

Transnational Networks of Poly-Centralized Governance in Nuclear Arms Control:
Shift from State-Centered to Transnational Discourse and Gaze

Tomonori Teraoka
School of International Affairs at the Pennsylvania State University
Master of International Affairs Candidate

Table of Contents

ABSTRACT.....	3
INTRODUCTION	4
 PART I	
FROM NONPROLIFERATION TO DISARMAMENT.....	6
RHETORICAL SITUATION	6
THE “ATOMS FOR PEACE”	7
OBAMA’S PRAGUE SPEECH.....	10
POWER ANALYSIS.....	13
CURRENT DISCOURSES OF NUCLEAR ARMS CONTROL	16
 PART II	
STATE-CENTERED GAZE AND DISCOURSE	19
TRANSNATIONAL GAZE AND DISCOURSE: EVOLUTION OF NUCLEAR POWER23	
NON-STATE CLANDESTINE NETWORKS: TERRORIST AND NUCLEAR TRAFFICKING	23
<i>Terrorist Networks</i>	24
<i>Nuclear Trafficking Networks</i>	28
<i>Terrorist Networks and Nuclear Trafficking Networks</i>	31
TRANSGOVERNMENTAL NETWORKS	33
GLOBAL NUCLEAR ENERGY NETWORKS: NUCLEAR RENAISSANCE OR NOT?	35
GLOBAL JUDICIAL NETWORKS: ICJ ADVISORY OPINION WITH REGARD TO NUCLEAR WEAPONS	39
OTHER NETWORKS	45
<i>Global Zero As Transnational Advocacy Networks</i>	45
<i>NPO networks</i>	48
 PART III	
TRANSNATIONAL NETWORKS OF POLY-CENTRALIZED GOVERNANCE IN NUCLEAR ARMS CONTROL.....	50
CONCLUSION: RECESSION OF STATE SOVEREIGNTY AND THE FUTURE OF NUCLEAR DISARMAMENT.....	54

Abstract

This paper aims at creating a new discourse of global nuclear arms control based on *transnational networks of poly-centralized governance in nuclear arms control*. This discourse is only possible through what I call a transnational gaze as opposed to a state-centered gaze represented by both Eisenhower's "Atoms for Peace" and Obama's Prague speech. "Gaze," according to Jacques Lacan, is a process where the object makes the subject look. Although the dominant discourse of nuclear arms control has changed from nonproliferation to disarmament, by being caught by the state-centered gaze, disarmament governance is framed in the structure where an aggregation of states dominates all the nuclear activities including non-state actors. *Transnational Networks of Poly-Centralized Governance in Nuclear Arms Control* is consisted of what I call nuclear power, employing the concept of Foucault's power: nuclear powers consist of non-state clandestine, transgovernmental, global nuclear energy, global judicial, and other networks. Among these powers, states lose their status as primary actors in nuclear arms control. Rather than states dominant control over nuclear arms which state-centered gaze supports, the current global reality of nuclear arms control has created poly-centralized governance networks in which each nuclear power has its own autonomy and is functionally differentiated, yet profoundly intertwined with one another. Thus, in order to grasp the whole picture of nuclear power, a transnational gaze and discourse is necessary.

Introduction

“I think that what has kept the world safe from the bomb since 1945 has not been deterrence, in the sense of fear of specific weapons, so much as it’s been memory. The memory of what happened at Hiroshima.” (John Hersey, The Art of Fiction No. 92)

It has been 67 years since the first use of nuclear weapons, by the U.S. upon Japan. After World War II, the spread of nuclear weapons across the world, as well as the drastic increase of nuclear stockpiles has been one of the most important issues for the human race. Despite the various efforts to fight the issues surrounding nuclear weapons over the past half-century, there are still many nuclear weapons, enough to destroy the entire world several times.

However, through its cultivation in the Cold War framework, nuclear weapons are unique in a way that they function in a symbolic way rather than in actual material way which makes human attempts at abandoning the weapons frustrating. In other words, in order to achieve total abandonment of nuclear weapons, discourse of nuclear arms control must be directed in the right path.

This paper aims at creating a new discourse of global nuclear disarmament governances or what I call *transnational networks of poly-centralized governance in nuclear arms control*.” The current discourse on disarmament, including both favorable and unfavorable ones have been stimulated by the U.S. President Obama’s Prague speech, which showed a clear shift away from the non-proliferation discourse, whose discursive framework can also be seen in the U.S. President Eisenhower’s “Atoms for Peace” speech. Although it is very favorable for the world to attempt serious nuclear disarmament, the current discourse of disarmament reflected by Obama’s speech seems to dismiss the dynamics of global nuclear realities regardless of its intention. Therefore, the primary question in this paper are: 1) of what do the dynamics of global nuclear realities consist; 2) how ought we consider these realities and create new ways of discourse of

them, while most have been dismissed so far. As evidence for the current dominant discourse, this paper starts to examine both Eisenhower's "Atoms for Peace" speech and Obama's Prague speech, which are the explicit examples of traditional discourse in nuclear arms control.

From Nonproliferation to Disarmament

Rhetorical Situation

Both Eisenhower's "Atoms for Peace" and Obama's Prague speech are very similar in the way they responded to the urgent demand to avoid any nuclear-related disasters. In *The Rhetorical Situation*, Lloyd F. Bitzer claims, "rhetorical discourse comes into existence as a response to situation, in the same sense that an answer comes into existence in response to a question, or a solution in response to a problem"¹ At the time of "Atoms for Peace," the tension between the U.S. and the Soviet Union in the Cold War was reaching its zenith, which was caused by the Soviet Union's success in testing hydrogen bombs a few months preceding the speech. Further proliferation of nuclear weapons, which would eventually lead to nuclear war, was the fear of the people. At the time of Obama, gradual realization of the possibility of nuclear terrorism was the situation that needed immediate response. This is explicitly expressed in the article, "A World Free of Nuclear Weapons" in *The Wall Street Journal* (2007), written by George P. Shults, William J. Perry, Henry A. Kissinger and Sam Nunn.² This article was impactful, as the authors are the U.S.'s high officials who had blind faith in the concept of nuclear deterrence. Thus, rhetorical exigence was placed on their speeches in the perfect timings and situations.

Through the urgent situations of nuclear weapons, Eisenhower and Obama's discourses can be marked as historical paradigm shifts from proliferation to non-proliferation and from nonproliferation to disarmament respectively. These shifts are represented through the concretization of their ideas in agencies and laws such as the Treaty on the Non-Proliferation of Nuclear Weapons (NPT) and the Nuclear Security Summit.

¹ Lloyd Bitzer, "The Rhetorical Situation", *Philosophy & Rhetoric* 1, no. 1 (January 1968): 5.

² George P. Shults, et al. "A World Free of Nuclear Weapons" *The Wall Street Journal*, January 4, 2007.

The “Atoms for Peace”

When it comes to nuclear weapons, particularly nuclear arms control, the word *non-proliferation* has been dominant and regarded as legitimate after World War II.³ In the well-known "Atoms for Peace" speech, addressed by the U.S. President Dwight D. Eisenhower at the UN General Assembly in New York City on December 8th, 1953, a bud of the concept “non-proliferation,” which was legally conceptualized by the NPT later in 1970, is clearly stated.

Eisenhower says,

the knowledge now possessed by several nations will eventually be shared by others - possibly all others....even against the most powerful defense, an aggressor in possession of the effective minimum number of atomic bombs for a surprise attack could probably place a sufficient number of his bombs on the chosen targets to cause hideous damage.⁴

He expressly shows his concern about proliferation, where other countries acquire nuclear weapons and the U.S.’s hegemonic power is overturned by those other states with the massively destructive nuclear weapons; even countries with much smaller-scale military power could supplant their superiors. Therefore, the ideal situation for the U.S. is that only the U.S. and its allies possess nuclear weapons and acquisition of these weapons by others is prevented, maintaining the U.S. and its allies’ hegemonic military power. However, the situation had changed: Eisenhower and U.S. political leaders realized that nuclear weapons were the true source of danger. Moreover, because of past proliferation and the invention of even more

³ US government and military officials have traditionally promoted “deterrent” value of nuclear weapons as instruments of national security since their advent in 1945. Bryan C. Taylor, “Register of the Repressed: Women's Voice and Body in the Nuclear Weapons Organization”. *The Quarterly Journal of Speech*, 79, no. 3 (1993): 267.

⁴ Ibid.

powerful weapons, the idea that only the U.S. and its closest allies could monopolize bombs is unrealistic.⁵

Therefore, unlike the “Chance for Peace” speech, which was addressed several months before the “Atoms for Peace” speech and “aimed at forcing the enemy to capitulate to an American vision of international security,”⁶ the goal of the “Atoms for Peace” speech was to prevent further proliferation of nuclear weapons with cooperation. However, there is a great dilemma in the position of the U.S: while it strongly wants to advocate nuclear non-proliferation and peaceful usage, it has no intention of disarmament by its own initiative. This dilemma is also reflected in that, despite the rhetorical expression of the U.S. as the light side, it also cannot escape from being placed on the dark side, or “dark chamber of horrors”⁷ since the U.S., like the Soviet Union, has the ability to prevail in a nuclear war. Eisenhower implicitly admits this ambiguous position of the U.S. by saying, “against the dark background of the atomic bomb, the United States does not wish merely to present strength, but also the desire and the hope for peace.”⁸

Solving the nuclear dilemma is expressed as the fundamental hope and the primary purpose of the speech. Therefore “[e]ven the smallest gesture of cooperation between the superpowers could be viewed as a symbolic fulfillment of eschatological hopes for peace.”⁹ The speech attempts to stress that nuclear strength and danger are no longer conflicting, therefore, serving as unifying factors rather than divisive ones. Hence, danger is not posted by Communism but by the nuclear weapons. According to the speech, this is why the two superpowers must join

⁵ A few months before the speech, On August 12, 1953, the Soviet Union succeeded in testing its first fusion-based device on a tower in central Siberia.

⁶ Robert L. Ivie, "Dwight D. Eisenhower's 'Chance for Peace': Quest or Crusade?," *Rhetoric & Public Affairs*, 1, no. 2 (1998): 227.

⁷ “Atoms for Peace.”

⁸ “Atoms for Peace.”

⁹ Ira Chernus, *Eisenhower's Atoms for Peace*, (College Station : Texas A&M University Press, 2002), 104.

together in order to combat the threat of nuclear weapons, which would lead “all peoples of all nations” to the peace and bright future.

Besides the hope for peace, stability is one of the most important concepts in the speech.¹⁰ Stability requires the Soviet Union to be a negotiating partner and does not demand its destruction or unconditional surrender. In other words, “a static rational balance of global forces”¹¹ and “endless apocalypse management”¹² is favored. Both the U.S. and the Soviet Union would be kept in check by the other’s equal power. This crystallizes the idea to preserve world safely by maintaining the status quo.¹³ In his diary, Eisenhower states the intention of the speech was to tell the world about the U.S.’s immense nuclear strength, but in order to make the speech “an argument for peaceful negotiation rather than to present it in an atmosphere of turbulence, defiance, and threat.”¹⁴

In order to achieve Eisenhower’s goal, the discourse of the speech aims to transform this dilemma into a more positive perspective with future hope. Medhurst assesses that Eisenhower used this language to address multiple audiences for diverse purposes while, at the same time, maintaining that the audience was one and the purpose straightforward.¹⁵ The speech states, “the United States knows that if the fearful trend of atomic military build up can be reversed, the greatest of the destructive forces can be developed into a great boon, for the benefit of all mankind.”¹⁶ The positive point is the peaceful usage of nuclear technology, which would be available to all the people and the negative one was danger caused by nuclear weapons and the

¹⁰ Ibid., 107.

¹¹ Ibid., 121.

¹² Ibid.

¹³ Ibid., 107

¹⁴ Robert H. Ferrell, *THE EISENHOWER DIARIES*, (New York: W.W.NORTON & COMPANY, 1981), 62.

¹⁵ Martin J. Medhurst, "Eisenhower's "Atoms for Peace" Speech: A Case Study in the Strategic Use of Language," *Cold War RHETORIC: Strategy, Metaphor, and Ideology*, ed. Martin J. Medhurst et al. (East Lansing: Michigan State University Press, 1997), 48.

¹⁶ “Atoms for Peace.”

existence of nuclear weapons. Thus the speech suggests “a mechanism for converting the means of war into instruments of peace.”¹⁷ In other words, by transforming the nuclear dilemma into a unified solution with the positive perspective of nuclear technology, Eisenhower successfully maintains the framework of the Cold War, or stability of power balance and most importantly advocates the “spread of nuclear technology as a nonproliferation tool.”¹⁸

Both the stability of power balance through nuclear weapons, constructed through the Cold War framework, and the guarantee of equal access to peaceful nuclear technology were later institutionalized as the International Atomic Agency (IAEA) and legally conceptualized in the NPT treaty. These, when combined together, function as the basis of non-proliferation discourse and structure. For these reasons, the “Atom for Peace” speech made a large contribution to the creation of non-proliferation as a legitimate language, which has dominated the field of international politics. Needless to say, in this global situation, where the phenomenon of globalization was not happening, the concept of proliferation was only framed within a collection of states.

Obama’s Prague Speech

The dominant language of non-proliferation has turned into disarmament since Obama’s Prague Speech.¹⁹ On April 5th, 2009, in Prague, the U.S. President Barack Obama strongly appealed for “a world without nuclear weapons.”²⁰ The remarkable aspect of this speech is that

¹⁷ Medhurst, Eisenhower’s “Atoms for Peace” Speech, 43.

