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Nuclear Security Complexes: An Alternative Approach to Nuclear Nonproliferation

Beyza Unal

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NUCLEAR SECURITY COMPLEXES: AN ALTERNATIVE APPROACH TO NUCLEAR NONPROLIFERATION

by

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ABSTRACT

NUCLEAR SECURITY COMPLEXES AN ALTERNATIVE APPROACH TO NUCLEAR NONPROLIFERATION

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Old Dominion University, 2014
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Existing literature examines nuclear proliferation from a regional or a national perspective but nuclear issues are inherently transnational. The literature also often focuses on single-state policies for deterrence purposes. Following tailored (single-state) policies, however, is too narrow because these policies are bilateral and based on national interest; they do not include global concerns. In response to the literature, this dissertation proposes to examine states grouped according to their state characteristics in terms of threat existence, democracy level in the nuclear field, and membership in nuclear organizations and compliance with major nuclear treaties. The focus here is to ask: “Does regional security complex theory explain nuclear behavior?” To some extent it does. Regional security complex theory groups states in relation to their geopolitical context. This grouping method is essential for the model that I call nuclear nonproliferation security complexes. Different than the former theory, I argue that nuclear issues are inherently transnational, not regional, and states’ nuclear behavior is shaped by the aforementioned state characteristics.

This model places states into seven different groups in terms of their characteristics. A triple Venn diagram helps to picture this conceptualization. The first three groups—called material, liberal, and norms-based security complexes—are the core parts of the Venn diagram. Security complexes four through six lie on the
intersections between one, two, and three, with the seventh lying at the center. The state characteristics of Iran, Israel, Turkey and the United States are examined in order to understand how the model functions. This dissertation finds that despite having common Middle Eastern security concerns, Iran, Israel and Turkey follow different nuclear policies and their relationship with the United States is a fundamental factor in their nuclear decision-making. In conclusion, I suggest that the United States should differentiate its national interest, which is more to follow nuclear nonproliferation policies, from the global interest, which is to follow nuclear disarmament policies. From this perspective, the United States should find equal ground for both policies to work in conjunction with each other. This could lead to a more comprehensive nuclear approach that incorporates and engages with all actors.
Aileme
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CHAPTER 1
INTRODUCTION

Both nuclear proliferation literature and various attempts to contextualize the new world order suffer greatly from a lack of theoretical perspective that supports alternative policy-making. Existing policies are a result of regional or national interest calculations and do not help to create an enduring international nuclear regime at a global level through multiple party engagements. The Nuclear Nonproliferation Treaty (NPT), in theory, is an example of how close we come to establish a universal treaty that’s Articles are subject to both nuclear weapon states\(^1\) and non-nuclear weapon states. In practice, NPT lacks commitment and action by both nuclear weapon states and non-nuclear weapon states. This dissertation is positioned around this logic to understand and explain nuclear behavior of nuclear weapon states and non-nuclear weapon states, through their fundamental state characteristics.

The nuclear literature is heavily dominated by studies that rest on regional context and studies that are too narrowly defined through single-state examination. These studies disregard an alternative way, which is a non-territorial approach to nuclear nonproliferation. This dissertation aims to fill this gap by proposing to group states regardless of their regions. The puzzle is nuclear issues are inherently transnational and should not be reduced to a regional or national level. Regional and national policies at the

\(^1\) Nuclear Proliferation Treaty defines a nuclear weapon state as “one which has manufactured and exploded a nuclear weapon or other nuclear explosive device prior to 1 January 1967.” This dissertation takes into account both *de jure* (China, France, Russia, United Kingdom, United States) and *de facto* (India, Israel, North Korea, Pakistan) nuclear weapon states. See Article IX in United Nations Office for Disarmament Affairs. March 5, 1970. Treaty on the Non-Proliferation of Nuclear Weapons.
decision-making level will suffer from any general framework that could be established in the long run.

The purpose of this research is to suggest an alternative theoretical and policy approach to nuclear nonproliferation in order to unfold existing nuclear problems. Some states choose to proliferate while others do not and the reasons behind these different policy choices are not necessarily the same. There is one common theme when states attempt to legitimize their nuclear programs, which is the ongoing power disparity between nuclear weapon states and non-nuclear weapon states. This disparity is an enduring feature of the modern world that is based on hierarchical structures and great power dominance. One way to deal with this disparity is to strengthen nuclear organizations’ decision-making to a level that objective policies are feasible.

RESEARCH QUESTION AND ARGUMENTS

With the aim of moving theory closer to the policy realm, this dissertation analyzes security complex theory for nuclear proliferation behavior. The main research question is “Does security complex theory explain nuclear proliferation and nonproliferation behavior?” To some extent it does. I argue that conventional security complex theory provides the fundamental understanding, which is to group states; however, it is filtered through geopolitical boundaries. I argue that nuclear issues, are transnational in nature. I, therefore, propose to group states in terms of their state characteristics that shape their nuclear posture, without regional limitations. The main reason for extracting geographic location out of my analysis is because nuclear issues are...
transnational in nature; nuclear weapons, knowledge, and material cross boundaries. I do not disregard regional calculations framing national interest; however, I go beyond this thinking, to seek an alternative nuclear policy understanding. Grouping states in terms of state characteristics that shape their nuclear posture creates awareness and generates alternative policies that may unlock the current stalemate in the nuclear nonproliferation and disarmament field.

A sub-argument that I follow, posits nuclear issues as part of a security puzzle rather than a pure political matter; thus, I argue that nuclear proliferation should be securitized rather than politicized. To politicize an issue means that it becomes a tool for policy-making that serves national interest and become an object of domestic politics. The United States, for instance, views Iranian nuclear proliferation as a matter of policy because domestic organs, like Congress and the State Department, cannot converge on a single policy position regarding Iran. An issue being securitized means it is a matter of security; above daily political dynamics; therefore, it should be handled through higher (international organs); bypassing the daily politics.

After addressing the main characteristics of the conventional security complex theory and applying these characteristics to nuclear proliferation, I suggest amending the theory, by grouping states with regards to their state characteristics (threat existence, democratic nuclear policies, membership to nuclear organizations and compliance to international treaties) rather than their geographical positioning. This argument is followed through a theoretical undertaking, resulting in what I call ‘nuclear security complexes.’
RESEARCH THEORIES

The main theory of this research is Barry Buzan and Ole Waever’s Regional Security Complex Theory. This theory rests on constructivist framework with realist regional dimensions. It is selected to understand and explain nuclear nonproliferation behavior in the post-Cold War era. This dissertation aims to go beyond this conventional theory by modeling a new approach to nuclear nonproliferation studies. This alternative model—grouping states in terms of state characteristics—rests primarily upon three fundamental theories: realism, liberalism, and constructivism. The selected variables for identifying state characteristics also come from the theoretical literature. Realist scholars indicate threat existence as the main variable for nuclear proliferation. Liberal scholars posit the role of domestic actors, scientific groups, and democratic nuclear policies in nuclear decision-making; whereas constructivist scholars indicate the role of nuclear institutions and treaties to curb nuclear proliferation. These theories are the backbone of this dissertation because they demonstrate the differences and nuances in nuclear policies through a theoretical framework.

The idea to group states in terms of their state characteristics emerge after reading Alexander Wendt’s Social Theory of International Politics. Following a structural approach, Wendt argues that not only national interest but also social interactions matter in state-to-state relations. Wendt, then, establishes three types of cultures that dwell under anarchy: Hobbessian culture, Lockean culture and Kantian culture. All three cultures exist at the same time, the author says. Nuclear security complexes are formed with the inspiration from Wendt’s work. Material security complex (realism), liberal security
complex (liberalism) and Norms-based Security complex (constructivism) are all existing structures in the world. Then, it is futile to explain a world through a single theoretical lens.

