addition, the relationship between military technological power and cooperation does not necessarily follow Realist reasoning either. According to Powell, when military defensive

555 Ibid, 12.
556 Ibid.
557 Ibid, 5.
technology dominates the international security environment, cooperation is more likely.\textsuperscript{558} Here no relationship between defensive biological technology and cooperation has been demonstrated. Rather, as discussed in the section on equanimity, clamoring by “the have nots” for cooperation on bioscience and biotechnology for nonoffensive purposes and the support of their claim using the BTWC has fallen on “the haves’” deaf ears.

As concerns Liberalism, it would have assumed cooperation amongst states with regard to contestation, but Realism posits that Liberal institutionalism is less relevant to the security arena because the risks here are greater if cheating occurs.\textsuperscript{559} This supposes that regimes or norms have little or no effect on cheating, a position, which states reject through regular use of regimes. Also, in the Realist zero-sum world, Liberal institutionalism only works when relative gains do not matter or matter very little.\textsuperscript{560} “The haves” are less convinced that regimes have an impact on absolute gains, thus their inclination to contest regimes and their norms, which only impact relative gains of any kind. “The have nots” are convinced that enforcement of regimes would have a positive impact on absolute gains, thus they pursue them. That is, if states – here “the have nots” – are not concerned about gaining its fair share of a single pie because but instead only concerns itself with gaining any share of the pie, then institutions matter because they can ensure a share. Another dichotomy between “the haves” and “the have nots” is that “the haves” appear to assume that the bioscience and biotechnology pie has already been determined, while “the have nots” believe that they can make it grow. That is, international law can spread out gains.

\textsuperscript{559} Ibid, 19.
\textsuperscript{560} Ibid, 22.
Furthermore, even though it is difficult or impossible to distinguish between offensive and defensive weapons, states generally exhibit a disproportionate lack of concern with bioscience or biotechnology programs, and more concern for protecting their market share in both. While Realism rejects relative economic gains unrelated to military gains as a reason for state behavior, the most salient counter case is China, which has not had military gains proportionate to its economic gains over the past two decades. More remarkable and counterintuitive for Realism is that while “the haves” retain the Realist reflex that possession generally equals intent with regard to WMD, this does not appear to be the case with bioscience and biotechnology. The findings actually insinuate that contrary to Realist expectations, security concerns are not as high a priority for States as Realists would believe.

**Recommendations**

Given the changes since the end of the Cold War, the question is whether a theory deriving from conditions and assumptions prominent in the era – Realism – continues to be a valid and reliable way to describe, explain, or predict state behavior with regard to those agreements. Of equal concern is whether WMD agreements based on the assumptions of that theory can continue to expose or shape state behavior given the contestation of their impact on the states. More useful would be a theory that addresses the reasons for the contestation of the equal recognition of BTWC norms by “the haves” and the uneven implementation and enforcement of those same norms by “the have nots.” Without directly tackling the issues of equality, equity, and equanimity from both the sides of “the haves” and “the have nots,” it appears certain that the BTWC will not advance, at least not fast enough to keep pace with the advancement of bioscience and biotechnology research and development. More importantly, given that a template for the content of WMD agreements, it is doubtful that the CTBT and
future security agreements with similar knowledge and technology sharing norms will be successfully ratified, implemented, or enforced unless the process and template can adjust to current international conditions and states’ assumptions about state behavior.

This study offers some insight into the reasons for the cooperative contestation of the non-disarmament norms in the BTWC and how states’ interpret and contest them in order to avoid their potential impacts. It also projects that contestation may be occurring with regard to similar norms in other WMD agreements. While this bodes particularly unfavorably for the development of future international security agreements, this study can be utilized to inform developers of such agreements of the pitfalls of the inclusion of certain norms, their association with various kinds of State Party contestation, and how cooperation in contestation might impact such agreements’ ability to shape state behavior. A detailed follow-on study of the information “the haves” are supplying through the CBMs compared to the value that “the have nots” perceive from this information would be helpful in understanding “the have nots’” contestation of the implementation and enforcement of the Article X norms in particular. Also useful would be a projection of how this sharing of information would impact “the haves’” economies. Finally, moving toward a more comprehensive and integrated use of international relations theories would enrich analysts’ ability to understand how states transition from pre-Cold War international agreements to the post 9/11 era, and to use integrated theory to reshape the basis for international security agreements.
Appendix A – Permission to Cite: Alexander Kelle

Dear Renee Ditter,

Thank you very much for your interest in my submission to the 2006 and 2006 ISA conventions. As the latter one is a revised and updated version of the former I attach only this for your information. No problem with citing from the manuscript, as long as it is made clear that this is still in draft form.

If you don’t mind (or aren’t prevented by some rules or procedures) I would appreciate receiving a copy of your dissertation.

Regards,

A. Kelle

Dr. Alexander Kelle
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web: http://people.bath.ac.uk/k10/index.htm

Quoting Renee Ditter: <renee.ditter@onestreet.co.uk>
Dear René,

Thank you for your request. A revised version of this paper has now been published (pdf attached)


If the older paper contains something that is not in the published article but that you still would like to quote, you have in permission to do so.

With kind regards and the best wishes for your defense and further career,

Guido Schwellnus

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-----Original Message-----
From: Rene Dittmer [mailto:rene.dittmer@statonv.co.uk]
Sent: Sun, 4/11/2010 90:45
To: Schwellnus, Guido
Subject: Request for Permission to Quote

Dr. Schwellnus
Appendix C – Permission to Cite: Il Hyun Cho

Dear Renae,

Thanks for your message and your interest in my paper. You are welcome to cite my work. By the way, what’s your dissertation on? Which part of the paper are you quoting for your dissertation? At any rate, best of luck with your upcoming defense!

All the best,
Il Hyun

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---- "Renae Dimmer" <renae.dimmer@stratcon.us> wrote: ----

To: <ichoice@csuohio.edu>
From: "Renae Dimmer" <renae.dimmer@stratcon.us>
Date: 04/12/2010 06:43PM
Subject: Request for Permission to Quote

Dr. Cho-

My name is Renae Dimmer and I am a PhD candidate at Georgetown University in Washington, DC. I will defend my dissertation on 30 April 2010.

In the course of my investigation I ran across a paper that you presented at APSA in September 2009 entitled “A Global Refugee in the Neighborhood: The North Korean Nuclear Challenge and Norm Contestation in East Asia.”

With your permission, I would like written permission to quote from this paper in my dissertation.

Thank you in advance for any consideration you might give this request. If you have further questions, please contact me via one of the means below my name.

Renae D. Dimmer
Georgetown University
Appendix D – Permission to Cite: Matthew Hoffman

Dear Renee,

Thanks for your note – you can certainly cite the paper. Good luck with your defense.

Cheers,
Matt

> Prof. Hoffman -
> >
> > My name is Renee Diller and I am preparing to defend my dissertation on 3Q
> > April 20 at Georgetown University in Washington, DC. In the course of my
> > research I ran across a paper that you had presented at ISA in March
> > 2007 entitled, "My Norm is Better Than Your Norm." I would like your
> > written permission (email) to quote from that document in my dissertation.
> > >
> > Best regards,
> > Renee
> > >
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> > >
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— Report prepared by the Chairman on the Synthesis of Considerations, Lessons, Perspectives, Recommendations, Conclusions and Proposals Drawn from the Presentations,


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