¹⁸ Leonard Weiss, “ATOMS FOR PEACE AND NUCLEAR PROLIFERATION,” *Atoms for Peace: An Analysis After Thirty Years*, ed. Joseph F. Pilat, Robert E. Pendley, and Charles K. Ebinger (Boulder: Westview Press, 1985), 131.

¹⁹ Reagan’s expression of nuclear disarmament was not intended total disarmament at global level. And the language of non-proliferation still has been dominant since then. See Lawrence S. Wittner, “Reagan and Nuclear Disarmament: How the Nuclear Freeze movement forced Reagan to make progress on arms control,” *Boston Review*, <http://bostonreview.net/BR25.2/wittner.html#13>.

²⁰ “Obama Prague Speech On Nuclear Weapons: FULL TEXT.” *The Huffington Post*, May 25, 2011. http://www.huffingtonpost.com/2009/04/05/obama-prague-speech-on-nu_n_183219.html. (Accessed November 26, 2012).

while most former presidents of the U.S. claimed their visions of nuclear weapons towards world leaders at international summits or at the United Nations, Obama's speech was addressed to the general public.²¹

Before diving into the issues of nuclear weapons, he mentions that he, an African American, became the President of the U.S., the Czech Republic became an NATO member, and a U.S. President is delivering a speech in Czech and highlighting the point that "we share this common history." Zhang claims that "[b]y paralleling three significant historical facts that are closely related to both the rhetor and the audience...President Obama attempted to persuade the audience to engage in inductive reasoning."²² Therefore, he makes his claim of a world without nuclear weapons credible by emphasizing the three historical events that were regarded to be impossible but later became true.

Then, Obama speaks about issues of global economy, climate change and energy where he stresses the need for universal cooperation and unification towards difficult issues. He also highlights the character of shared values, which most strongly unites all people, and claims, "we must strengthen our cooperation with one another, and with other nations and institutions around the world, to confront dangers that recognize no borders."²³

At the same time, he emphasizes the leading role of the U.S. in global issues. By citing the Velvet Revolution, he stresses the important role of moral leadership. Then, by applying this role to the U.S., he states, "I pledge to you that in this global effort, the United States is now ready to lead."²⁴

²¹ Juyan Zhang, "Exploring rhetoric of public diplomacy in the mixed-motive situation: Using the case of President Obama's 'nuclear-free world' speech in Prague," *Place Branding and Public Diplomacy*, 6, no. 4 (2010): 290.

²² *Ibid.*, 297.

²³ Obama Prague Speech.

²⁴ *Ibid.*

After placing great emphasis on the terms “common,” “cooperation,” and “leading role,” Obama finally starts to talk about nuclear weapons. First, he claims the symbolic change of nuclear weapons since the Cold War and increasing danger of nuclear terrorism. Facing this growing danger, he admits the failure of the conventional non-proliferation regime. Then, he suggests a new framework for fighting against this new danger of nuclear terrorism.

The core of Obama’s Prague speech is “[ensuring] that terrorists never acquire a nuclear weapon. This is the most immediate and extreme threat to global security.”²⁵ Before saying this, he mentions the issues in North Korea and Iran and stresses the importance of mutual dialogues. This change of contexts from “rogue” states to non-state entities represents the world structural change of the issue of nuclear weapons. Specifically, it represents the idea that the U.S.’s major concern was that through “rogue” states weapon-grade nuclear materials will be in the hands of terrorist groups.

In the latter section addressing nuclear disarmament, he often emphasizes the terms he employed in the former parts of his speech: leadership of the U.S., cooperation, and common values.²⁶

While he emphasized universal cooperation, shared values, and the power of ideas, the speech attempted to justify the continued possession of nuclear arsenals by guaranteeing allies’ security. However, by employing all the keywords he was successful in producing persuasive

²⁵ Ibid.

²⁶ Leadership: “the United States has a moral responsibility to act. We cannot succeed in this endeavor alone, but we can lead it, we can start it;”

Cooperation: “We must confront it not by splitting apart but by standing together as free nations, as free people.”

Common Values: “our global safety, our security, our society, our economy, to our ultimate survival.”

arguments that the issues he presented should be shared by all of the people in the world and that the speech was not self-serving advocacy.²⁷

Eventually, his plan for gradual disarmament and global security of nuclear materials was crystallized in the same way as the NPT Review Conference, the conclusion of a new Strategic Arms Reduction Treaty with Russia, and the the Nuclear Security Summit.

Power Analysis

In comparing the two speeches (i.e., “Atoms for Peace” and the Prague speech), it can be said that they share the notion of power. For Eisenhower and Obama, power is exercised through law enforcement or through coercive power. For Eisenhower, power was reflected in military power, particularly nuclear weapons. For Obama, this notion of power was expressed as, “[r]ules must be binding. Violations must be punished”²⁸ and his notion that a collection of states can manage nuclear security over terrorist networks through regulations. Their entire notion of power is something that they can control and forcefully exercise from the top to the bottom. However, this notion of power will limit our perspectives of global nuclear dynamics.

Foucault provides a new way of looking at power. In his *History of Sexuality*, he elaborates on the analysis of power which is opposed to the traditional Western concept of centralized power that is exercised to dominate a subject and what he calls, “juridico-discursive”²⁹ power. The “juridico-discursive” power, or sovereign-power, has several features. First, one element is *the negative relation*, which is that power creates negation, exclusion, and

²⁷ Zhang, “Exploring rhetoric,” 295.

²⁸ Obama, Prague Speech.

²⁹ Michel Foucault, *The History of Sexuality Volume I: An Introduction*, (New York: Vintage Books, 1990), 92-93. See also Michel Foucault, “*SOCIETY MUST BE DEFENDED*,” (New York: Picador, 2003), 265-72.

lack of relations between the dominant and dominated.³⁰ Another is *the insistence of the rule*, which is that power acts by the rule stipulated.³¹ The third feature is *the cycle of prohibition*, which is that “power employs nothing more than a law of prohibition.”³² Finally, the fourth is *the uniformity of the apparatus*, which is that power is exercised “from top to bottom [and] it acts in a uniform and comprehensive manner.”³³ Therefore, in this form, there is “a legislative power on one side and an obedient subject on the other.”³⁴ This “juridico-discursive” power represents the traditional notion of sovereignty: top-down enforcement power through law or even coercive force. Foucault, however, suggests sovereign-power cannot capture the entire impact of power. For him,

[b]y power, I do not mean, either, a mode of subjugation which, in contrast to violence, has the form of the rule...power must be understood in the first instance as the multiplicity of force relations immanent in the sphere in which they operate and which constitute their own organization...power is not an institution, and not a structure.³⁵

There are five features of power as opposed to sovereign-power. First, power is not “something that is acquired, seized, or shared, something that one holds on to or allows to slip away.”³⁶ Second, power is not applied externally to relationships of knowledge or to others. Power has a directly productive role inside relationships and is “not in [a] superstructural position.”³⁷ Third, power is not imposed from the top but generated from the bottom and there is no distinction

³⁰ Ibid., 83.

³¹ Ibid., 84.

³² Ibid.

³³ Ibid., 84-5.

³⁴ Ibid., 85.

³⁵ Ibid., 92-3.

³⁶ Ibid., 94.

³⁷ Ibid.

between people who rule and who are ruled.³⁸ Rather, power relationships emerge at all levels of society. Fourth, while the object of power is discernable, there is no one person who devises and controls it.³⁹ Fifth, resistance is incorporated in the whole system of power.⁴⁰

Foucault's analysis of power shows that power should not be examined in a single unilateral relation. Rather, it should be examined more closely through the diverse and multiple relations that exist everywhere. Power, put simply, has to be analyzed as something to regulate actors' behaviors without top-down force.

By following Foucault's concept of power, it is clear that the notion of power employed by both Eisenhower and Obama cannot grasp the global nuclear reality since their discourses embrace the very notion of power-sovereignty. However, the way Obama attempted to manage nuclear arms control was by far problematic in comparison to Eisenhower's approach because Eisenhower's advocacy for non-proliferation among other states was formed in the Cold War framework in which states are the only primary actors in nuclear related activities. However, the current situation of the global nuclear situation is remarkably different. Under the influence of globalization, which is usually said to have initiated in the 1980's, states are no longer primary actors in global politics, particularly in nuclear arms control.⁴¹ Therefore, it can be said that Obama's discourse was still narrowed by the very traditional state-centered gaze and discourse. "Gaze," according to Jacques Lacan, is a process where the object makes the subject look. Žižek explains, "the gaze marks the point in the object...from which the subject viewing it is already

³⁸ Ibid.

³⁹ Ibid., 94-5.

⁴⁰ Ibid., 95-6.

⁴¹ However, the starting point of phenomenon of globalization vary from late 1980s to mid 200s. See Andrew Jones, *GLOBALIZATION: KEY THINKERS*, (Cambridge: Policy Press, 2010), 10.

gazed at, i.e., it is the object that is gazing at me.”⁴² Therefore, “the gaze entails that the human being's subjectivity is determined through a gaze which places the subject under observation, causing the subject to experience themselves as an object which is seen.”⁴³ By being caught by this gaze, Obama’s disarmament discourse was framed in the structure where a collection of states control all of the nuclear activities including non-state actors through enforcement of law and coercive power. Consequently, with this gaze, discourse of nuclear arms control revolves around states. Hence, states with sovereign power are only primary actors in creating world nuclear realities. In other words, on the global scale, in power-sovereign discourse, power must be expressly embraced in a single source, which is created mainly by the aggregation of states. Positivism in international law usually employs this power-sovereign framework and claims a formal legal document generated from a collection of states has only legitimate binding effects.⁴⁴ Obama’s discourse on states-versus-transnational non-state actors clearly emphasized this gaze and desire to mold all of the nuclear problems into a state-centered structure, making nuclear terrorism a *manageable risk*. Moreover, continued possession of nuclear weapons reflects a state-centered gaze in which nuclear deterrence is a primary concern, which his discourse successfully dealt with.

Current Discourses of Nuclear Arms Control

The current discourses of nuclear arms control have evolved around nuclear disarmament much greater than before, whether or not these discourses support disarmament. However, as elaborated above, their discourses are mostly confined to a state-centered gaze and discourse.

⁴² Slavoj Žižek, *Looking Awry: An Introduction to Jacques Lacan through Popular Culture*, (Cambridge: The Massachusetts Institute of Technology Press, 1991), 125.

⁴³ Lacan, Jacques. "The Split between the Eye and the Gaze," (1964). In *The Four Fundamental Concepts of Psychoanalysis*. Trans. Alan Sheridan. New York: Norton (1978). 67-78. annotation by Phil Lee (Theories of Media, Winter 2003).

⁴⁴ See José E Alvarez, *International Organizations As Law-makers*, (Oxford: Oxford University Press, 2005).

On the one hand, the proponents of disarmament applaud Obama's proposal and their discourses have shown relatively positive views for the future disarmament. Cortright, Vayrynen, and Rydell say the recent growing attention toward global nuclear disarmament is unprecedented.⁴⁵ Moreover Holloway praises Obama's step-by-step approach towards disarmament, stating that Obama has "opened up political space for renewed efforts to deal with the nuclear danger."⁴⁶ According to Meyer, the speech helped to destroy the belief in one's reliance to nuclear weapons for national defenses.⁴⁷ For developing mechanisms of disarmament, Sagan suggests the need of a global effort for shared responsibilities between non-nuclear states and nuclear states.⁴⁸ Furthermore, Lodgaard states Obama's speech was important because of its focus on disarmament, which has been neglected among the "three pillars" described in the NPT. He also emphasized the importance of the U.S. leadership for disarmament as Obama expressed in his speech.

On the other hand, there is, of course, skepticism about disarmament proposals and discourse, particularly from realist perspectives. For them, nuclear disarmament has currently been stuck after Obama's speech. This greatly differs compared to the hopeful expectations at that time and Warren cautiously claim that the the U.S.'s attitude towards disarmament has changed less than popular expectation since Obama's speech.⁴⁹ Furthermore, slow or incremental

⁴⁵ Randy Rydell. Arms Control Association, "The Future of Nuclear Arms: A World United and Divided by Zero." Last modified April 2009. http://www.armscontrol.org/act/2009_04/Rydell. (Accessed November 25, 2012.). David Cortright and Raimo Vayrynen, *Towards Nuclear Zero*, (London: Routledge, 2010), 28.

⁴⁶ David Holloway, "The Vision of a World Free of Nuclear Weapons," *Getting to Zero: The Path to Nuclear Disarmament*, ed. Catherine Kelleher and Judith Reppy, (Palo Alto: Stanford University Press, 2011), 24.

⁴⁷ Paul Meyer. Arms Control Association, "Prague One Year Later: From Words to Deed." Last modified April 2009. Accessed November 25, 2012. http://www.armscontrol.org/act/2010_05/LookingBack

⁴⁸ Scott Sagan. (2010) The Causes of Nuclear Proliferation. *Annual Review of Political Science* 14:1, 157-8

⁴⁹ Aiden Warren, "The Promises of Prague versus Nuclear Realities: From Bush to Obama," *Contemporary Security Policy*, 32, no. 2 (2011): 433.

disarmament illustrates the complex nature of nuclear issues.⁵⁰ Jonathan Schachter and Emily B. Landau both emphasized the delicate balance of disarmament and nonproliferation that Obama must be faced with. Landau calls this situation “inter-state context logic.”⁵¹ Moreover Davis and Josef strongly claim against Obama’s view of the nuclear zero world that “the proliferation of nuclear weapons to states such as North Korea and Iran or to nonstate actors such as al Qaeda follow a logic that has little to do with great-power arms control. If such states cannot be disarmed, they must be deterred.”⁵²

With regard to the danger of nuclear terrorism, Delpech stresses, from the realist perspective, that nuclear terrorism is a threat but that states’ effort will make it less threatening and the importance of nuclear deterrence will remain for a long time.⁵³ Additionally, Allison argues that nuclear terrorism will be preventable as long as the non-proliferation regime becomes successful.⁵⁴

Whether or not discourses support Obama’s disarmament approach, their frameworks of thinking are parochial and examine power as crystallization of coercive forces such as regulations and laws. Both supporters’ and skeptics’ disarmament discourses consider the fact that states have free will to decide what to do, rather than acknowledging states as subjugated under nuclear power. In this sense, regardless of the contents, both discourses provide very limited views and actually share the same frameworks employed by both Eisenhower and Obama.