RESEARCH DESIGN AND METHODOLOGY

There are three main methodological designs used in this dissertation. First one is the falsification method, designed by Karl Popper. By applying conventional security complex theory to nuclear proliferation and suggesting that it does not hold for transnational issues, the method rests on falsification of theory. This dissertation uses the method of taxonomy, which is to classify or group states. Taxonomy is a method that has been used in social sciences to understand and analyze phenomenon. Yet, it is generally underestimated and not noticed in the nuclear field. Nuclear scholars make an implicit classification in the literature, but have not used grouping as a method. This dissertation aims to fill this gap because grouping is not only a method of mapping but also a method of linking the dots in that mapping. Taxonomy, in this dissertation, is relevant for classifying states in terms of state characteristics that shape their nuclear posture. Based on this classification, a group-level-policy approach becomes viable to tackle proliferation. Classifying states is also important to create awareness on nonbiased nuclear policies at the international level.

This dissertation also uses case study methodology (examples) to understand how the proposed theory works. These case studies (Iran, Israel, Turkey and the United States) do not test nuclear security complex theory; rather they are the examples to demonstrate
the ways in which the proposed theory functions. In other words, these cases are the operationalization of the nuclear security complex theory. Throughout the case studies chapter, I use primary data from the International Atomic Energy Agency and the United Nations Office of Disarmament Affairs. Notably, the working group papers of Islamic Republic of Iran\(^2\), Israel, Turkey and the United States at the Preparatory Committee Meetings in the Review Conference of the Parties to the Treaty on the Non-Proliferation of Nuclear Weapons, shed light on the nuclear posture of these states. I have used several governmental documents while examining Turkey and the United States. Lastly, while examining the state characteristics and nuclear posture of Israel, my research is based on unclassified United States’ documents.

**CONTEXT**

The word 'complex' originates from the Latin word *complexus* and it first appeared in English in the 17\(^{th}\) century. When used as a noun, *complectere* means to embrace or to comprise. In the modern dictionary, a complex is "a group or system of different things that are linked in a close or complicated way."\(^3\) A nuclear security complex then is a group of states that share similar nuclear posture. To analyze states' nuclear posture, I examined their state characteristics through an examination of the nuclear literature review. I argued that states facing threat existence have nuclear ambiguity as state policy. States that base their nuclear dialogues on a ground of

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2 Unless stated otherwise, I refer to Islamic Republic of Iran simply as Iran in this dissertation.  
democracy are likely to follow nuclear nonproliferation posture, if not proliferated already. The nuclear weapon states in this group are also likely to follow nuclear non-proliferation policies. States that base their nuclear dialogues on international nuclear organizations and internalized nuclear nonproliferation through domestic policy structures are likely to follow nuclear disarmament posture. These three nuclear postures are not in accord with each other at all times. As a result of clashing national interest, there is not much change on nuclear undertakings in the 21st century.

I suggest employing a common nuclear policy-security response at the international level for states in the same nuclear security complex, with the aim of eradicating biased third-party involvement for the case-by-case assessment and addressing of proliferation problems. More or less impartial nuclear nonproliferation policies are possible at the international level4. These policies are likely to accelerate dialogue among parties since favoritism will diminish and hierarchical power dimensions in the nuclear arena will dissolve. The international policies might range from deterrence policies to non-proliferation and disarmament.

Nuclear security complexes place states into seven different groups, which can be helpfully conceptualized through a triple Venn diagram (see Figure 1 below). The first three complexes, called material, liberal, and norm-based security complexes are the core parts of the Venn diagram. Security complexes four through six lie on the intersections between one, two, and three, with the seventh lying at the center. The seventh nuclear security complex has only the United States as its sole member. The United States is the

4 I mean an international level engagement where all parties have equal saying on the matter. United Nations Security Council for instance is an international organ, but the hierarchical positioning of the Security Council members over the members of the General Assembly limits this sort of engagement that I am referring to here.
main actor that has the ability to shape and influence other security complexes, projecting its national interest in nuclear nonproliferation policies. In this regard, all security complexes have distinguished characteristics/variables to explain nonproliferation. This model suggests addressing alternative policies to each group of states rather than to each state \textit{per se}.

Figure 1. Nuclear Security Complexes based on State Characteristics

Security complex theory renders an alternative policy-making context to unfold the nuclear proliferation problems that exist in the 21\textsuperscript{st} century. The key point of this alternative policy is an awareness of similar nuclear postures and state characteristics. After a careful analysis, North Korea and Israel are found to be the members of the same, material, security complex. This means, a common policy that is excused of third-party national interest, is projected by both North Korea and Israel. Alienating Israel and other \textit{de facto} nuclear weapon states from the proliferation dynamic complicates the nuclear
posture of several other states; one of which is Iran, as it officially claims equal nuclear nonproliferation and disarmament policies for all parties. Therefore, understanding the similarities in the nuclear behavior of states is also important when attempting to generate an alternative policy making model.

The cognizance of states in different geographies having similar nuclear postures brings about the question; how does the established nuclear regime tackle possible nuclear proliferator states? I argue that the United States makes its 'national interest' a synonym of the 'international interest' in the 21st century, at least in the nuclear field. It is the United States that shapes the international nuclear agenda. The United States’ Nuclear Posture Review Report of 2010, for instance, shows the on-going role of strategic deterrence and stability in the United States’ national security as well as significance of nuclear proliferation. The Nuclear Posture Review Report does not weigh nuclear disarmament as equally as nuclear nonproliferation. In other words, it prioritizes non-compliance over nuclear abolishment.

The national interest based policies of the United States jeopardizes the global interest too. The United States government, for instance, blocked the last meeting of the Conference on Disarmament (CD), which was going to take place on March 25th 2013. Erin Pelton, the Spokesperson at the United States Mission to the United Nations, stated that the United States posture was a result of Iran’s upcoming Presidency position at the CD. Pelton stressed “countries that are under Chapter VII sanctions for weapons
proliferation or massive human rights abuses should be barred from any formal or ceremonial position in UN bodies.  

There are no clear-cut differences between the interest of the United States and the interest of the United Nations Office of Disarmament Affairs when the United States uses the international forum as leverage for its national interest. The nuclear treaties and agreements are also synonym of the United States' national posture. The North Atlantic Treaty Organization's (NATO's) nuclear posture, stated in the 2010 Strategic Concept, shares common statements with the United States' Nuclear Posture Review Report. The problem at the moment is that the United States does not differentiate the international will from its national interest. This, therefore, results with an international nuclear policy that is driven by the United States interest in which neither the states following nuclear disarmament policy nor the states following nuclear ambiguity policy are happy of. Some of the states that oppose the nuclear agenda driven by nuclear non-proliferation is not only Iran, but also European states, like Norway and Sweden. It is noteworthy to see these states with different state characteristics follow a similar nuclear policy, but with different rational behind. North Korea and Iran use nuclear disarmament as leverage against the nuclear weapon states; whereas, European states ask for nuclear disarmament because of their support to international nuclear regime that is based on nuclear abolition.

The United States is being challenged majorly in different settings, including in the nuclear nonproliferation field. President Obama does not bring anything new to the table to solve the issues in the Middle East or in Asia, for instance. To have a

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comprehensive solution though, the United States should differentiate its national interest from the international interest. The United States can share its power in the nuclear issues in order to enable other parties to involve in nuclear-policy making. The Joint Action Plan, signed with Iran on November 24th, 2013, for instance, was a result of a successful European initiative through the representation of the European Union High Representative Catherine Ashton. When Bashar Al-Asad used chemical weapons against the Syrian population, it was Russia that came up with the rules of mediation, which was to convince Syria to renounce its chemical stockpile and become a member of the Chemical Weapons Convention Treaty. In return the Western powers agreed not to initiate further military action against the Syrian regime. One should also note that the British Parliament had already chosen not to have military involvement in Syria, after the government was defeated in a parliamentary vote. These examples show that the United States is being challenged at home and abroad, on different levels, and this challenge brings about alternative and new solutions to the problems that persist in the nuclear nonproliferation field that are beyond the scope of national interest.