⁵⁰ Tanya Ogilvie-White, “Disarmament and Non-proliferation: Towards More Realistic Bargains,” *Survival*, 53, no. 2(2011): 101.

⁵¹ Emily B Landau and Tamar Malz-Ginzburg, *The Obama Vision and Nuclear Disarmament*, (Zurich:Institute for National Security Studies (INSS), 2011), 22.

⁵² Josef Joffe, and James W. Davis, "Less Than Zero: Bursting the New Disarmament Bubble," *Foreign Affairs* (Jan/Feb 2011).

⁵³ Therese Delpech, *Nuclear Deterrence in The 21st Century*, (Santa Monica: RAND Corporation, 2012), Chapter 2.

⁵⁴ Graham Allison, *Nuclear Terrorism: Ultimate Preventable Catastrophe* (New York: Times Books, 2004), Chapter 7.

State-Centered Gaze and Discourse

From Eisenhower to Obama, there was clearly a discursive transformation from nonproliferation to disarmament. However, as I have previously mentioned, Obama's rhetoric towards disarmament was framed in what I call a traditional state-centered gaze, which was also applied to Eisenhower's speech. According to this gaze, the world governance of nuclear arms control including non-proliferation, disarmament and security of nuclear materials revolves around states, International Organizations (IOs) and its derivative apparatuses.

As for non-proliferation expressed by Eisenhower, the nuclear non-proliferation regime was concretized based on the NPT in 1970. In this regime the IAEA as safeguard of peaceful use of nuclear materials play an active role. The basic idea of this regime is that while only five nuclear-weapon State Parties, all of which are permanent members of United Nations Security Council, can have nuclear weapons, other non-nuclear-weapon State Parties can access nuclear materials only for peaceful energy usage.⁵⁵ The evaluation of this regime has been controversial. On the one hand, one is optimistic: Ambassador George Bunn states that were it not for the NPT as much as 30 countries would have acquired nuclear weapons.⁵⁶ Cirincione in *Bomb Scare* also states after the NPT came into effect, North Korea, Iran, and Pakistan were the *only* three countries who possessed nuclear weapons, which is *good news*.⁵⁷ Indeed, this is a fair response because in the beginning of the 1960s, the prediction was that 30 or 40 nuclear weapon states would emerge in the next 20 years.⁵⁸ Moreover, according to Sauer, most experts believe that the pace of nuclear proliferation was delayed by the NPT, although prevention of states' ambition

⁵⁵ "TREATY ON THE NON-PROLIFERATION OF NUCLEAR WEAPONS." Accessed November 25, 2012. <http://www.iaea.org/Publications/Documents/Infcircs/Others/infcirc140.pdf>.

⁵⁶ George Bunn, "The World's Nonproliferation Regime in Time," *IAEA Bulletin* 46. no. 2 (2004).

⁵⁷ Joseph Cirincione, *BOMB SCARE*, (New York: Cambridge University Press, 2007), 43. (emphasis added)

⁵⁸ Tom Sauer, "The Nuclear Nonproliferation Regime in Crisis," *Peace Review: A Journal of Social Justice*. 18. no. 3 (2006): 333.

for acquisition of nuclear weapons is very difficult.⁵⁹ On the other hand, there is skepticism about the effect of the regime. This is due to North Korea's withdrawal from the NPT regime and successful acquisition of nuclear weapons, as well as Iraq's ongoing suspicious nuclear program. Moreover, doubt has been cast upon the NPT not only for its effect on prevention, but also for its effect on disarmament. In fact, this was explicitly indicated in the 1995 NPT Review Conference. Rhianna Tyson states, "upon adoption of the indefinite extension, RevCon President Jayantha Dhanapala...warned the Nuclear-Weapon States (NWS) that with such an extension comes 'permanence with accountability.'"⁶⁰ Therefore, this is described as nuclear states' exclusive club in which they enjoy privileged rights of continuous possession of nuclear weapons while forcing others to quite their attempts at acquisition.⁶¹

While the NPT regime has succeeded in creating perceptions in which some countries found non-possession to be more beneficial for their national interest, evaluation of the NPT should not be optimistic.⁶² One of the greatest crises the NPT regime has faced was global networks of Dr. Khan as a non-state actor in Pakistan, which successfully proliferated nuclear materials and knowledge to other countries like North Korea, Libya, and Iran.⁶³ However, the fact that this threatening proliferation reality did not encourage states to abandon their nuclear weapons reflects state-centered gaze and blind beliefs in state sovereign power.

Phenomena of globalization made this proliferation of nuclear technology and knowledge possible across borders. Growing concerns towards nuclear proliferation and future terrorist attacks with nuclear weapons, has become an imminent danger represented by the September

⁵⁹ Ibid.

⁶⁰ Rhianna Tyson, "Contextualizing past, present and future challenges to the NPT regime," *Disarmament Forum The 2005 NPT Review Conference*, no. 4 (2004): 58.

⁶¹ Richard Butler, *FATAL CHOICE*, (Boulder: Westview Press, 2001), 45.

⁶² David Fischer, *Stopping the Spread of Nuclear Weapons: The Past and the Prospect* (London: Routledge, 1992), 6.

⁶³ Sauer, "The Nuclear Nonproliferation Regime in Crisis," 335.

11th terrorist attack in 2001. This has led Obama to propose nuclear disarmament and security of nuclear materials. This concern has concretized sequences of 2010 NPT review conference and the Security Commission.

In the 2010 NPT review conference, the adopted action plan indicated a further step towards creating norms of nuclear disarmament in which the word *disarmament* is used over 50 times as opposed to the original NPT in which nuclear disarmament was hardly highlighted.⁶⁴ Additionally, in order to promote disarmament, long-standing tensions between the five nuclear weapon states and the non-nuclear weapon states with regards to the nonproliferation regime need to be alleviated. In the 2005 review conference, while the U.S. wanted to focus on non-proliferation, especially on its allegations against Iran, other non-nuclear states emphasized the lack of serious nuclear disarmament by the nuclear powers.⁷³ Although in the 2005 review conference the NPT was extended indefinitely and without conditions, there was no formal document. This is mainly because there were stark differences between nuclear states, especially the U.S., and most other non-nuclear states. Therefore, in the 2010 conference, the final document states that the mutual trust and security assurances towards non-nuclear states are crucial elements for nonproliferation and disarmament.⁷⁴ The review conference was also important for a collection of states in order to strengthen the NPT regime, which had been

⁶⁴ Final Documents of the 2010 NPT Review Conference, "The 2010 Review Conference of the Parties to the Treaty on the Non-Proliferation of Nuclear Weapons (NPT)." Accessed November 25, 2012. <http://www.un.org/en/conf/npt/2010/>.

⁷⁵ "The term originally referred to poorly guarded nuclear weapons in the former Soviet Union that might tempt terrorists or criminals. Today, experts use the term to refer to nuclear weapons, materials, or know-how that could fall into the wrong hands. Areas of particular concern include the black market in uranium and plutonium, as well as the temptation for poorly paid former Soviet nuclear scientists to sell their skills to the highest bidder." See COUNCIL on FOREIGN RELATIONS, "Loose Nukes." <http://www.cfr.org/weapons-of-terrorism/loose-nukes/p9549>.

⁷⁵ "The term originally referred to poorly guarded nuclear weapons in the former Soviet Union that might tempt terrorists or criminals. Today, experts use the term to refer to nuclear weapons, materials, or know-how that could fall into the wrong hands. Areas of particular concern include the black market in uranium and plutonium, as well as the temptation for poorly paid former Soviet nuclear scientists to sell their skills to the highest bidder." See COUNCIL on FOREIGN RELATIONS, "Loose Nukes." <http://www.cfr.org/weapons-of-terrorism/loose-nukes/p9549>.

weakened by a series of events such as North Korea's withdrawal from the NPT and Iran's suspicious activities.

The Nuclear Security Summit held in 2010 and 2012, which was mentioned in Obama's speech, was organized to address the concern of a "loose nuke."⁷⁵ In the 2010 summit, the non-binding communiqué issued after the summit recognized nuclear terrorism as "one of the most challenging threats to international security."⁷⁶ Also, the topic of a nuclear fuel bank, an internationally centralized management system in which non-nuclear states indiscriminately can obtain enriched uranium for nuclear power plants, was briefly discussed by some members attending the summit.⁷⁷ In the second summit in 2012, the coordinated effort to replace weapons-grade uranium fuel with low enriched uranium, and to abandon the use of the former material at several key reactors were included in the communiqué.⁷⁸

The NPT review conference and the Nuclear Security Summit clearly show that change of states' perception of nuclear strategy from state-versus-state based on nuclear deterrent theory to states-versus-transnational non-state actors. The problem of loose nuke appears to be an imminent danger to states as the IAEA has documented over 2,000 cases of illicit trafficking of nuclear materials worldwide.⁷⁹ Therefore, nuclear states have had to face the irony that although they themselves hold nuclear weapons for their own protection, terrorist groups could acquire and use the weapons to destroy them, ultimately leading states to take disarmament seriously.

⁷⁵ "The term originally referred to poorly guarded nuclear weapons in the former Soviet Union that might tempt terrorists or criminals. Today, experts use the term to refer to nuclear weapons, materials, or know-how that could fall into the wrong hands. Areas of particular concern include the black market in uranium and plutonium, as well as the temptation for poorly paid former Soviet nuclear scientists to sell their skills to the highest bidder." See COUNCIL on FOREIGN RELATIONS, "Loose Nukes." <http://www.cfr.org/weapons-of-terrorism/loose-nukes/p9549>.

⁷⁶ COUNCIL on FOREIGN RELATIONS, "Communiqué of the Washington Nuclear Security Summit." <http://www.cfr.org/proliferation/communiqu-washington-nuclear-security-summit/p21896>.

⁷⁷ Peter Spiegel and Jonathan Weisman. "U.S. Tries to Keep Summit Nuclear." *Wall Street Journal*, April 11, 2010.

⁷⁸ Mark Hibbs. Carnegie Endowment for International Peace, "The Legacy of the Nuclear Security Summit." Accessed November 25, 2012. <http://carnegieendowment.org/2012/03/29/legacy-of-nuclear-security-summit>.

⁷⁹ Ibid.

Hence, the process towards nuclear disarmament appears to be directed in the right path led by strong states' initiative. However, this discourse and gaze cannot fully grasp the entire picture of *nuclear power*.

Transnational Gaze and Discourse: Evolution of Nuclear Power

Instead of states-centered gaze and discourse, I would like to suggest what I call *transnational gaze and discourse*. This new gaze and discourse are based on Foucault's notion of power. Through transnational gaze and discourse, I examine five networks of nuclear power, which are also profoundly intertwined.

Non-state Clandestine Networks: Terrorist and Nuclear Trafficking

Non-state clandestine networks are the ones Obama expressed to fight against in his speech. Despite the efforts of states, under the current globalization, activities of non-state clandestine networks seem to be beyond states' capacities. Dr. Khan's successful nuclear network was an embryo of the development of the current networks of non-state clandestine groups. "Khan network was...an elaborate and highly successful illicit procurement network that Khan created in the 1970s...to make highly enriched uranium (HEU)"⁸⁰ for the Pakistani government nuclear weapon project. This network was mainly connected with states such as Iran, Iraq, Libya, and North Korea that secretly sought nuclear weapons. Although he was arrested in 2004, the level of proliferation of nuclear technology is unknown.

This Khan network has revealed the fact that there are non-state clandestine networks that seek nuclear material or weapons for their own interests. Non-state clandestine networks can be

⁸⁰ David Albright, and Corey Hinderstein, "The A.Q. Khan illicit nuclear trade network and implications for non-proliferation efforts," *Globalization and WMD Proliferation*, ed. James A. Russell and James J. Wirtz (London: Routledge, 2008), 49.

divided into two: terrorist networks and nuclear trafficking networks. Then, they have different motivations, types of networks, and autonomies. Yet, these networks are also profoundly connected with each other.

Terrorist Networks

Terrorist groups' attempts at acquiring nuclear weapons, and political rhetoric about terrorism as extremely abnormal and unacceptable actions, give an image of anarchist characteristics to terrorist groups.⁸¹ Terrorist groups, however, create their own order as forms of networks.

The al-Qaeda is a great case to examine the network system of terrorist groups. Because of the death of the former leader of the al-Qaeda, Osama bin Laden, it is said that core of al-Qaeda under the new leader Ayman al-Zawahiri became weaker than before.⁸² The former CIA Deputy Director John McLaughlin stated that "I think it is now possible...to actually visualize, to imagine its collapse...speaking of the original core group."⁸³ However, by warning against underestimating Zawahiri or his followers, he claims Zawahiri's ambition towards acquiring nuclear weapons.⁸⁴ Moreover, on October 16th, 2012, U.S. Representative Peter T. King, New York Republican and Chairman of the House's Homeland Security Committee, stated that "they're a greater threat than they were back on September 11 [and] now spread out into many different groups, and that is why it is considered by most intelligence experts to be more

⁸¹ Joseph S Tuman, *Communicating terror: the rhetorical dimensions of terrorism*, (Thousand Oaks: Sage Publications, Inc, 2003), 43.