DISSERTATION ORGANIZATION

Chapter 2 introduces the reader to the conventional security complex theory by Barry Buzan and Ole Waever. Security complexes are clusters of states whose national securities are linked to each other. These complexes feed from local patterns where security problems are deeply interconnected. Buzan and Waever call this security interdependence. According to Buzan and Waever, regional patterns are responsible for
defining security complexes. Geographical proximity, the number of states, mutual exclusiveness, mutual recognition of membership, and patterns in relations are the main characteristics of a security complex. A security complex uses securitization as the main political tool to increase awareness in areas of low politics, such as environment. At the bottom line security complexes is an approach to grouping, which arranges states in terms of geopolitics.

Chapter 3 brings in nuclear literature by discussing the field, as viewed through a grouping method lens. Nuclear scholars implicitly grouped states into categories by asking questions. One of the groupings is based on legal possession of nuclear weapons. In this grouping, states are divided into two groups: nuclear weapon states, non-nuclear weapon states. Second type of grouping is related to the theoretical posture of the researchers. There are realist, liberal, and constructivist posture that is visible in nuclear scholarship. Third type of grouping asks whether nuclear proliferation brings stability or not? Waltz and Mearsheimer argue that proliferation has optimistic results whereas Sagan says proliferation has negative consequences. These scholars are grouped as proliferation optimists and proliferation pessimists. Fourth type of grouping occurs in the geographical setting that nuclear issues dwell in. A group supports regional approaches to nuclear proliferation whereas another group supports state-based tailored approach. There is not enough scholarship that supports global considerations in the nuclear field. Fifth group identifies the methods to prevent proliferation. These methods are grouped deterrence, nuclear non-proliferation and nuclear disarmament. These methods can all be complimentary or oppositional in a state's nuclear policy posture. This debate identifies nuclear weapon states to be in favor of following a nuclear proliferation policy whereas
non-nuclear weapon states following nuclear disarmament policies. This debate indicates that deterrence is not an effective strategy in the 21st century. Tailored deterrence creates biased proliferation policies and cannot lead to solutions in complex cases. This chapter suggests a mid-level approach, which is grouping states with state characteristics that shape nuclear posture. States are grouped in three categories; nuclear weapon states, non-nuclear weapon states and nuclear transitioning states. The main variables for state characteristics derive from the literature on nuclear proliferation and nonproliferation. This grouping is different than the others because it relies on active state characteristics; therefore needs persistent analysis of country nuclear profiles. Other groupings are all implicit to the research, whereas grouping in terms of state characteristics is an explicit methodological approach that may benefit from persistent policy analysis. In other words, previous groupings are an outcome of a process. For instance, the difference between a nuclear weapons state and a non-nuclear weapon state is an outcome of a legal process. Grouping in terms of state characteristics, on the other hand, is the initial methodological process, to understand and examine nuclear behavior. State characteristics, moreover, is an overarching way of grouping where all of the other implicit grouping methods can engage in the analysis.

Chapter 4 uses the state characteristics for grouping states. These are threat existence, nuclear democratic policies and transparency, nuclear treaty membership and compliance. This chapter introduces seven types of nuclear security complexes. The material nuclear security complex uses threat as the main variable. States that are overwhelmingly subject to, and prioritize, threat existence in national policies are likely to follow a nuclear weapons program. The material-liberal nuclear security complex uses
both threat existence and nuclear democracy level to define states that are not totally
democratic in nuclear energy and weapons program and are not also prone to threat.
These states are in transition and this security complex needs careful assessment.

The liberal nuclear security complex uses nuclear democracy and economic
regulations as main state characteristics that shape nuclear posture. Democratic states that
proliferated before 1967 are part of this security complex as well as non-nuclear weapon
states with transparent nuclear energy policies. The liberal-norms based nuclear security
complex feeds from good institutional standing in nuclear organizations and democratic
nuclear posture as the fundamental factors. States in this security complex do not follow
nuclear weapons program and are likely to securitize nuclear issues at the institutional
level. This means that they would prioritize the role of nuclear institutions. The national
interest in this regard, is a projection of international nuclear posture, not the other way
around. Germany is an example of liberal-norms based nuclear security complex as well
as Japan.

The norms nuclear security complex is composed of states that follow
disarmament as a major policy. Internalization of nuclear treaties in national policies,
compliance to treaties and voluntary undertakings of nuclear transparency are the main
factors of this security complex. States in this security complex prioritize nuclear norms
and the idea of nuclear taboo over interests of states or institutions. Any actor that supply
to the benefit of the nuclear norms would be part of this security complex. Transnational
advocacy networks, non-profit organizations are an example of broad spectrum of actors.
The material-norms based nuclear security complex is composed of states that are
affected from threat but are still being members of major international treaties. These
states politicize nuclear agenda through national interest by pushing disarmament policies at the expense of non-proliferation. Iran is a member of this security complex.

The quasi-hegemonic security complex is not a group of many states. It is only composed of the hegemony, in today’s world the United States. This is still a security complex (group) because the group representation emanates from the distribution of power at the system level. Today’s unipolar system is a representation of this group; however, if the analysis would be conducted in the Cold War, this security complex would be based on bipolarity. There are three main factors to be considered in the quasi-hegemonic security complex. These factors originate from the literature on hegemony and they are centered on the power that hegemony holds. These factors are power in terms of capability (military and soft power), the leadership role in the nuclear field, and to provide nuclear umbrella as a part of public good sharing. The United States is the only member of this complex under the condition of unipolarity in the international structure.

Chapter 5 models nuclear security complexes with selected country examples. There are 44 nuclear capable states, defined in the Comprehensive Test Ban Treaty. Four of the states are selected to explain nuclear security complex modeling with real world implications. The selected cases are Iran, Israel, Turkey, and the United States. The first three cases are from the Middle East to directly show that nuclear behavior is not primarily related to regional dimensions. The analysis indicates that these states have different proliferation and nonproliferation postures, despite Israel’s nuclear weaponry. The United States is selected as the fourth case because it has the potential to influence the international nuclear dynamic on its own. When states are grouped in terms of state
characteristics, states like North Korea and Israel end up in the same group. Nonetheless, the international pressure on the two states differs drastically. This type of grouping indicates that Iran has different nuclear posture than North Korea. Nevertheless, international treaties treat the two countries similarly. The reason for this type of political confusion is the dominance of the United States’ nuclear interest in the international arena. The United States’ nuclear behavior over states in the Middle East complicates the Middle Eastern dynamics, as states could not agree whether to focus on nuclear proliferation or disarmament as an end-state. The United States’ nuclear policy over this region is to ensure deterrence policies and to keep nuclear status quo. Keeping status quo, however, will not bring change in the nuclear behavior of the states in the region. An alternative approach for the United States may to employ policies without regional considerations, purely based on state characteristics.