⁸² Kimberly Dozier. "Al Qaeda WMD Use Likely, Former U.S. Officials Say." *The Huffington Post*, July 28, 2011

⁸³ Ibid.

⁸⁴ Ibid. However, popular sentiment towards bin Laden was very low according to a survey conducted after his death. Even among Muslim nations, the highest level of support was only 34 % by Palestinian territories. See Pew Research Center, "Osama bin Laden Largely Discredited Among Muslim Publics in Recent Years." Last modified May 2, 2011.

dangerous now than it was then, and that's the story the president is not telling.”⁸⁵ Although al-Qaeda’s core group might have become weaker due to bin Laden’s death, it is true that a weakened core does not affect their activities contrary to popular sentiment.⁸⁶ Ganor claims that al-Qaeda’s global networks have already developed to a fully autonomous being, which can live without bin Laden’s charismatic leadership.⁸⁷

Therefore, it is worth examining the structure of al-Qaeda as one of world's most influential terrorist networks. Al-Qaeda’s basic form of networks is “a hybrid of networks and hierarchy...a network that included hierarchical nodes,”⁸⁸ although they have changed and evolved over time according to the operational expansion and transformation of their strategy.⁸⁹ On the one hand, the core was hierarchical albeit not being static, and the hierarchical system is also applied to personal ties in the core networks.⁹⁰ On the other hand, the structure of al Qaeda’s networks with other regional and global terrorist networks are horizontal and flexible and al-Qaeda does not necessarily exercise its ultimate authority over other terrorist networks.⁹¹ Moreover, in contrast to criminal networks such as nuclear trafficking networks requiring complete secrecy, for terrorist networks, a balance between political publicity and secrecy is crucial and a completely clandestine terrorist network would fail.⁹² Marc Sageman describes this

⁸⁵ David Sherfinski. "Rep. King: Al Qaeda a greater threat now than before 9/11." *The Washington Times*, October 16, 2012.

⁸⁶ According to *USA Today*/Gallup poll, a slight majority (54%) believe bin Laden's death will make the U.S. safer from terrorism, nearly double the 28% who fear it will make it less safe. See Lydia Saad. GALLUP Politics, "Majority in U.S. Say Bin Laden's Death Makes America Safer." Last modified May 4, 2011.

⁸⁷ Boaz Ganor, *The Network Challenge (Chapter 26): Terrorism Networks: It Takes a Network to Beat a Network*, (New Jersey: Pearson Education, Kindle Edition, 2009), Kindle Locations 148-150.

⁸⁸ Miles Kahler, "Collective Action and Clandestine Networks: THE CASE OF AL QAEDA," *Networked Politics: AGENCY, POWER, AND GOVERNANCE*, ed. Miles Kahler (London: Cornell University Press, 2009), 109.

⁸⁹ Therefore, among exper of al-Qaeda, structures of its network are differently described. See Kahler, "Collective Action and Clandestine Networks," 106.

⁹⁰ Kahler, "Collective Action and Clandestine Networks," 122.

⁹¹ Ibid.

⁹² Ibid.

entire network as “the Global Salafi Network,”⁹³ which features diversity and flexibility of terrorist networks. (See Figure 1) These networks are never monolithic and static.

Widespread transnational networks are hardly eradicated and difficult for states to crack down and al-Qaeda’s attempts at acquiring nuclear weapons or small-scale bombs containing nuclear materials have been reported many times.⁹⁴ For example, on December 2001, the New York Times reported that Pakistani scientists with actual experience in production of nuclear weapons and related technology had contact with al-Qaeda.⁹⁵

Therefore, the question is whether terrorism networks are capable of acquiring and using nuclear weapons. Clearly, the answer is yes. Bun and Wier claim that while it is an extremely demanding process for terrorists to conduct nuclear attacks, if terrorists acquire sophisticated knowledge and skills, it is unrealistic to say that nuclear terrorism is impossible.⁹⁶ There are two types of nuclear weapons that terrorists could make and use in practice: “A ‘gun-type’ bomb made from highly enriched uranium (HEU), in particular, is basically a matter of slamming two pieces of HEU together at high speed; an ‘implosion-type’ bomb...would be substantially more difficult for terrorists to accomplish, but is still plausible, particularly if they got knowledgeable help.”⁹⁷ A group of the U.S. nuclear weapons designers concluded that in order to make a gun-assembly type bomb, similar to the Hiroshima bomb, terrorists need sufficient resources and a

⁹³ Marc Sageman, *UNDERSTANDING TERROR NETWORKS*, (Philadelphia: University of Pennsylvania Press, 2004), 138.

⁹⁴ For many cases, See David, Albright, and Higgins Holly. INSTITUTE FOR SCIENCE AND INTERNATIONAL SECURITY, "Pakistani Nuclear Scientists: How Much Nuclear Assistance to Al Qaeda?." Last modified August 30, 2002.

⁹⁵ David E. Sanger. "A NATION CHALLENGED: INTELLIGENCE; Nuclear Experts in Pakistan May Have Links to Al Qaeda." *The New York Times*, December 09, 2001.

⁹⁶ Matthew Bunn, and Anthony Wier, "Terrorist Nuclear Weapon Construction: How Difficult?," *Annals of the American Academy of Political and Social Science*, 607, no. 1 (2006): 147.

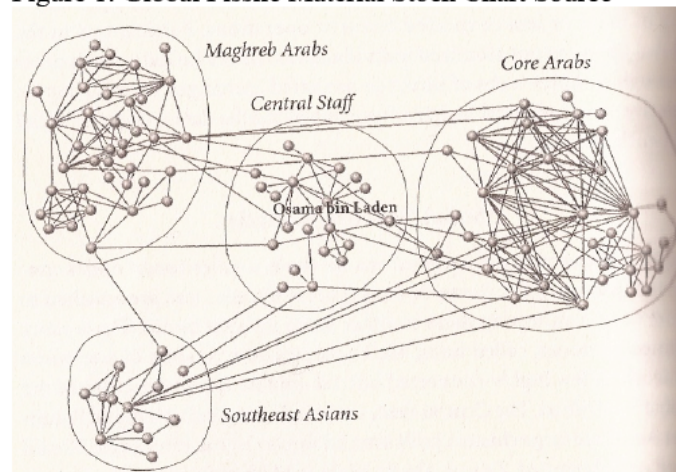
⁹⁷ Matthew Bunn, "Securing the Bomb 2010: Securing All Nuclear Materials in Four Years," *Project on Managing the Atom, Harvard University, and Nuclear Threat Initiative* (2010): 16.

team of three or four technically qualified specialists.⁹⁸ Even though terrorists could not make military-level nuclear bombs, a crude nuclear weapon would have a large enough effect to destroy a city with explosion and nuclear fallout.⁹⁹

Moreover, if terrorists succeeded in stealing nuclear weapons, they would have great difficulty with the latest nuclear weapons to bypass locking devices. However, old tactical weapons, particularly old Russian ones, are not equipped with safeguards against unauthorized use.¹⁰⁰ Although old nuclear weapons have been dismantled in recent years, not all of them have yet been destroyed, which leaves an opening for terrorists to steal and use them.

Although terrorists could possibly acquire nuclear weapons, obtaining usable bombs has its setbacks for them, including the acquisition of fissile materials and sophisticated skills.¹⁰¹ This is one of the reasons that nuclear terrorism has not yet occurred. However, this fact cannot be overestimated since terrorist networks are also connected with profit-oriented nuclear trafficking networks.

Figure 1: Global Fissile Material Stock Chart Source



Source: Marc Sageman, *UNDERSTANDING TERROR NETWORKS*, (Philadelphia: University of Pennsylvania Press, 2004), 138.

⁹⁸ Bunn and Wier "Terrorist Nuclear Weapon Construction," 90.

⁹⁹ Kevin O'Neill, "The Nuclear Terrorist Threat," *Institute for Science and International Security* (1997): 8.

¹⁰⁰ Bunn and Wier "Terrorist Nuclear Weapon Construction," 143

¹⁰¹ Ibid.

Nuclear Trafficking Networks

Nuclear trafficking began to receive recognition after the collapse of the Soviet Union, which triggered a wave of nuclear theft and smuggling attempts in Russia, Lithuania, Ukraine, Kazakhstan and other former Soviet republics. After the terrorist attacks in the U.S. on September 11th, increased awareness of nuclear terrorism prompted national governments to increase their activities to prevent theft and trafficking of nuclear materials. For example, the U.S. Department of Energy established the Global Threat Initiative (GTRI) in 2004, whose mission is to “identify, secure, recover and/or facilitate the disposition of high-risk, vulnerable nuclear and radiological materials around the world that pose a threat to the United States and the international community.”¹⁰² In the case of 2005, 14 kilograms of HEU that could be used for nuclear weapons were returned safely to the Russian Federation from the Czech Technical University in Prague under the GTRI program.¹⁰³ Another example, the Proliferation Security Initiative (PSI), which was launched on May 31, 2003, is “a global effort that aims to stop trafficking of weapons of mass destruction (WMD), their delivery systems, and related materials to and from states and non-state actors of proliferation concern.”¹⁰⁴ The Security Commission is a series of these activities carried out by a larger collection of states.

On top of activities to prevent trafficking, efforts to report trafficking incidents have been carried out much more than in the past. According to the IAEA’s Illicit Trafficking Database

¹⁰² The National Nuclear Security Administration, “GTRI: Reducing Nuclear Threats.” <http://nnsa.energy.gov/mediaroom/factsheets/reducingthreats>. (Accessed November 25, 2012.)

¹⁰³ The U.S. Department of State, “Highly Enriched Uranium Transferred to Russia from Czech Republic: Repatriation of radioactive material is part of Global Threat Reduction Initiative.” Last modified September 27, 2005.

¹⁰⁴ The U.S. Department of State, “Proliferation Security Initiative.”

(ITDB)¹⁰⁵ from January 1993 to December 2011, a total of 2,164 incidents were reported to the ITDB by participating states and some non-participating states. Of the 2,164 confirmed incidents, 399 involved unauthorized possession and related criminal activities. Incidents included in this category involved illegal possession, movement or attempts to illegally trade in or use nuclear material or radioactive sources. Sixteen incidents in this category involved HEU or plutonium. Although the demand for the information has increased, the fact that states supplied information for a comprehensive global assessment on nuclear trafficking is somewhat unreliable due to states' underreporting of incidents.¹⁰⁶ Therefore, this illustrates the sobering fact that there could have been numerous unreported thefts of nuclear materials.

According to Zaitseva, during the years 2001 and 2005, 40 trafficking incidents associated with organized crime occurred, which consisted of 10% of the total 426 trafficking incidents during the same period.¹⁰⁷ Among the criminal groups, over half (60%) were transnational and 169 actors were involved in these incidents as sellers, traffickers, and buyers.¹⁰⁸ Zaitseva also suggests the alliances of nuclear trafficking with drug smugglers, a newly developed market in Africa, and unclear weapons smugglers.¹⁰⁹

What are the features of nuclear trafficking networks? First, "their ultimate objective is to resell the material at a higher price than was paid for."¹¹⁰ Therefore, unlike terrorist groups, nuclear trafficking groups are motivated by profits rather than by actual usage. This partially creates different network structures from terrorist groups who are ideologically driven, leading to

¹⁰⁵ The International Atomic Energy Agency (IAEA), "IAEA Illicit Trafficking Database (ITDB)." Last modified Sep 11, 2012.

¹⁰⁶ See Potter William C., and Elena Sokova, "Illicit nuclear trafficking in the NIS: What's new? What's true?," *The Nonproliferation Review*, 9, no. 2 (2002).

¹⁰⁷ Lyudmila Zaitseva, "Organized crime, terrorism and nuclear trafficking," *Globalization and WMD Proliferation*, ed. James A. Russell and James J. Wirtz (London: Routledge, 2008), 105.

¹⁰⁸ Ibid.

¹⁰⁹ Ibid.

¹¹⁰ Ibid., 109.

weaker ties. Kenny describes models of Wheel and Chain networks represented by Colombian trafficking networks. Wheel networks contain “few hubs linked to many peripheral nodes, which are themselves poorly connected.”¹¹¹ A hub or core node is a multitask enterprise, channeling communication and coordinated relations among nodes, which renders the network a relatively centralized character. On the other hand, in chain networks, “autonomous nodes exchange directly with other nodes [and] more diffuse and self-organizing than wheels.”¹¹² In chain networks, distribution of power is more eminent than wheel networks, and there is no single dominant entity that takes control over the entire set of networks.¹¹³ Although wheel networks are somewhat similar to hybrid networks like terrorist networks, since the driving-force of trafficking groups is profits rather than ideology, each node does not necessarily share the same ideas and has weaker ties. However, weaker ties are not necessarily a deficiency. Weaker ties are necessary for complete secrecy in order to avoid law enforcement, which is also another different from of terrorist networks. In order to achieve this, non-state clandestine networks are considerably flexible and adaptive and can change their form of organization according to the circumstances around them. In this sense, weaker ties mean flexible and adaptive ties. In the case of Colombian drug traffickers, they have frequently transformed their network structure between chain and wheel networks according to changes of their environments.¹¹⁴ Therefore, non-state clandestine networks are flexible enough to learn and discipline themselves according to external circumstances and to create their own unique autonomy. Moreover, unlike terrorist networks, illicit trafficking networks attempts to build mutually supportive relationship with public

¹¹¹ Michael Kenney, "Turning to the “Dark Side”: COORDINATION, EXCHANGE, AND LEARNING IN CRIMINAL NETWORKS," *Networked Politics: AGENCY, POWER, AND GOVERNANCE*, ed. Miles Kahler (London: Cornell University Press, 2009), 89.

¹¹² Ibid., 87

¹¹³ Ibid.

¹¹⁴ Ibid., 96-102.

officials so that they can enhance their survival abilities.¹¹⁵ These characteristics of networks explain high resilient and adaptive abilities of non-state clandestine networks, which limit states' power over these networks.

Therefore, nuclear trafficking networks are different from terrorist networks in that they are profit-driven, under complete secrecy, and have weaker ties with nodes, which are more flexible and adaptive. In sum, as long as they find profitable markets and business partners such as states seeking nuclear weapons and terrorist groups, nuclear trafficking networks can greatly expand.

Terrorist Networks and Nuclear Trafficking Networks

In the situation where “there are over forty states with civilian research reactors fueled by highly enriched uranium -- perfect for a bomb, but still guarded as if they were library books,”¹¹⁶ the possibility of terrorists acquiring weapon-grade nuclear materials are high by connecting with nuclear trafficking networks. Although the Database on Smuggling, Theft and Orphan radiation Sources (DSTO) from the period of January 2001 to December 2005 have not indicated strong ties between terrorist networks and nuclear trafficking networks, these results ~~came from only~~ were solely derived from successful tracking activities and there have been many unreported illicit trafficking.¹¹⁷

Although the number of world fissile materials is decreasing, it is important to note that as of the year 2010, there are still more than 3,900 tons, enough for over 350,000 nuclear weapons among which about 2,000 tons are in weapons usable forms.¹¹⁸ (See Figure 2)

¹¹⁵ Ibid., 89.

¹¹⁶ Cirincione, *BOMB SCARE*, 91.

¹¹⁷ Zaitseva, "Organized crime," 119.

¹¹⁸ The Institute for Science and International Security (ISIS). <http://isis-online.org/isis-reports/detail/global-fissile-material-stock-charts/> (Accessed November 25, 2012.)

Moreover, as of 2003, most of the weapon-grade nuclear materials belong to civil stocks.¹¹⁹ (See Figure 3) Civilian facilities for academic research or production of medical isotopes could indeed become sources for a bomb that destroys a whole city because many of them do not have adequate protection measures¹²⁰

The situation where terrorists and nuclear trafficking networks have become a grave danger to people would be best described as “netwar, ” which was coined by John Arquilla and David Ronfeldt.¹²¹

The term netwar refers to an emerging mode of conflict (and crime) at societal levels, short of traditional military warfare, in which the protagonists use network forms of organization and related doctrines, strategies, and technologies attuned to the information age...The term netwar is meant to call attention to the prospect that network-based conflict and crime will become major phenomena in the decades ahead.¹²²

Arquilla and Ronfeldt point out that for governments that wish to fight against terrorism and nuclear trafficking networks, “[i]t takes networks to fight networks.”¹²³ This has led state-government’s functions to become disaggregated and de-centralized.

¹¹⁹ Global Stocks of Nuclear Explosive Materials: Summary Tables and Charts July 12, 2005, Revised September 7, 2005, available at http://isisonline.org/uploads/isisreports/documents/summary_global_stocks.pdf (Accessed November 25, 2012.)

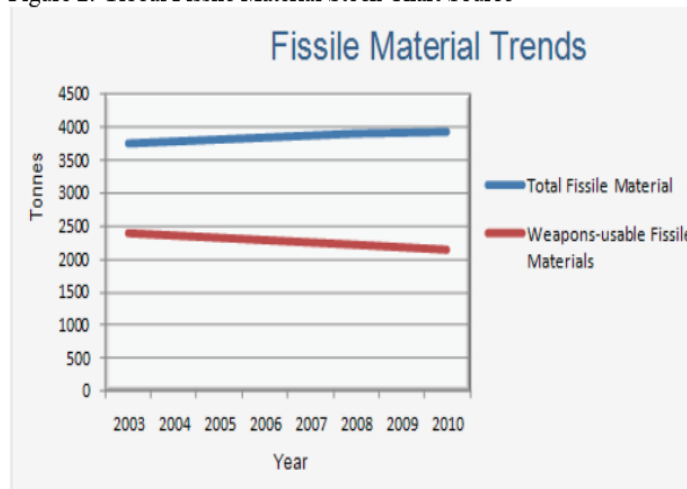
¹²⁰ Cirincione, *BOMB SCARE*, 95.

¹²¹ John Arquilla, and David Ronfeldt, "THE ADVENT OF NETWAR (REVISITED)," *Networks and Netwars: The Future of Terror, Crime, and Militancy*, ed. John Arquilla, David Ronfeldt (Santa Monica: RAND Corporation, 2001), 2.

¹²² Ibid., 6.

¹²³ Ibid., 15.

Figure 2: Global Fissile Material Stock Chart Source



Source: The Institute for Science and International Security (ISIS), available at <http://isis-online.org/isis-reports/detail/global-fissile-material-stock-charts/>

Figure 3: Global Plutonium and Highly Enriched Uranium (HEU), Assigned to Civil or Military Stocks, end 2003

Category	Plutonium	HEU	Total
Civil Stocks	1,675^b	175	1850
Power and Research Reactor Programs ^c	1570	50	
Russian and U.S. Military Excess ^d	102.5	125 (US only)	
Military Stocks	155	1725	1880
Primary	155	1250	
Naval and Other	--	175	
Russian HEU Declared Excess	--	300 ^e	
Total	1830	1900	3730

Source: Global Stocks of Nuclear Explosive Materials: Summary Tables and Charts July 12, 2005, Revised September 7, 2005, available at http://isisonline.org/uploads/isisreports/documents/summary_global_stocks.pdf

Transgovernmental Networks

Transgovernmental networks (TGNs) such as the PSI function significantly in fighting against non-state clandestine networks. In this network, government officials across borders share information and coordinate together. This TGN “provides an alternative to conventional

interstate cooperation based on multilateral treaties and often coupled with formal international organizations.”¹²⁴ There are distinguished differences between this TGN and traditional international organizations (IGOs): membership, structure and formality. With regard to membership, while in IGOs states are represented as unitary with one voice, under the control of foreign ministers. In TGNs, states are represented as disaggregated where multiple high- and mid-level officials coordinate policies across borders. Structural differences rest on the fact that while IGOs are structured hierarchically, TGNs are horizontally networked and the decision-making system is decentralized.¹²⁵ In terms of formality, while IGOs are involved with treaty-based cooperation with formally binding powers, cooperation in TGNs tends to be informal and hardly based on formal binding document¹²⁶ The PSI is originally established as “a reaction to the growing threat of proliferation to and from ‘rogue’ states, specially North Korea and Iran.”¹²⁷ Eilstrup-Sangiovanni points out four strengths in the PSI as TGNs: adaptable, flexible and rapid implementation, relative independence from domestic political pressure, high selectivity towards the particular target, and small size of memberships¹²⁸

Among the features and conditions of TGNs, the most critical is the fact that they cannot only complement but also substitute for formal IGOs about concerned issues, which is essential to creation of their own harmonious autonomy as a functionally differentiated unit through

¹²⁴ Mette Eilstrup-Sangiovanni, "Varieties of Cooperation": GOVERNMENT NETWORKS IN INTERNATIONAL SECURITY," *Networked Politics: AGENCY, POWER, AND GOVERNANCE*, ed. Miles Kahler (London: Cornell University Press, 2009), 194.

¹²⁵ Ibid at 199.

¹²⁶ Ibid., 200.

¹²⁷ Ibid., 214.

¹²⁸ Ibid., 215-217. Small membership is important since the initiative is not to track all illicit shipment of WMD but is to seize shipments of selected countries such as North Korea and Iran which are considered as posing a security threat to the participants. “The decision to maintain a small number of core participants seems to reflect the U.S. desire to keep PSI flexible and free of the constraints on decision-making concomitant with a larger and more diverse group of members.” See Jofi Joseph. Arms Control Association, "The Proliferation Security Initiative: Can Interdiction Stop Proliferation?." Last modified June 2004. Accessed November 25, 2012.

http://www.armscontrol.org/act/2004_06/Joseph

effective peer-to-peer monitoring. The PSI, for example, is a small network but has its homogeneous and strong autonomy in the field of interdiction of particular illicit trades by sharing secret information that even other government officials cannot reach. Slaughter points out a disaggregating feature of the current states and claims that “these parts – courts, regulatory agencies, executives, and even legislatures – are networking with their counterparts abroad, creating a dense web of relations that constitutes a new, transgovernmental order.”¹²⁹ Thus, states are no longer holistically structured in order to deal with non-state clandestine networks.

Global Nuclear Energy Networks: Nuclear Renaissance Or Not?

Since the year 2001, there has been discourse of the revival of nuclear industries or what is referred to as the “nuclear renaissance.”¹³⁰ There are several reasons for this claim such as increased global demand, security of supply with the abundance of naturally occurring uranium, and the stabilized price of nuclear energy. Michel-Kerjan and Decker claim that the global total use of nuclear energy will be increasing in the foreseeable future.¹³¹ Despite the impact of the Fukushima nuclear plant incidents, supporters of nuclear renaissance claim not only that an overall trend towards global dependence upon nuclear energy will not drastically change but also that an additional 25 countries are ready to have nuclear power generation capacity.¹³² In addition to the demands for efficient nuclear energy from developing countries, the number of supplying countries that seek business opportunities from nuclear industries has increased. For

¹²⁹ Anne-Marie Slaughter. "The real new world order." *Foreign Affairs*, Sep/Oct 1997. Available at http://www.columbia.edu/itc/sipa/S6800/courseworks/real_new_slaughter.pdf

¹³⁰ World Nuclear Association, "The Nuclear Renaissance." Last modified August 2011.

¹³¹ Erwann O. Michel-Kerjan, and Debra K. Decker, "The Economics of Nuclear Energy Markets and the Future of International Security," *Working Paper 2008-01-08, Risk Management and Decision Processes Center, Wharton School of the University of Pennsylvania* (2008)

¹³² "The Nuclear Renaissance," 69.

instance, according to Korea's Economic Institute's report, by the year 2030, South Korea plans to export as many as 80 nuclear reactors to foreign countries.¹³³ Thus, competition to obtain a business contract among states such as Japan, France, and the U.S, and South Korea has been fiercer year by year.

Conversely, some would strongly argue that the trend towards anti-nuclear energy spawned by the great influence of Fukushima nuclear plant accident. Japan's Fukushima nuclear plants have caused many states to reconsider the safety of their nuclear energy plants and their entire energy strategies.¹³⁴ For instance, as an immediate reaction to 2011, "the German government announced plans to shut all of the nation's nuclear power plants within the next 11 years."¹³⁵ In Germany, a law extending the lives of nuclear plants was approved in 2011 but faced strong opposition from the public and is being challenged by state governments, and the anti-nuclear sentiment could intensify further.¹³⁶ The prediction of the IAEA about the amount of total nuclear energy in the world reduced to half of what it originally predicted before the Fukushima nuclear plants accidents.¹³⁷

Even without the impact of the Fukushima disaster, the overall trend of nuclear energy has not been on the rise recently in terms of both the percentage of global electricity production and the number of operating reactors. Specifically, 16.7% of world electricity production in 2000

¹³³ Troy Stangarone. Korean Economic Institute, "A New Nuclear Issue on the Korean Peninsula: The Rise of Korea's Nuclear Power Industry." Last modified October 24, 2012.

¹³⁴ Platts, "NEWS ANALYSIS: Japan crisis puts global nuclear expansion in doubt." Last modified March 21, 2011.

¹³⁵ JUDY DEMPSEY, , and JACK EWING. "Germany, in Reversal, Will Close Nuclear Plants by 2022." *The New York Times* , May 30, 2011.

¹³⁶ "NEWS ANALYSIS: Japan crisis," 74.

¹³⁷ "Gauging the pressure: France's nuclear-energy champion hopes to benefit from a flight to safety." *The Economist*, April 28, 2011.

decreased to 13.5% in 2008 and compared to the historical peak of 444 in 2002, 436 reactors have been reported as of December 2009.¹³⁸ (See Figure 4)

Michael Dittmar, a physicist of CERN, stated that “[o]n a worldwide scale, nuclear energy is thus only a small component of the global energy mix and its share, contrary to widespread belief, is not on the rise.”¹³⁹ Moreover, by presenting counterarguments to elements of the nuclear renaissance, Glaser claims that although the full impact of the Fukushima accidents will not be explicit for a while, the nuclear renaissance has clearly ended.¹⁴⁰

Although the future nuclear energy trend throughout the world is unknown, dependence upon nuclear energy is likely to be inevitable for at least a few decades regardless of the extent of reliance. Most importantly, since the nuclear industry has become larger, more complicated, and a more profitable business, “the nuclear industry is moving away from small national programmes towards global cooperative schemes.”¹⁴¹ For instance, the world reactor supply market has been dominated by three major Western-Japanese alliances since the end of 2006¹⁴²

Michel-Kerjan and Decker argue that nuclear energy markets “are not only opaque but also semi-government-controlled.”¹⁴³ For instance, other than mine production which makes up 60% of uranium supplies, the remaining 40% of uranium supplies currently comes from others sources: the stockpiles of natural and low-enriched uranium held by electric energy producers; the world’s nuclear weapons stockpiles, etcetera. In 1993 the U.S. and Russian Highly Enriched Uranium Purchase Agreement, whose main goal was is to convert HEU taken from dismantled

¹³⁸ Trevor Findlay. The Centre for International Governance Innovation, "THE FUTURE OF NUCLEAR ENERGY TO 2030 AND ITS IMPLICATIONS FOR SAFETY, SECURITY AND NONPROLIFERATION Overview." Last modified 2010.