Chapter 6 analyzes the proposed theory with the examples (cases) used throughout this dissertation. This chapter links the overall dissertation to the general field of International Relations through two important discussions. The first discussion states that nuclear proliferation is a transnational issue; thus its implications are global. Nuclear issues are transnational because nuclear weapons cross borders and regions. As such, third-party concerns about possible proliferator states pass beyond regions and full nuclear fuel cycle needs international assistance. Policies regarding nuclear proliferation should stem from globalization and transnationalism literatures. I draw some policy implications with this respect. I indicate the role of interdependence, international organizations, treaties, transnational network groups; socialization and cooperation imperatives should be of utmost importance in nuclear policy-making. The second
discussion is about the role of power in nuclear studies. In this discussion, my model suggests that the United States has the most power to shift the nuclear discourse at the international level. I also discuss that states in the material security complex lack power and they try to compensate this through nuclear weapons program.

Security interdependence finds a new form in the nuclear field. This dimension is similar to the interdependence theory suggested by Keohane, but with a nuclear tone. Non-nuclear weapon states are politically and strategically “vulnerable” to nuclear weapon states’ threats and power (vulnerability). Nuclear weapon states, on the other hand, are sensitive to nuclear proliferation. The sensitivity is a result of economic and military power that nuclear weapon states already have. These options make it easy to direct these states’ effort to impose power on others, if necessary. Nuclear weapons states states can divert their capabilities to conventional weaponry and new technological advancements in the weapons sector (sensitivity). Nonetheless, the more states with nuclear weapons, the less political leverage de jure nuclear weapon states would have over the newly proliferated ones. This would also have an impact on the general nonproliferation regime.

Overall, the model suggests that nuclear non-proliferation posture is non-regional. State characteristics shape nuclear posture of a state. Alternative nuclear policies may generate through an understanding of non-territorial grouping. The United States and international organizations should create group-level profiles and can publish reports on how does a state do on nuclear non-proliferation by conducting a quantitative analysis. States, in return, may aim to improve these points in order to comply with the rules of the nuclear regime.
The research showed that nuclear weapons are being used as a tool for national policy making rather than being a security issue. When issues are nationalized concession becomes harder between the parties. Nuclear policies do not go beyond the national interest, today. Grouping states in terms of state characteristics, as an alternative method, aims to securitize nuclear weapons at the international level. The proposed alternative nuclear security complex theory sheds light on this securitization process, as it highlights a group level approach to state characteristics that leads to nuclear posture, without getting involved in the dilemmas caused by examining national interest. International decision-making bodies should consult a similar grouping method to crosscheck nuclear policy-making. This might eventually eliminate claims that international organs work for the benefit of the powerful. A nonbiased approach can be achieved only through an objective classification of nuclear capable states.

Finally, future research is suggested to examine how states shift from one security complex to another and how states in different security complexes interact. A continuation of this dissertation could also be an in-depth qualitative and quantitative analysis of all nuclear-capable states, referred in Comprehensive Test Ban Treaty in order to have comprehensive nuclear country profiles.
CHAPTER 2
SECURITY COMPLEX THEORY

This chapter rests on the examination of security complex theory to utilize it in understanding nuclear security complexes. Security complexes are composed of states that share similar understanding of security and thus to follow similar security policies. The idea of a security complex originates from the English School writer Barry Buzan, as he asserts the role of regions and regional dynamics to explain certain state policies and behavior.

The first section defines security complexes and security complex theory as formulated by Barry Buzan and Ole Waever in the 1970s. This section states the main characteristics of the theory and how it is applied to regional security complexes. The second section goes a step further and examines regional security complexes by asking, “what differentiates one region from another to the extent that eventually a new security complex is created?” The main reasoning behind this question is to understand the construction and differentiation of security complexes from each other.

The third section identifies two types of debate in the literature. The first debate is between the traditional school of thought (neorealism) and the Copenhagen School/English School. The second debate is between the scholars from the Copenhagen School and alternative school theorists in general. Whereas the first debate rests on capturing how the traditional school of thought in International Relations reacted to security complex theory, the second debate acknowledges this part but differentiates on the nuances of how to view security complex theory. The main contributors to the second
debate are Barry Buzan and Ole Waever in one camp, and David Lake and Patrick Morgan in the other. The debate aims to highlight the main differences of understanding security complexes through territoriality versus non-territoriality.

The last section introduces nuclear nonproliferation security complexes as a new and alternative way to study nuclear security and policy. This section feeds from the debate identified in the literature. It follows the main approach by Buzan and Waever, but with a twist of non-territoriality, borrowed from Lake and Morgan. This idea offers an issue-based framework for studying international relations. The issue at stake is nuclear nonproliferation. This chapter makes a constructive critique of security complex theory by Buzan and Waever. It states that the existing regional approach cannot be applied to the proliferation puzzle as nuclear weapons are a transnational issue and are not fixed to regions. Therefore, the chapter concludes with a need to model non-proliferation and proliferation security complexes by grouping states with regards to their state characteristics and nuclear posture, with the aim of creating group-level nuclear policies.
DEFINITION

What is Security Complexes?

In *People, States, and Fear*, Buzan advocates a broad security approach as he hints to the idea of security complexes.¹ This broad approach interlinks the military, economic, political, societal, and environmental security sectors. The author suggests the referent objects² of security to be widened, as he challenges the centrality of states in security. Buzan notes the “security of any one referent object or level cannot be achieved in isolation from the others; the security of each becomes, in part, a condition for the security of all.”³

Security complexes are cluster of states “whose primary security concerns link together sufficiently closely that their national securities cannot realistically be considered apart from one another.”⁴ They are the “nodes” in the international system that “define intense and relatively durable local patterns” and “guide and shape the impact of larger external powers on these local patterns.”⁵ A security complex is composed of “states whose security problems are closely interconnected.”⁶ It is a form of classification for states that have similar security dynamics and processes.

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² In the traditional international relations literature “actors” are similar to the “referent objects.” Non-traditional school of thought purposely uses “referent object” rather than the agents because it diminishes the role of the agent and prioritizes the issue at stake. This makes “actors” the object and the phenomenon the “subject.”
⁵ Buzan, 1983, p. 111.
Buzan signifies that security complexes are “durable, dynamic, open to change and are not permanent and internally rigid.”

Buzan formulizes the security complex theory, by referring to the Middle East and South Asia, suggesting security complexes are an “alternative approach” to security studies. Security complexes, therefore, create mini-systems that are linked to the international system. Buzan accepts that by drawing attention to “particular systems” rather than the “power structure of the system” the “ability to make comparisons is lost.”

The author suggests, however, that by fusing particular systems, the assessments made are “rich” and more detailed than those of the all-encompassing international system that the traditional school favors. Buzan’s approach is regarded as an “incorporation of systems theory into area studies based on regional criteria.”

To “label the relevant structures” at the mid-level analysis, Buzan uses the term “security complexes.” Buzan introduces a sub-structure-supra-agent level into the equation to explain state policies, and this sub-structural level is regional. Regions are the mini-systems with characteristics. Buzan argues the following about the mini-systems:

“This middle level of analysis is an important but seriously neglected area of international relations analysis. Much effort is devoted to analysis of security at the state level both in terms of national security policy and in terms of situation analysis of trouble spots. Similarly, a weight of analysis is oriented towards the

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8 Buzan 1983: 105.
9 Carlos Teixeira, 2011, Dissertation: The Absent Empire: The United States and the South American Regional Subsystem, Old Dominion University
grand abstraction of systems analysis. In between, however, we find only the hazy
derived notions of regional balances of power, and sub-systems.”