¹³⁹ Michael Dittmar. "Taking stock of nuclear renaissance that never was ." *The Sunday Morning Herald*, August 18, 2010.

¹⁴⁰ Alexander Glaser. Bulletin of the Atomic Scientists, "After the nuclear renaissance: The age of discovery." Last modified March 17, 2011.

¹⁴¹ "The Nuclear Renaissance."

¹⁴² Ibid.

¹⁴³ Michel-Kerjan and Decker, "The Economics of Nuclear Energy Markets," 70.

Russian nuclear weapons into low-enriched uranium (LEU) for nuclear fuel.¹⁴⁴ To implement this agreement, the U.S. set up the U.S. Enrichment Corporation (USEC) which was a government-owned corporation at that time, and later fully privatized in July 1998. The feature of this agreement was based on a commercially financed public-private partnership. Michel-Kerjan and Decker also see the great potential for private insurance and risk management mechanisms adding to the stability of existing or new fuel supply arrangements. Moreover, economic regulation by the government has been very difficult to subjugate electricity markets in many parts of the world due to markets' complexity.¹⁴⁵

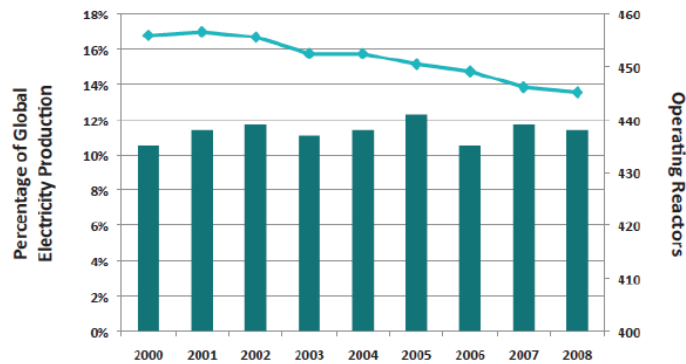
Clearly, the global trend of nuclear markets has begun to evolve to a hybrid of private and public spheres where in some fields, private actors have dominated over government-initiative public actors. This, however, creates a serious security dilemma: although the collection of state governments' efforts represented by the Security Commotion to prevent proliferation of nuclear materials has increased, as long as there are more profitable private businesses involved with nuclear energy, the chance for proliferation would increase. This is highly plausible as Obama mentions in his speech, "all countries can access peaceful nuclear energy"¹⁴⁶ Nuclear energy markets at the crossroads of heightened economic, political, and military interests take place at the transnational level where private actors create their own networks and autonomies outside of governments' authorities.

¹⁴⁴ Ibid.

¹⁴⁵ "The Future of Nuclear Power," *Massachusetts Institute of Technology* (2003), 7.

¹⁴⁶ "Obama Prague Speech."

Figure 4:
Nuclear Reactor Numbers and Share of Global Electricity Production since 2000



Source: THE FUTURE OF NUCLEAR ENERGY TO 2030 AND ITS IMPLICATIONS FOR SAFETY, SECURITY AND NONPROLIFERATION: Overview, available at <http://acuns.org/wpcontent/uploads/2012/06/NuclearEnergyFuture.pdf>

Global Judicial Networks: ICJ Advisory Opinion With Regard To Nuclear Weapons

On July 8th, 1996 the International Court of Justice (ICJ) issued an Advisory Opinion of *Legality of the Use by a State of Nuclear Weapon* per the request of the General assembly. According to Gowlland-Debbas, “the Court examines -- though not always explicitly -- non-derogable rights (the right to life), and rules of jus cogens (genocide, prohibition of the use of force, basic principles and rules of humanitarian law)”¹⁴⁷ *Jus cogens* was codified in Articles 53 and 64 of the 1969 Vienna Convention.¹⁴⁸ “Jus cogens embraces customary international law considered binding for all nations and is derived from values taken to be fundamental by the international community, rather than from the fortuitous or self-interested choices of nations.”¹⁴⁹

¹⁴⁷ Vera Gowlland-Debbas, “THE RIGHT TO LIFE AND GENOCIDE: THE COURT AND AN INTERNATIONAL PUBLIC POLICY,” *International Law, the International Court of Justice and Nuclear Weapons*, ed. Laurence Boisson de Chazournes and Philippe Sands (Cambridge: Cambridge University Press, 1999), 315.

¹⁴⁸ “Vienna Convention on the Law of Treaties.” Accessed November 25, 2012. http://untreaty.un.org/ilc/texts/instruments/english/conventions/1_1_1969.pdf

¹⁴⁹ Nicholas Tsagourias, “The constitutional role of general principles of law in international and European jurisprudence,” *Transnational Constitutionalism: International and European Perspective*, ed. Nicholas Tsagourias (Cambridge: Cambridge University Press, 2007), footnote 94.

The Advisory Opinion states that although there are no particular rules to proscribe the use of nuclear weapons, the court deals with illegality of weapons' use from the perspective of international humanitarian law.¹⁵⁰ However, despite the scrutiny of *jus cogens* that could be applicable to this case, the tension between the survival of states and that of humans is clearly reflected in the Opinion, which states that while nuclear weapons may be devastative and indiscriminant, courts cannot claim the usage of nuclear weapons to be illegal in *any circumstances*, particularly when states' survival is at stake.¹⁵¹

However, some scholars claim the applicability of humanitarian law as *jus cogens* to the usage of nuclear weapons. Werksman and Khakastchi argue that widely accepted perceptions of international humanitarian law as *jus cogens* could have been employed by the Court in order to prohibit usage of nuclear weapons.¹⁵² Moreover, some judges acknowledged that the principles which constitute international humanitarian law have the character of *jus cogens*. Judge Weeramantry stresses, "threat of use of nuclear weapons is absolutely prohibited by *existing law - in all circumstances and without reservation*."¹⁵³ He emphasizes the status of the humanitarian law as *jus cogens*, the impossibility of derogation of it and the character of genocide that use of nuclear weapon would actually bring.¹⁵⁴ Additionally, Judge Koroma refers to the nature of *jus cogens*, which humanitarian law has,

¹⁵⁰ "Legality of the Threat or Use of Nuclear Weapons :Advisory Opinion of 8 July 1996." Para. 74. Last modified 1996. Accessed November 25, 2012. <http://www.icj-cij.org/docket/files/95/7495.pdf>.

¹⁵¹ Laurence Boisson de Chazournes and Philippe Sands, "INTRODUCTION," *International Law, the International Court of Justice and Nuclear Weapons*, ed. Laurence Boisson de Chazournes and Philippe Sands (Cambridge: Cambridge University Press, 1999), 15.; "Legality of the Threat or Use of Nuclear Weapons", Para 95-6.

¹⁵² Jacob Werksman and Ruth Khalastchi, "NUCLEAR WEAPONS AND *JUS COGENS* PEREMPTORY NORMS AND JUSTICE PRE-EMPTED?," *International Law, the International Court of Justice and Nuclear Weapons*, ed. Laurence Boisson de Chazournes and Philippe Sands (Cambridge: Cambridge University Press, 1999), 184.

¹⁵³ "Legality of the Threat or Use of Nuclear Weapons :Dissenting Opinion of Judge Weeramantry." Last modified 1996. Accessed November 25, 2012. <http://www.icj-cij.org/docket/files/95/7521.pdf>.

¹⁵⁴ Ibid.

and claims that the use of nuclear weapons in any circumstances would violate the principles and rules of international law.¹⁵⁵

On the other hand, some are more cautious about the indiscriminate application of international humanitarian law as *jus cogens* that have non-derogable rights. Dupuy claims that the term the court utilized, *intransgressible*, does not enhance the legal status of the basic principles of humanitarian law, but the court's legal point of view and authority.¹⁵⁶ Judge Fleischhauer states, "the present state of international law does not permit a more precise drawing of the borderline between unlawfulness and lawfulness of recourse to nuclear weapons."¹⁵⁷

The significant impact of this judgment rests not upon the impact of this judgment *per se*, but upon the fact that this judgment framed the usage of nuclear weapons in international humanitarian law. This is mainly acknowledged to have the nature of *jus cogens* and can be incorporated in the ongoing phenomenon of transnational constitutionalism.¹⁵⁸

[Transnational constitutionalism] is based on the creation of norms for the limits of governmental power in the constitution of states, based on developing international principles of conduct, elaborated in the increasingly prominent organs of global discourse, including the United Nations, and emerging systems of regional human rights systems...[b]y the 21st century, political communities organized as states no longer constitute their governance apparatus in isolation, especially with respect to the

¹⁵⁵ "Legality of the Threat or Use of Nuclear Weapons :Dissenting Opinion of Judge Koroma." Last modified 1996. Accessed November 25, 2012. <http://www.icj-cij.org/docket/files/95/7523.pdf>.

¹⁵⁶ Pierre-Marie Dupuy, "BETWEEN THE INDIVIDUAL AND THE STATE: INTERNATIONAL LAW AT A CROSSROADS?," *International Law, the International Court of Justice and Nuclear Weapons*, ed. Laurence Boisson de Chazournes and Philippe Sands (Cambridge: Cambridge University Press, 1999), 457.

¹⁵⁷ Ved P Nanda, and David Krieger, *Nuclear Weapons and the World Court*, (New York: Transnational Publishers, Inc., 1998), 146.

¹⁵⁸ Great increases of national constitutions which incorporate *jus cogens*, especially basic human rights are obvious phenomena. See Frank Thomas M., and Thiruvengadam Arun K., "International Law and Constitution-Making," *Chinese Journal of International Law*, 2, no. 2 (2003): 492.

protection of the rights of their citizens and residents. State constitutions no longer represent unique expressions of the “souls” of nations expressed through law.¹⁵⁹

Transnational constitutionalism is featured by “transnational constitutional arrangements, transnational judicial dialogue and global convergence of national constitutions.”¹⁶⁰ Gardbaum emphasizes a very constitutional characteristic of international human rights law in which a government’s lawful behavior towards people is strictly regulated within their jurisdictions.¹⁶¹ Incorporation of basic human rights as *jus cogens* into states’ constitutions and transnational judicial dialogue appear to be critical dynamics toward the legalization of nuclear weapons.

In a sense, the ICJ’s judgment succeeded in creating impetus to bring the usage of nuclear weapons to the violation of fundamental human rights. Development of transnational constitutionalism promoted the prevalence of human rights as non-derogatory rights. Power of mutual judicial reviews and references are significant for this development.¹⁶² Judicial conversations across state boundaries are threefold: 1) domestic judicial reference to international norms including decisions by international tribunals, 2) domestic judicial reference to foreign laws of other nation-states including decisions of foreign national courts, and 3) reference made by international tribunals to other international regimes or decisions by other international tribunals.¹⁶³ The transnational judicial harmonization is especially best exemplified in the development of the European Convention of Human Right (ECHR) and cases of the

¹⁵⁹ Larry Catá Backer. "God(s) Over Constitutions: International and Religious Transnational Constitutionalism in the 21st Century." *Mississippi Law Review*. 27. (2008): 103-4. <http://ssrn.com/abstract=1070381> (accessed November 25, 2012).

¹⁶⁰ Jiunn-Rong Yeh, and Wen-Chen Chang, "The emergence of transnational constitutionalism: its features, challenges and solutions," *Penn State International Law Review*, 27 (2008): 50.

¹⁶¹ Stephen Gardbaum, "Human Rights and International Constitutionalism," *RULING THE WORLD?: Constitutionalism, International law, and Global Governance*, ed. Jeffrey L. Dunoff and Joel P. Trachtman (New York: Cambridge University Press, 2009), 237.

¹⁶² Elihu Lauterpacht, "JUDICIAL REVIEW OF THE ACTS OF INTERNATIONAL ORGANISATIONS?," *International Law, the International Court of Justice and Nuclear Weapons*, ed. Laurence Boisson de Chazournes and Philippe Sands (Cambridge: Cambridge University Press, 1999), 93.

¹⁶³ Yeh, and Chang, "The emergence of transnational constitutionalism," 50.

European Court of Human Rights (ECtHR). For instance, the decision of the German Federal Constitutional Court, the *Bundesverfassungsgericht* on October 14th, 2004 discussed the obligation in which a national court had to take Community law into consideration.¹⁶⁴ Beljin claims, “the Convention constitutes more than an ordinary statutory law [and] it has constitutional importance.”¹⁶⁵

With regards to the ICJ, Tsagouris points out that in comparison with the European Court of Justice (ECJ), particularly when relevant rules are not explicitly expressed, the ICJ is not willing to employ general principles as a constitutional role.¹⁶⁶ He also states the ICJ does not have “strong normative mechanisms to enforce compliance and absorb dissent are lacking.”¹⁶⁷

However, whether a state has a formal and binding obligation to follow *jus cogens* is not a matter of the “judicial globalization”¹⁶⁸ phenomenon, in which “diverse and messy process of judicial interaction across, above and below borders, exchanging ideas and cooperating in cases involving national as much as international law” take place. Currently, the massive effects of the global judicial network where there is no universal centralized hierarchy can be seen. Without top-down coercive enforcement power, knowledge constructed through global judicial networks creates its own harmonization and legitimacy beyond the states’ boundaries. This was seen in the *Brunner vs. The European Union Treaty*, in which the German Federal Constitutional Court (*Bundesverfassungsgericht*) clearly proposed relationship with the ECJ as horizontal cooperation rather than vertical hierarchy.¹⁶⁹

¹⁶⁴ Saša Beljin, "Germany: Bundesverfassungsgericht on the status of the European Convention of Human Rights and ECHR decisions in the German legal order. Decision of 14 October 2004," *European Constitutional Law Review*, 1, no. 3 (2005).