CHARACTERISTICS

Security complexes can be formed by “geographical, political, strategic,
historical, economic or cultural links.” Since it is hard to differentiate the former
concepts, the boundaries of security complexes may be fuzzy. Security complexes are
“historical” since they follow the patterns of interactions between states.\textsuperscript{12} However,
not all types of interaction direct a state to a particular security complex. The United
States, for example, has significant security interests linked to the Middle Eastern
region but is not part of that region. A combination of insecurities of states,
interdependence, economic regulations, treaties, geographical location, trade levels,
partnerships, and “local and external patterns of insecurities,” all may contribute to
placing a particular state a specific security complex.\textsuperscript{13}

One security complex is not distinct and separate from other security
complexes. Buzan suggests that alignments “lock” security complexes “together.”\textsuperscript{14}
This clearly means that alignment, or any other form of organization, makes security
interlinked for different complexes. States in the same security complex have similar

\textsuperscript{12} Buzan, 1983, p. 114.
\textsuperscript{13} Buzan, 1983, p. 111.
\textsuperscript{14} Barry Buzan, 1983, p. 110.
disputes, alignments, and external interests. The external powers—states from different security complexes, depending on their size and power—have impact on other security complexes as well. These external powers may also link one complex to the other depending on their interests. Buzan notes that the power of the major states has impacts both on the system and other security complexes. This mutual impact is stated as follows:

"In forcing attention to both levels [macro-level of great power impact on the system and micro-level of local state relations], security complexes emphasize the mutuality of impact between them, with external influences tending to amplify local problems, and local problems shaping and constraining external entanglements and influences."16

In essence, security complexes are organically bound to the international system. The primary system has affect on all regional security complexes. Each regional security complex is composed of states. The intense security interdependence is pictured with strong lines from one state-to-another-state.

A security complex is composed of states that have high level of security interdependence. The security complexes above are formulated through regions. It is worth noting, non-territorial security complexes—unlike Buzan’s regional work—

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15 Kenneth Waltz’s sentence on states act alike under the same conditions fits better to security complexes rather than the international system because in one security complex, states that have similar insecurities and concerns are formed together. Similarity exists in terms of security management methods as well.
16 Parenthesis added. To clarify, the usage of the term ‘local’ may drag the reader to think it as ‘domestic’. Here, local problems do not associate to the problems inside one state but local to one security complex (region). Here, Buzan’s thesis on the mutual impact of local problems and external forces is similar to why Iran acts in the way that it does on nuclear proliferation and why the US acts on the way it does as a response. See, Buzan, 1983, p. 112.
may stay at the abstract level because they are less tangible than regions and have higher normative aspects.

Buzan finalizes the earlier idea by noting that security complexes can be “applied to any situational analysis.” In a more dynamic mode of analysis, security complexes “offer a class of durable entities whose patterns and processes of evolution are of as much theoretical, and perhaps more practical, interest as those of the power structures of the system as a whole.”

**How do security complexes encompass the security idea?**

Security complexes prioritize not only the “traditional power” conjunctions but also the “patterns of relations” and “sources of insecurity at all levels through which power relations are mediated.” Security complexes include “balance of power” but they are not “limited” to it. Traditional power relations among states are significant in security complexes as they form a pattern.

Differently, security complexes also capture states with relatively less power. In a security complex, small states have an impact on the major powers. Small states have characteristics peculiar to each other and have “patterns within and among themselves which condition to some extent the great powers.” This leads an analysis of hierarchies of power through security complexes, which also exists in nuclear nonproliferation security complexes.

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18 Buzan 1983, p. 112.
20 Buzan 1983, p. 112.
Regions and Powers, co-authored with Ole Waever encapsulate the boundaries and relationship between security complexes as it includes nine regional security complexes as case studies. In Regions and Powers a security complex is redefined as a “set of units whose major processes of securitization, desecuritization, or both are interlinked that their security problems cannot be able to analyzed or resolved apart from one another.”

There are two major points to unfold in the above definition. First is related to extending the actors and sectors in security complex theory. The new definition encompasses “different type of actors” and “different sectors of security” to be involved in the regional security complex; and it keeps the essence of interdependence of the actors within the security issues. Security complexes, therefore, may compose non-state actors as well as untraditional security issues (sectors) such as environment or societal security. This means that environmental problems can also group states in the same security complex. A river that passes more than one state might be related to water security and can be securitized, for instance, by those states that are involved. Waever notes “security becomes a practice” and an issue is securitized when it is constructed as a threat.

The second point with regards to the difference between the earlier and later definition of security complexes is with the term securitization. Waever introduced the

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22 Buzan and Waever, 2003, p. 44.  
securitization theory through the Copenhagen School\textsuperscript{25}. Securitization is significant in security complexes, because it follows a process-based approach to security, where actors label a “politicized” problem as if it is a security problem. Not all politicized issues are security issues and not all security issues are captured in policies. A security issue does not necessarily need to be an issue where state survival is at stake. The five sectors—environmental, social, political, economic, and military—are all security issues. This means that a security complex is composed of issues that are political in nature and are explicitly securitized.

To understand the definition of security complexes, one needs to understand what is securitization and desecuritization, and how securitization occurs. Securitization is to “shift an issue into the realm of security” to gain more attention for the issue.\textsuperscript{26} By securitizing, the issue at stake gains priority over other issues. Hirschauer says, “attaching the term security to an issue—lifts the issue above politics and above regular (political) agenda setting” where the “act of securitization” occurs.\textsuperscript{27} This means any issue can be securitized by the elites (particularly by decision-makers and interest groups).\textsuperscript{28}

The act of securitization occurs through threat identification, where threat is open to interpretation by the actors.\textsuperscript{29} Dillon regards security to be a function where the

\textsuperscript{25} The name of the school is associated to the Center for Peace and Conflict Research in Copenhagen, today renamed as Copenhagen Peace Research Institute (COPRI).
\textsuperscript{26} Sabine Hirschauer, August 2012—Dissertation: All is Fair in War: Violent Conflict and the Securitization of Rape, Old Dominion University.
\textsuperscript{27} S. Hirschauer, 2012, p. 49.
\textsuperscript{28} Although the authors contemplate non-political issues to lift it to the security realm like environmental problems or issues related to human security such as hunger, AIDS/HIV, one can think of security issues like terrorism or nuclear proliferation to be securitized as well. A security issue does not inherently mean it is securitized. There should be also a “level of securitization” which is dismissed in the securitization literature so far.
\textsuperscript{29} S. Hirschauer, August 2012, p. 54.
process is subjective to the actors. \(^{30}\) Securitization occurs in three steps. First, an issue needs to be presented as a threat by the actors. Second, the public or some other audience needs to accept this issue as a threat. Third, the issue gains political prominence, prompting elites/decision-makers to initiate specific policies.

Suffice to say, security complex theory is based upon a general securitization theory. Why securitization theory is significant to explain security complexes?

Securitization theory assumes that the “security agenda is about different things in different regions” since states react differently to security issues (sectors) in different regions. \(^{31}\) Securitization theory suggests that not all security complexes would perform extraordinary measures for any specific phenomenon. Policies are shaped depending on whether the security of the actors’ (states, decision-makers, interest groups, organizations) coincides with each other and whether these actors call for attention. One of the reasons why the Nuclear Weapons Free Zone in Latin America cannot be replicated in the Middle East, for instance, is that the issues securitized in the Middle Eastern region do not open up room for conciliation.

Securitization challenges the traditional method where security issues are pre-given; rather it suggests that issues are constructed by someone and for some purpose. Securitization theory observes not only the power relations but also the historical relations of actors. By inserting the historical accounts, securitization aims to trace the root causes of state behavior and foreign policy. \(^{32}\)


\(^{31}\) Buzan and Waever, 2003, p. 86.

\(^{32}\) The methodological approach to securitization—if scholars like to unpack how an issue is securitizes, is most likely to be historical materialism where causes and changes are examined through historical preceding. In international studies “what?” questions are empirically driven and
DEBATE

David Lake started a debate on Regional Security Complexes. Lake defines regional security complexes where the members are “affected by one trans-border but local security externality.” According to Lake, security externalities are previously called “spillovers” or “neighboring effects” and they are the most definitive factor to border a region. Trans-border externalities cross national borders and have “strategic and political impact” yet they are local because they stay in the regional terrain. Security externalities focus on transnational issues to frame the regions; therefore, this definition is inclined towards an issue-based understanding to define the security complexes rather than an actor specific approach.

There are two differences between Buzan and Lake. Firstly, in Buzan’s definition, securitization is the key; whereas, Lake does not discuss securitization. Buzan claims interdependence through securitization, whereas Lake claims interdependence is a result of transnational issues. Secondly, Lake assumes non-regional actors can also be member of a security complex, whereas Buzan disagrees to this point. Buzan and Waever associate security complex theory exclusively with regions. The authors do not work on non-territorial security complexes; yet they agree that it is possible.35

ask for data analysis whereas “how?” questions are process driven. To capture the main idea on the difference between problem-solving theories and critical study see Robert Cox, 1981, Social Forces, States, and World Orders: Beyond International Relations Theory, Millennium: Journal of International Studies, Vol.10: 2, pp. 126-155.
33 David Lake, 1997, p. 49.
34 David Lake, 1997, p. 51.
35 Bear in mind that Chapter 2 of this dissertation utilizes a non-territorial security complex approach to non-proliferation. For this aim it models non-proliferation into seven security complexes. This approach differs from a “regional” method.
Regional security is different from regionalism. The latter is expounded in International Relations literature from 1960s and 1970s. Regionalism starts with the assumption that states’ cooperation in one region may result in integration within that region. The end-state in regionalism, therefore, calls for regionalism and formation of security communities. Regional security is also different from area studies, yet some area studies scholars like Mohammad Ayoob, may follow a regional approach.36

Buzan and Waever argue that world politics is best explained by “several subsystems” and each subsystem should have its own dynamics and actors (Schoenman 2005:141). The definition of subsystems is obscure however. Teixeira suggests scholars are calling the same approaches by different names. Regional subsystems, subordinate systems, cluster of nations, and submacro partial international systems are all the synonyms for subsystems.37 A sub-system is an “extremely broad notion, and security complexes could be the type of sub-system.”38 Russett notes that sub-systems are invariably associated to “geographical regions.”39 The regional level is a mid-level of analysis. This layer informs the sub-systemic explanation of security interactions among regional actors. It does not neglect the impact of anarchy on states at the global level, but focuses on regions and regional characteristics.

Regional security complex theory rests on four levels of analysis:

1- At the domestic level, it rests on the "vulnerability" of the states. Here the authors observe whether a state is labeled a strong or weak state.

2- At the state level, the theory looks at state-to-state relations. Here the interstate relations are significant to label insecurities and securitize issues.

3- At the regional level, the integration with other security complexes—regions—is significant.

4- At the global level, the role of global powers in security complexes are observed. Global powers in one region, as has been stated previously, have the power necessary to have impacts on other regions.

The four levels are in play at all times, yet sometimes one level is dominant over the others. Security complexes evolve and change as well. The regions may have three different stages of evolution. They may stay the same in the status quo stage, may have internal change either through "ideological shifts" or by the "change in the leadership" (internal transformational stage), and may have external transformation, where "the outer boundary of the region expands or shrinks" (external transformational stage).40 Change at the regional level, therefore, is visible.

Regions are constructed complexes. They are constructed all through history, either by the states that benefit from shaping the boundaries, or by the political, cultural, and historical interactions of the countries within a geographical region. The former is the traditional way to literally 'make' a region. When Middle East is considered, the question of why scholars call it "Middle East" demonstrates the construction of a region. The label Middle East is by the "representation to British and later the US strategists to think about

40 Barry Buzan 2003, p. 53.
and organize action for maintaining security” in the “south-west of Asia and North Africa.” Even if the strategic and security framing of great powers—formerly Britain and presently the US—shape regions, the historical and cultural links of the countries make these framing either obsolete or real. At this last aspect, Buzan and Waever’s view on how to compose regions and how to differentiate one region from another is helpful.

There are four variables that differentiate regions. The first one is the “intense interaction” among the actors. State-state relationship and the security interdependence of the actors comprise this intense interaction. Geographical proximity, actors’ “recognition” of their presence in one sub-system, and a “minimum of two actors” are the other three variables making up regional security complexes.

Referencing to the main idea of security complexes, so far specific security complexes are defined through regions. It is stated that regional security complexes reshape the abstract security framework to allow practical application. The following section dwells on the characteristics of regional security complexes.

a- Geographical proximity: Regional security complex theory considers geographical proximity to be the core tenet to establish a complex. Security of neighboring states is threatened much easily by similar threats. Since “many threats travel short distances more easily than long distances” security of neighboring states overlap in many ways.

Geographical proximity makes neighboring states’ “security interaction” frequent and it leads to a pattern. Often it comes to a point where a state’s security cannot be

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43 Barry Buzan and Ole Waever, 2003, p. 45.
delivered without the security of other neighboring states. Buzan and Waever (2003) call this “security interdependence,” where the security of states in one complex is dependent on the security of the other states in the same complex. The actors in the security complex are interdependent, and this interdependence allows room for patterns of cooperation on major security issues. It could also result in a negative pattern of behavior resulting in less security for all the states in the complex.

The geographical proximity causes a level of interaction among states, which results with an ally or adversarial relationship and an identity of “fear, hatred, or friendship” among the regional actors. According to Buzan and Waever, a region is more than the borders. It is composed of “history, culture, religion, and geography.” The regional security complex is shaped by security practices. This gives regional security complexes a constructed character.

**b- Number of states:** A regional security complex is composed of at least two states. For Cantori and Spiegel, two or more states that have similar cultural, social, and historical links, in other words states that share similar identity create security complexes. The actors in the regional security complex are important because they are linked through security interdependence. These states have similar threat identification to the threats faced in the same region as well. This means that the number of states is important in the conventional security complex idea. The issues that these states encounter are secondary because it is the geographical proximity that links these states to each other.

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44 How to create interdependence on nuclear weapons? States might need similar logic in the nuclear realm.


46 Buzan and Waever, 2003, p. 50.

47 Cantori and Spiegel, The International Politics of Regions, pp. 6-7.
Security complexes have levels as well. A “higher level security complex” is
“composed of major powers which define their security in regional or global terms.” In turn, major powers have great impact on “local complexes” says Buzan. The relations of major states (high level complexes) impact on “local complexes,” strengthening the patterns in each security complex. However, “local” powers are affected more from external great powers due to the “disproportion in size and resources.” Not only size and resources, but also different power capabilities of major states, infuse into “local complexes” easily. Buzan and Waever call security complexes that are composed of strong states to be definitive of the structure, whereas they call security complexes with weak powers to be “unstructured proto-complexes.”

c- Mutual exclusiveness: Another characteristic of a regional security complex, from Buzan and Waever, is that it is mutually exclusive. A state that is characterized as belonging to a certain security complex cannot be a member of another security complex. States in the same complex should have a degree of security interdependence both to bind them and also to separate them from other regional security complexes. Turkey, according to these authors, can only be in one regional security complex—either in the Middle Eastern Security Complex or in European Security Complex. However, because Turkey has shared security concerns, historical, cultural, and economic ties with both of the complexes, Buzan and Waever names Turkey an “incubator” state. Similar logic

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51 Buzan, 1983: 111.
follows for landlocked country, Afghanistan. On contrary to Buzan, Lake and Morgan suggest that states can be part of more than one regional security complex. According to Lake the concept of “interlocking regions” is an example of a state to be a member of multiple security complexes.