¹⁶⁵ Ibid., 556.

¹⁶⁶ Tsagourias, "The constitutional role of general principles of law," 99.

¹⁶⁷ Ibid.

¹⁶⁸ Anne-Marie Slaughter, "Judicial globalization," *Virginia Journal of International Law*, 40, no. 4 (2000): 1104.

¹⁶⁹ Ibid., 1107-8.

Under judicial globalization, the ICJ decision about nuclear weapons also has to be examined through the complexities of judicial networks and the power exercised through these networks. Identification of the usage of nuclear weapons with humanitarian law has substantial potential to evolve up to non-derogatory rights even when states' survival is at risk. The critical issue presented by the Advisory Opinion was the balance between individual rights and states' survival. When states' survival is at stake, a robust mechanism of international law and principles for the protection of human rights is required.¹⁷⁰ Article 15 of the ECHR describes the clause of derogation in time of emergency:

In time of war or other public emergency threatening the life of the nation any High Contracting Party may take measures derogating from its obligations under this Convention to the extent strictly required by the exigencies of the situation, provided that such measures are not inconsistent with its other obligations under international law.¹⁷¹

Requirements for derogation of basic human rights are extraordinarily strict not only under the ECHR but also under transnational jurisdiction. Therefore, usage of nuclear weapons even when states' survival is at stake must be strictly restricted, and in practice it can be considered almost impossible. Moreover, the evolution of *jus cogens* in global judicial networks can subsequently transform from the norm that the usage of nuclear weapons is a violation of humanitarian law to the norm that the existence of nuclear weapons *per se* is a violation of basic human rights as *jus cogens*. These potential developments of connection between nuclear weapons and human rights as *jus cogens* have been boosted by autonomous transnational judicial networks beyond states' authorities.

¹⁷⁰ Mohamed M. El Zeidy, "The ECHR and States of Emergency: Article 15 - A Domestic Power of Derogation from Human Rights Obligations," *San Diego International Law Journal*, 4 (2003): 227.

¹⁷¹ "European Convention on Human Rights." Accessed November 25, 2012.

http://www.echr.coe.int/NR/rdonlyres/D5CC24A7-DC13-4318-B457-5C9014916D7A/0/CONVENTION_ENG_WEB.pdf

Other Networks

Global Zero As Transnational Advocacy Networks

One of the largest current transnational civil networks, or transnational advocacy networks (TANs) regarding nuclear weapons is Global Zero. According to the official website, “Global Zero is the international movement for the elimination [of nuclear weapons including] 300 eminent world leaders and more than 400,000 citizens worldwide.”¹⁷² Global Zero set its four-phase plan for nuclear disarmament, which will be completed by the year 2030.¹⁷³ The movement includes grassroots efforts by civil society, deep dialogues with states, and a creation of a documentary movie titled, *Countdown to Zero* in order to increase public awareness towards nuclear disarmament.¹⁷⁴ *The Economist* emphasizes that roles of Global Zero in creating a worldwide mainstream norm in the past few years where politicians, retired military leaders and academic strategists have begun to share the same universal goal without nuclear weapons.¹⁷⁵

The huge influence of Global Zero was illustrated in the London Global Zero Summit in 2011, which received great attention from media throughout the world.¹⁷⁶ This Summit aimed to emphasize the overwhelming costs of possession of nuclear weapons.¹⁷⁷ The technical report for

¹⁷² Global Zero, "THE MOVEMENT." Accessed November 25, 2012. <http://www.globalzero.org/about-campaign>.
¹⁷²

¹⁷³ Global Zero, "GETTING TO ZERO." Accessed November 25, 2012. <http://www.globalzero.org/en/getting-zero>.

¹⁷⁴ Shubhra Chaturvedi. Eurasia Review, "Global Zero: The Road Ahead – Analysis." Last modified June 13, 2012. Accessed November 25, 2012. <http://www.eurasiareview.com/13062012-global-zero-the-road-ahead-analysis/>.

¹⁷⁵ "The growing appeal of zero: Banning the bomb will be hard, but not impossible." *The Economist*, June 16, 2011. http://www.economist.com/node/18836134?story_id=18836134&fsrc=rss (accessed November 25, 2012).

¹⁷⁶ Global Zero, "LONDON SUMMIT 2011." <http://www.globalzero.org/en/page/london-summit-2011>. (Accessed November 25, 2012.)

¹⁷⁷ James Blitz. "Nuclear-armed countries to spend \$1,000bn this decade." *Financial Times*, June 19, 2011. <http://www.ft.com/intl/cms/s/0/dc3dba1e-9aa4-11e0-bab2-00144feab49a.html>.

the Global Zero Summit in London 2011 states that over one trillion dollars must be spent on nuclear weapons among nuclear weapon states.¹⁷⁸

In its May 2012 issue, *The Economist* claims that President Vladimir Putin's boycott of G8 was ascribed to a complaint towards the Global Zero report, which emphasized bilateral negotiations between the U.S. and Russia to achieve deep cuts.¹⁷⁹ In addition, the Heritage Foundation, one of the most influential conservative think tanks in the U.S., supporting the possession of nuclear weapons for security, expressed fear that the report arguing that the U.S. should reduce its nuclear weapons to 900, would be used as an authoritative document by Obama.¹⁸⁰ As these examples show, Global Zero as a TAN has been a very powerful movement. There are some factors that make this movement influential: normative change regarding nuclear weapons, multi-level participation, and association with state governments and leaders.

(1) Normative change regarding nuclear weapons

Past movements of global nuclear disarmament had been weak, since they advocated somewhat abstract concepts of immorality of nuclear weapons, mainly supported by political leftists.¹⁸¹ However, the central norm advocated by Global Zero is "danger associated with

¹⁷⁸ Bruce G Blair, and Matthew A. Brown, "WORLD SPENDING ON NUCLEAR WEAPONS SURPASSES \$1 TRILLION PER DECADE," *Global Zero Technical Report Nuclear Weapons Cost Study | June 2011*, [http://www.globalzero.org/files/scott/Global Zero Cost Study, June 2011.pdf](http://www.globalzero.org/files/scott/Global%20Zero%20Cost%20Study,%20June%202011.pdf) (Accessed November 25, 2012).

¹⁷⁹ "Global zero: Fewer nukes, more security." *The Economist*, May 16, 2012. <http://www.economist.com/blogs/clausewitz/2012/05/global-zero> (Accessed November 25, 2012).

¹⁸⁰ Rebecca Heinrichs, "Policymakers Should Disregard "Global Zero" Report," *THE FOUNDAry* (blog), May 17, 2012, <http://blog.heritage.org/2012/05/17/policymakers-should-disregard-global-zero-report/>. (Accessed November 25, 2012.)

¹⁸⁰ See also Global Zero, "U.S. NUCLEAR POLICY COMMISSION" <http://www.globalzero.org/en/US-Senate-Appropriations-Hearing-July-2012>. (Accessed November 25, 2012.)

¹⁸⁰ See also "2008 GLOBAL SURVEY OF THINK TANKS FACT SHEET" http://www.foreignpolicy.com/files/2008_Global_Zero_To_Think_Tanks.pdf (Accessed November 25, 2012).

¹⁸¹ S. Samuel C. Rajiv. Institute for Defence Studies and Analyses, "Global Zero and Nuclear Disarmament Activism." Last modified July 19, 2011. Accessed November 25, 2012. http://www.idsa.in/idsacomments/GlobalZeroandNuclearDisarmamentActivism_sscrajiv_190711.

nuclear terrorism.”¹⁸² This norm strikes people’s mind at a global level, because it makes the danger seem imminent particularly because of the experience of 9.11.

(2) Multi-level of participation

The Global Zero movement is supported in multi-layered levels of groups including political and military leaders, students, and civilians at the global level. Unlike the previous International Physicians for Prevention of Nuclear War (IPPNW), the Pugwash Conferences on Science and World Affairs, and Nuclear Weapons Freeze Campaign, Global Zero is both de-territorialized and multi-level movement. While it has world level commissions including current political leaders, it also has large grass root campaigns such as students submit. By doing so, Global Zero has succeeded in enhancing public participation, towards which many transnational social movements work hard.

(3) Association with state governments and leaders

As described above, the most crucial strength of Global Zero is that its movement is firmly associated with political leaders across the world. That is, through its strong agenda-setting power, it has the ability to strongly influence state leaders. The leaders even participated in a summit, which was not a summit of formal IOs. President Obama stated in the 2010 Global Zero Summit in Paris, “Global Zero works to build grassroots and public support, you will always have a partner in me and my administration.”¹⁸³ President Dmitry Medvedev also stressed, “I am confident, that a productive dialogue and joint efforts of global community will help to achieve the major goal—to ensure a safe and sustainable future for our common planet.”¹⁸⁴ The

¹⁸² Ibid.

¹⁸³ Global Zero, "Opening Day Statement from Global Zero Leaders" Accessed November 25, 2012. <http://www.globalzero.org/en/opening-day-statement-global-zero-leaders>.

¹⁸⁴ Ibid.

direct connection with state leaders and governments enable Global Zero to exercise its normative and surveillance power more efficiently.

These three prominent features have made Global Zero an unprecedented movement of nuclear disarmament. Lake and Wong claim Amnesty International (AI), as one of the most influential TANs that have been successful in setting human rights norms as a result of its two characteristics: one is “the capacity of the central node ... to control the content of the AI human rights agenda [and another is] its ability to attract new adherents.”¹⁸⁵ Indeed, Global Zero can be evaluated and comprised of these two key elements thus far.

However, there is substantial concern and opposition from realists about Global Zero’s advocacy of disarmament. From the realist perspective, Davis and Josef claim that “the idealism of Global Zero becomes not merely irrelevant but possibly tragic, obstructing the sensible policies required to maintain a credible modern deterrent.”¹⁸⁶ Moreover, there is concern that a possible failure of bilateral negotiation between the U.S. and Russia will ruin the entire process towards disarmament. Since Global Zero is a very new phenomenon, few studies addressing this issue have been conducted so far. Although the potential power of Global Zero seems to be enormous, further studies are required to see the future development.

NPO Networks

Non-Profit Organizations’ (NPOs) roles as one of nuclear power should be considered. These institutions play prominent roles in advocating the legitimacy of nonproliferation or disarmament, although a few do, and collecting and analyzing information regarding nuclear

¹⁸⁵ David A. Lake and Wendy H. Wong, “The Politics of Networks: INTERESTS, POWER AND HUMAN RIGHTS NORMS,” *Networked Politics: AGENCY, POWER, AND GOVERNANCE*, ed. Miles Kahler (London: Cornell University Press, 2009), 149.

¹⁸⁶ Joffe and Davis, “Less Than Zero.”

weapons. Particularly in the U.S. the disproportion rate of non-proliferation-focus institutions to disarmament-focus institutions reflect the legitimacy of the word “non-proliferation” rather than “disarmament.” Public education by these institutions is influential. As discursive change to disarmament occurred, the normative shift of NPOs will be expected in subsequent years.

As for the role in collecting and analyzing information, for example, the Institute for Science and International Security (ISIS) conducts technical analyses of nuclear proliferation through the examining of technical data and satellite imagery. On March 13th, 2012 the ISIS “has identified in commercial satellite imagery a building on the Parchin site in Iran that the International Atomic Energy Agency (IAEA) wants to visit because it contains, or used to contain, a high-explosive test chamber.”¹⁸⁷ Although these NPOs are mostly government-sponsored, and typically follow national interests, by providing significant information about proliferation, they substitute governments’ former functions. Therefore, they are functionally differentiated and independent, if not fully independent, actors in governance of nuclear arms control.

¹⁸⁷ David Albright and Paul Brannan. INSTITUTE FOR SCIENCE AND INTERNATIONAL SECURITY, “Satellite Image of Building Which Contains a High Explosive Test Chamber at the Parchin Site in Iran.” Last modified March 13, 2012. <http://isis-online.org/isis-reports/detail/satellite-image-of-building-which-may-contain-high-explosive-test-chamber-a/>. (Accessed November 25, 2012.)

Transnational Networks of Poly-Centralized Governance in Nuclear Arms Control

All networks of nuclear power (i.e., terrorist networks, nuclear trafficking networks transgovernmental networks, global nuclear energy networks, global judicial networks, and NGO and NPO networks) create *transnational networks of poly-centralized governance in nuclear arms control*. Every network that is involved with nuclear power has its own autonomy and is functionally differentiated; yet, these networks are also profoundly intertwined with one another. In traditional state-centered gaze, it appears that the monolithic collection of states is faced with non-state terrorist groups exercising sovereign power to control all of the nuclear materials and initiate nuclear disarmament. However, in reality, a collection of states is not a primary actor in the dynamics of nuclear reality. Dean claims that governance is “multiple and heterogeneous, involving different types of agency and authority and involving different types of agency and authority and employing different types of thought. Thought, however, is a collective product.”¹⁸⁸ Thought indicated here refers to human security involved with nuclear materials and weapons with different intentions and aims. There are six characteristics of this governance.