**d- Mutual recognition of membership:** States should acknowledge their membership of the security complex and the recognition should be mutual with other members of the complex. Not only the state itself, but also other states in the complex, should recognize each other. This point is similar to the Wendtian “identity” conceptualization. According to Wendt state identity is constructed two-fold: 1- a state names its identity, 2- others recognize this identity or attribute different identities.\(^{54}\)

Considering the Turkish case, even if Turkey claims to be a European country, a lack of attribution from the European powers to Turkey on its European-ness diminishes the reality of that identity. Similarly, in a territorialized security complex, both sides need to acknowledge each other in the same complex. Lake quotes Boals; constructivist theory assumes this mutual recognition as a “collectively produced self-understanding.”\(^{55}\)

In the nuclear security complexes the mutual recognition is related to the nuclear posture of states. Often times although a state claims not to acquire nuclear weapons, is subjected to international pressure because its nuclear posture is not mutually recognized.

**e- Patterns in relations:** According to Thompson, regional security complex members have interactions to such a “particular degree of regularity and intensity that a

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change at one point in the subsystem may cause change in other points. This means that change in particular state’s posture/policy in the security complex might also cause a change in other actors’ postures. Likewise, states might reinforce their stance by copying the posture of other states. The patterns in the relations of the actors are similar to what Buzan calls the “security interdependence” of the regional actors in one security complex.

**What makes Regional Security Complexes significant?**

Is there a significant reason to observe nuclear posture in a cluster rather than observing it separately? This question is significant because if a security complex is not “more than its parts” then formulating them into clusters would not make any difference. According to Buzan and Waever, the “outcome of the interactions of the security complex would be different if it were not in regional security complex.” This means that the regional aspect generates the security structures through practice. Thinking similarly, security complexes in general are different than observing state policies individually. By compartmentalizing states into different groups—or by creating the boundaries of regions like Buzan and Waever do—the researcher works at a different level. This level enables the researcher to be flexible and to recognize that the most absurd cases can end up in the same cluster. If so, the nuclear policy upon these bizarre cases should also be similar. For

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57 In the second chapter the “patterns of relations” is going to be examined through non-proliferation security complex idea in which it is defended that posture and policy of one state in a security complex may change or reinforce the posture of other states with regards to their proliferation practices. For instance, the idea that liberal states do not proliferate in the post-Cold War era rests upon their collective posture. Besides, states like North Korea and Iran follow proliferation practices because they feed from each other’s posture.
instance, in Chapter 5 it is discussed, Israel and North Korea’s nuclear posture are similar; yet the policies to these two states from the United States and international nuclear groups are different. This results with continuous problems and questioning of other actors. The realization of the similarity in some cases renders an opportunity to revise existing policies and to turn the nuclear course into a different direction.

There are two types of debate on the security complex theory. The first debate is between the regional security complex defenders and their opponents. The second debate is among the defenders of the regional security complexes, yet the scholars disagree on how to frame security complexes and their main assumptions. Suffice to say that the first debate is more general and broad that the focus is not so much on the security complexes per se but on the level of analysis, whereas the second is more particular in that it focuses on the functioning of the security complexes.

Debate #1:

This debate results from calls to favor different levels of analysis from both the mainstream and regional theorists. The traditional approach to security studies emphasizes the global character of world politics. Scholars from neo-realist school of thought such as Kenneth Waltz, Stephen Walt, and John Mearsheimer believe in the supremacy of the system—explained through distribution of power and anarchy—over the agents (states)58. The level of analysis in the traditional approach is global, where anarchy (a system level characteristic) shapes and molds state policies and affects the decision-making. This approach suggests that states act similarly under same conditions.

Mainstream international relations scholars remain at the global level of analysis and make systems level explanations. Kelly says, for instance, “global-level international relations theories regard regionalist approaches to be “a brief upsurge while system-level forces calibrate new equilibria.”\textsuperscript{59} To any approach that defends system level analysis, like those of Kenneth Waltz and Stephen Walt, regionalist explanations do not sufficiently explain world politics.

In response to the mainstream analysis, Hentz and Boas find “systemic international relations too abstract and distant to capture regional dynamics.”\textsuperscript{60} Therefore, the latter scholars accuse the mainstream view being too general. At the global level analysis, scholars are mainly criticized to be ahistorical and too much concerned with theory that cannot bind history and theory together.\textsuperscript{61}

In general, the debate stems from the agent-structure debate in international studies. As a response to mainstream approaches that diminish agency, alternative theories—mainly of the constructivist school—integrate agents within the structure, stressing the “choice”\textsuperscript{62} of states, and how policy impacts can alter the “social structure.”\textsuperscript{63} When agents, namely states, have the choice to carry out an action, that choice might make free from an international system based on “self-help.” In a self-help system, actors are expected to act similarly under the same conditions; yet, states’

\textsuperscript{61} This feeds another debate in international relations: which one is \textit{a priori}: history or theory.
\textsuperscript{63} Nicholas Onuf, 1989.
policies differ in response to the same situation. In other words, both agent and the structure interact in the constructivist perspective.\(^{64}\)

Agent-structure debate is significant with respect to the possibility of change in the system.\(^{65}\) According to realism, the international system is definitive and there is no significant room for change because the system is based on anarchy. This paradigm, in reality, observes the billiard table (the black box) rather than the billiard balls. According to alternative theories, change is possible and the system is in constant change. The agent’s role in shaping the system should not be diminished. This paradigm, in reality, observes not only the change of the shape of the billiard table after the billiard balls interact with each other and hit the table, but also to the billiard balls that jump off the table. Alternative theories question the black box and unfold this box into its pieces. To take from this school of thought, Buzan and Waever contribute to the sub-system analysis—regional—suggesting that regional interactions are affective to shape and transform the international system.

This primary debate is also related to the study of hegemony in the 21\(^{st}\) century. The supporters of the global level of analysis regard major powers to be the only significant actors. More precisely, if the system is unipolar then the hegemon shapes the state relations. Buzan and Waever degrade the importance of the hegemony in the contemporary world; indeed defending hegemony is in decline due to the rise of regional


\(^{65}\) For an extended work, composed of thirteen articles on change in the international system see Barry Buzan and R. J. Barry Jones (eds.), 1981, Change and the Study of International Relations: The Evaded Dimension, New York: St. Martin’s Press, pp. 1–241.
powers. Ikenberry, Nye, and Keohane challenge this view. Buzan, in an interview, states:

"The way that the world is unfolding, with a greater global distribution of power and more voice to non-western cultures, makes the idea that hegemony is ever going to be legitimizable (that is, not in practice, but as agreed upon by the multiplicity of states) on a global level a passing one."

Debate #2

The main contributors to the second debate are Buzan and Waever, and Lake and Morgan. The latter scholars have debated the security complex theory majorly with respect to the aspect of territoriality within regionalism. According to Lake, the system is anarchic but not all the relationships in the system are based on the rules of anarchy. Anarchy does not explain much of the relationships of states; rather a focus on hierarchical relationships is in need. Lake stresses international hierarchy over international anarchy, which places the scholar close to the English School, like Barry Buzan himself. Patrick Morgan differentiates between two types of relations in international relations: anarchic and transnational. Morgan suggests that realism can be applied to anarchic systems and liberalism can be applied to "transnational security

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68 Regionalism in Buzan and Waever’s study is different than the traditional regional studies that support integration at the end of regionalism. The European studies scholars use regionalism conventionally different than Buzan and Waever.
Although scholars (Buzan and Waever vs. Lake and Morgan) follow generally a similar perspective on international relations, the latter scholars differ slightly on the idea of security complexes.