(1) *Deterritorialized and Metamorphic*

Unlike traditional states’ centered structures, which are territorialized and solid, networks of poly-centralized governance are deterritorialized, and metamorphic. They are deterritorialized because networks are connected cross borders or transnationally. State sovereignty is merely one element in this governance rather than an ultimate source. Additionally, it is metamorphic since these networks must be adaptive to the dynamics of intertwined nuclear power due to frequently changing circumstances.

(2) *Fractured Power*

¹⁸⁸ Mitchell Dean, *Governmentality: Power and Rule in Modern Society*, (Thousand Oaks: Sage Publications, Inc, 1999), 27.

Power is produced from networked relations and is sparsely distributed. Importantly, none of the powers can dominate the entire system, unlike the traditional state-centered gaze, which views states as the dominant factors controlling world nuclear reality. Power is disaggregated horizontally at multiple levels rather than vertically. Each network competes with each other and tension among them is substantially high.

(3) Easily Reversible Power

In networks of poly-centralized governance, power relations can easily be reversed. Transnational judicial networks indicate that national courts are not ultimate sources but parts of a larger (?) court in global networks, which creates harmonization among them. Also, networks of NGOs such as Global Zero subjugate states under their surveillance. Therefore, traditional coercive power such as hard law no longer function to serve as a dominant power.

(4) Functionally and Teleologically Differentiated Autonomy

All networks have different motivations and functions in the entire governance. As previously mentioned, networks of nuclear power are independent and have their own strong autonomy according to their own functions and motivations. Yet, none of these networks can avoid interacting with other networks. There is no single center but many distributed centers in the system; that is, the networks are poly-centralized.

(4) Constant Information Flow

Constant information flow is critical for all of the networks to survive and function effectively in their roles. In networks of poly-centralized governance, competition and interactions among networks “revolve around ‘knowledge’”¹⁸⁹ The development of information technology produces severe competition between networks that attempt to protect human security and between the ones that attempt to violate it. Information on nuclear materials for

¹⁸⁹ See Arquilla and Ronfeldt, "THE ADVENT OF NETWAR," 1.

security cannot be completely secret. This is because sharing the information among defenders is essential for securing nuclear materials that exist in numerous places. Terrorist groups and nuclear black markets also participate in information flow by obtaining information about nuclear materials and weapons. This sharing of information exists not only between defenders and violators, but also among defenders and among violators, within which competition for information is severe. Information is divided and categorized according to its quality and shared within a network in which more accurate and faster information acquisition make a network superior to other networks. The significance of information and development of technology have created a driving-force of deep interaction among networks.

(5) *Surveillance as a Regulatory Mechanism*

A mechanism through which power is asserted and regulation is affected in a world of shared public and private governance is surveillance.¹⁹⁰ Surveillance also represents the shift from power-sovereign to power. Foucault explains how surveillance or ‘the eye of power’ functions in *Discipline and Punish (year)*,

“[h]e who is subjected to a field of visibility, and who knows it, assumes responsibility for the constraints of power; he makes them play spontaneously upon himself; he inscribes in himself the power relation in which he simultaneously plays both roles; he becomes the principles of his own subjection.”¹⁹¹

In nuclear power, surveillance as a means of management of human security is crucial. For example, in the nuclear energy industry, private corporations as stakeholders participate in creating regulations for management of nuclear material. Private institutions and civil organizations collect information about nuclear materials and provide information to state

¹⁹⁰ Larry Catá Backer, "Global Panopticism: States, Corporations, and the Governance Effects of Monitoring Regimes," *Indiana Journal of Global Legal Studies*, 15, no. 1 (2008): 1.

¹⁹¹ Michel Foucault, *Discipline & Punish: The Birth of the Prison*, (New York: Vintage Books, 1995), 202-3.

governments and the public. That information is then employed and judged by high officials who create transgovernmental networks.

In terms of nuclear weapons and human rights, transnational judicial networks invade the sphere which states use to dominate and produce strong normative power. Surveillance is also employed in terrorist group networks and black markets in order to regulate their own activities so that secrecy can be kept. Hence, surveillance expands its function beyond public spheres to private spheres and acts as one of the most critical mechanisms of governance.¹⁹² As a function of surveillance, it is involved with information gathering, value judgment, and regulation. Through surveillance, Foucault's power and knowledge is felt. Networks of surveillance between the entities produce knowledge and create their own "truths"¹⁹³ along which each actor behaves. Truth is created in the system of circulating power and knowledge: "'Truth' is linked in a circular relation with system of power, which produces and sustains it, and to the effects of power which it induces and which extend it."¹⁹⁴ Through this process, surveillance becomes both "government (apparatus) and governmentality (its self-conception and complicity, the prisoner becomes his own keeper)."¹⁹⁵ By collecting information and creating knowledge about other entities, all of the entities are under surveillance and conduct self-regulation.

Philip G. Cerny describes this plurality of global political situation as "neomedievalism.":

Neomedievalism means that we are increasingly in the presence of a plurality of overlapping, competing, and intersecting power structures—institutions, political processes, economic developments, and social transformations—above, below, and cutting across states and the states system. States today represent only one level of this

¹⁹² Backer, "Global Panopticism," 3.

¹⁹³ The Nietzschean and Foucauldian notion of truth is that truth is not something discovered but created. *See, e.g.,* Friedrich Nietzsche, *On The Genealogy of Morals*, (New York: Vintage Books, 1989).

¹⁹⁴ Michel Foucault, *Power/Knowledge Selected Interviews & Other Writings 1972-1977*, (New York: Vintage Books, 1980), 133.

¹⁹⁵ Backer, "Global Panopticism," 45.

power structure, becoming more diffuse, internally split, and enmeshed in wider complex webs of power.¹⁹⁶

According to Cerny, there are some features about neomedievalism. The first is that entities and networks such as states, transgovernmental networks, and private organizations and the likes compete with each other and activities of all the entities or networks are interacted and exchanged whose influences are never mutually exclusive.¹⁹⁷ The second is that territorial limitation is dissolved.¹⁹⁸ The third is sparsely and unevenly distributed spaces at the global scale.¹⁹⁹ The fourth is that identities are fractured.²⁰⁰ This neomedievalism is not chaos, but a relatively “durable disorder.”²⁰¹ Therefore, having the characteristics of neomedievalism, all the nuclear networks have created poly-centralized transnational governance in nuclear arms, which traditional state-centered gaze has dismissed, particularly the great recession of centralized states sovereign-power.

Conclusion: Recession of State Sovereignty and the Future of Nuclear Disarmament

Back in 1997, Jessica T. Mathews claimed, “the absolutes of the Westphalian system -- territorially fixed states where everything of value lies within some state's borders; a single, secular authority governing each territory and representing it outside its borders; and no authority above states -- are all dissolving.”²⁰²

¹⁹⁶ Philip G Cerny, "TERRORISM AND THE NEW SECURITY DILEMMA," *Naval War College Review*, 58, no. 1 (2005): 12. (emphasis added)

¹⁹⁷ Ibid., 20-2.

¹⁹⁸ Ibid., 22-5.

¹⁹⁹ Ibid., 26-8.

²⁰⁰ Ibid., 18-9.

²⁰¹ Ibid., 29.

²⁰² Jessica T. Mathews. "THE RISE OF GLOBAL CIVIL SOCIETY." *Foreign Affairs*, Jan/Feb 1997. <http://www.foreignaffairs.com/articles/52644/jessica-t-mathews/power-shift>

Recently, in *Walled States, Waning Sovereignty*, Wendy Brown nicely describes the erosion of nation-state sovereignty under globalization, considering the recent spate of wall building as a sign of it. She claims that

“the role of and status of states in both domestic and international politics have been altered by the twin forces of denationalized economic space and re-nationalized political discourse, by the separation of sovereignty from states ... states do not dominate or order, but react to the movements and imperatives of capital as well as to other global phenomena, ranging from climate change to transnational terror networks.”²⁰³

As they describe, today’s state sovereignty cannot dominate global order. Fractured power creates global reality in which state sovereignty is only a part. As I have elaborated thus far, state centralized gaze of nuclear arms governance dismisses nuclear power, which actually creates nuclear reality. In the complexity of nuclear power, the extent to which states exercise their sovereign power is strictly limited. As Obama claimed, nuclear disarmament and security of nuclear materials is an imminent matter for the human race. However, the decision of nuclear disarmament is no longer upon states but upon nuclear power surrounding states. Obama’s discourse dismissed global networks of nuclear weapons. However, his emphasis on the cooperation of states can be interpreted as an indication to bring states with waning sovereignty back as dominant actors in the field of global politics. Therefore, Obama’s discourse can be interpreted as an expression of states’ resistance of global networks of nuclear power, or more generally, as other influential non-state actors and the dynamics of globalization. Yet, as mentioned earlier in the preceding section (i.e., power analysis), his discourse as resistance towards global nuclear power is destined to be incorporated into the entire discourse of global networks of nuclear power. That is, resistance is an internal part of complete power rather than an external force. In this web of power, a new discourse of nuclear weapons can not be

²⁰³ Wendy Brown, *Walled States, Waning Sovereignty*, (New York: Zone Books, 2010), 66-7.

redirected from “what we actively should or can do,” to “what we are forced or destined to do.” From this new discourse, the realists’ claim of nuclear disarmament appears very idealistic. It is the realists who actually cannot grasp the entire picture of nuclear power. Hence, a realist is an optimistic supporter of disarmament. In this sense, Obama’s discourse implicitly reveals a pathetic ambition of states’ revival and unpredictable future of global nuclear reality.

My aim in this paper was not to give a solution for nuclear disarmament but to create a new discourse towards nuclear disarmament that a dominant state-centered gaze cannot grasp. This new discourse of nuclear power will also allow us to reconsider what is referred to as a rogue state’s acquisition of nuclear weapons. It is indeed true that state-centered regimes and discourse of non-proliferation and disarmament have had a great impact on nuclear arms control throughout the world. However, it is also true that all of the non-proliferation discourse and regime has focused on the self-justification of nuclear weapon states. Moreover, the current disarmament discourse also heavily relies on the realism perspective of nuclear arms control.²⁰⁴ The plans of gradual reduction of nuclear weapons between the U.S. and Russia reflect this perspective more or less. As long as states rely on the realist perspective, although they can reduce weapons to a certain amount, they do not take initiative to abandon their weapons.

For states, nuclear weapons are a symbol of sovereignty. That is, if sovereignty did not exist, there would be no nuclear weapons. As Max Weber said, “a state is a human community that (successfully) claims the monopoly of the legitimate use of physical force within a given territory.”²⁰⁵ Further, state-sovereignty has given people rational national self-identity. However,

²⁰⁴ About realist view of nuclear weapons, for example, See Kenneth N. Waltz, "MORE MAY BE BETTER," chap. 1 in *THE SPREAD OF NUCLEAR WEAPONS: A DEBATE*, ed. Kenneth N. and Scott D. Sagan (New York: W.W.NORTON & COMPANY, 1995).

²⁰⁵ Max Weber, "Politeis as a Vocation": 1, <http://anthropos-lab.net/wp/wp-content/uploads/2011/12/Weber-Politics-as-a-Vocation.pdf>. (accessed November 25, 2012).

under globalization where people cannot encounter many “others,”²⁰⁶ idolized and straightforward self-identity has been ripped off. Cerny calls this “fragmented identity” in which people tend to have multiple disaggregated identities under the influence of globalization rather than centralized holistic identities.²⁰⁷ Nuclear weapons were born and proliferated in order to protect states’ security, which was originally, an “imagined community.”²⁰⁸ Although the lives of human beings are constantly exposed to the perils of survival, the theory of nuclear deterrence prefers to protect states’ survival, which is a completely apocalyptic idea. That is why we must create a new discourse of nuclear power, which disenchant the illusion of states sovereignty.

Some would agree that efforts by a collection of states can prevent nuclear terrorism and protect human security since actual nuclear terrorism has never occurred. However, this is too naive and optimistic. David Hume once criticized this typical inductive reasoning by stating, “[a]s to past Experience, it can be allowed to give direct and certain information of those precise objects only, and that precise period of time, which fell under its cognizance: but why this experience should be extended to future times, and to other objects, which for aught we know, may be only in *appearance* similar; this is the main question on which I would insist.”²⁰⁹ Therefore, causal relations of the future do not necessarily parallel causal relations of the past. This applies to nuclear arms control as well. Most importantly, nuclear terrorism or nuclear-related accidents could happen anytime and states have no control over them. The current

²⁰⁶ I use other as the same concept of what Emmanuel Levinas calls “the Other” “The absolutely other is the Other. He and I do not form a number. The collectivity in which I say “you” or “we” is not a plural of the “I.” I, you—these are not individuals of a common concept. Neither possession nor the unity of number nor the unity of concepts link me to the Stranger Over him I have no power.”

²⁰⁶ Emmanuel Levinas, *Totality and Infinity*, (Pittsburgh: Duquesne University Press, 1969), 39.

²⁰⁷ Cerny, “TERRORISM AND THE NEW SECURITY DILEMMA,” 26.

²⁰⁸ A nation (state) “is imagined because the member of even the smallest nation will never know most of their fellow-members, meet them, or even hear of them, yet in the minds of each lives the image of their communion.” Benedict Anderson, *Imagined Communities*, (London: Verso Books, 2006), 6.

²⁰⁹ David Hume, “An Enquiry Concerning Human Understanding: Section IV - SCEPTICAL DOUBTS CONCERNING THE OPERATIONS OF THE UNDERSTANDING,” <http://18th.eserver.org/hume-enquiry.html>. (emphasis added)

discourses of nuclear arms control including both the pros and cons provided through Obama's speech do not capture nuclear power. However, the suggested transnational gaze and discourse provide potential for considering the urgent demand of immediate disarmament.