Unlike Buzan and Waever, Lake and Morgan say that regional security complex theory does not have to compose of states that are neighbors. This means that “geographical proximity” is not a necessary condition for a state to be a member of a security complex. Following this logic, the United States is a member of more than one security complex because it is involved in many regions. Suffice to say, regional security complexes have “overlapping membership” for Lake and Morgan, whereas they have “exclusive membership” for Buzan and Waever. The response to Lake and Morgan is on the importance of geographical proximity since states that do not share same geographical location always have the “option to opt-out” from that region. Buzan and Waever omit the possibility that in essence the option for a state to leave a security complex might also be the reason for that complex to transform.

Buzan and Waever have two debated points on security complexes. The first is on the assumption of territoriality. Lake and Morgan disagree with this assumption by suggesting normative thinking in security complexes, stressing that globalization and transnational threats challenges the “approach on territoriality.” Buzan and Waever reply to Lake and Morgan on territoruality by stressing that they do not refuse non-territorial security constellations but they do not use it on their study. Constructivist scholars such

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70 Croffit and Terriff, eds. 2000.
as Vayrynen, go even further to question Buzan and Waever, and suggest emancipating security studies from its “territorial prison” by focusing on “identities.”

The second point is on regional level analysis. Buzan and Waever put the whole approach at regional level. Lake and Morgan still keep the regional level analysis but regard regions as a term that is not purely geographical. Kelly, on the other hand, twists this approach and asks whether regionalism is important when the United States is the hegemon? The main logic of the latter scholar derives from the driving force of the hegemon to shape international system. Some scholars even write about hegemonic regionalism where the United States shapes the regions. To counter critiques, Buzan and Waever self-criticize their approach, saying, “it could be argued that the whole levels-of-analysis set up is biased towards the territorality.” Regardless of this self-critique, they do not make step further to tackle this circular relationship.

Even in the traditional understanding of the security complex theory, Buzan could not give up formulizing the theory without resorting to a regional perspective. This actually biases the theory because the theory loses its explanatory power without referring to the regions. The idea of keeping the regional perspective in utmost importance allows Buzan and other writers on security complex theory to follow an unorthodox level of analysis, which is not global or local but regional. Yet again, the pros and cons of this theory show that there is a great necessity to produce security constellations regardless of regions.

One of the other critiques is on the necessity of geographical proximity as “threats spread easily within proximate actors.” The transnational approaches in international

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studies argue that globalization shrinks the world and threats travel easily, not only in neighboring states, but around the globe. This creates a certain level of interdependence among the states since “an action of a state affects an action of other states.” Since threats travel easily, it is hard to claim a regional approach for state relationships because the impact of the threat could be the same even in different regions. International terrorism is the only example that Buzan and Waever label as a global threat. In essence, the nuclear threat is also a global one that states relations might be shaped by, since the weapon itself has power to cross borders.

The idea of security interdependence has not been discussed in depth by the authors, but it has similarities with the liberal theory on economic interdependence. Although the term ‘security interdependence’ is helpful to figure out the regional dynamics, it has some shortfalls. The ambiguity of security interdependence within the regional security complex theory is that the authors do not ask explicitly the question whether security interdependence diminishes conflict. Buzan and Waever regard regional security complexes to be “socially constructed and they are contingent on the security practice of the actors.” If one state’s security is dependent on another’s, and security practices determine this process, then the authors need to explain how a region might transform war-like characteristics into a peaceful dynamic. Is Germany’s security transformation sufficient to change the whole regional security conceptualization? Is it enough to have one state to change its security practice? How many states are needed to transform a regional security complex? It is apparent that, it is important whether a state is strong, weak or a great power with the ability to transform the whole region. However,

how this transformation occurs is the question. These questions are important, because under constant repetitions of threat or warfare, how one state could change its security discourse and policy still needs to be explained, in the regional security complex theory, and more broadly in International Relations.

Security complexes, according to say Buzan and Waever, need to be examined “sector by sector” and “unit by unit” to build the “security constellation” among the regional actors. The reason for this is regional security complexes may fall short in explaining “intense security dilemmas” as it gets hard to find the real threat and the perceived threat in the same sector.

NON-TERRITORIALITY: MISSING ELEMENT

The debate between Buzan-Waever and Lake-Morgan lacks a “non-territorial” understanding of security complexes. Originally, security complex theory explained mid-level analysis on state behavior, encompassed through a regional filter. Lake and Morgan criticized the territoriality aspect of it, as for them, “what really matters is the flow of threats that binds states regardless of their location.” In this understanding, any state can be a member of any security complex, because regional security complexes are “issue-specific.” Buzan and Waever do not consider issue-specific security complexes to be efficient, claiming, “one can find thousands of complexes based on almost every sub-

global threat perception.” In an issue-based security complex the central focus moves away from the actors to the issues. This kind of shift is beneficial in better understanding the phenomenon because actors’ policy practice changes, not depending on the actor that it faces, but depending on the issue in question.

NUCLEAR PRACTICES AND SECURITY COMPLEX THEORY

This chapter, so far, examined the definitions of security complex theory. It looked at the debates relating to the theory and stressed the main contributors to these debates. The main difference between the founders (Buzan and Waever), and Lake and Morgan lies in territoriality. Lake and Morgan stressed security complexes do not need boundaries and geographical locations. Likewise, “what really matters is flow of threats that binds states regardless of their location.” Any state can be a member of a security complex because regional security complexes are “issue-specific.” For Lake, a region is nothing more than cluster of states. Buzan and Waever believe to issue specific security complexes not to be efficient because “one can find thousands of complexes based on almost every sub-global threat perception.”

Contrary to Buzan and Waever, this dissertation revolves around issue-specific security complexes with a focus on the nuclear practices of states. There is no need for hundreds of issue-based security complexes like Buzan claims. Based on the

78 Buzan and Waever, 2003, p. 80.
81 Buzan and Waever, 2003, p. 80.
securitization level of certain issues in world politics, an issue specific analysis can be made. Alternatively, Buzan categorizes security issues in five sectors. As aforementioned, there are political, military, economic, social, and environmental security sectors for Buzan. The nuclear security complexes fit into the political-military security sector threats. 8

An issue-based security constellation is one where the states' posture is categorized in terms of the issue at stake. The issue that the next chapter highlights in depth is nuclear proliferation. Although a regional approach is fixed to the territory, issue-based groupings—security complexes—are subjected to change over geography. State behavior on nuclear proliferation may change over time. That is why the security constellations rest upon the historical posture of states.

This kind of conceptualization is different than the traditional security complexes that Buzan and Waever have defined, in terms of two aspects: The first point is that issue-based security complexes place the issue at the center of the study rather than the geographical positions of states. It groups states' postures (security policies) with regards to proliferation. For instance, the traditional school of thought assumes every issue is significant, as long as it is related to power and capabilities and determines state survival. However, states do not react to all security issues (be it nuclear, terrorism, environmental, human rights) in a similar fashion. State polices differ as their securitization level of the issue differs. Since states follow different approaches to different security problems, it is extremely hard to talk about a fixed international system with the assumptions of anarchy that shapes state-state relations.

8 Buzan and Waever, 2003, p. 80.
The second point is that security complex theory originally assumes change in the system but regional perspective limits the idea of change in security complexes since regions are more or less defined through geographical locations. A non-territorial security complex, gives flexibility back to the theory. Since state relations are significant to certain policies, regions might be significant only to observe actors’ policies in one region on a specific issue. With regards to nuclear proliferation and non-proliferation practices, following a regional approach generally falls short because states even in one region may have very different policies regarding proliferation.

Why suggest issue based security constellations rather than focusing merely on regions? The regional security complex theory has shortfalls to explain transnational security problems such as international terrorism and nuclear proliferation. This shortfall rests on the main assumption of the theory that threats travel easily in the neighboring states; that is why regional security complexes are territorial in origin. Nuclear weapons undermine this assumption, as they are easy to deploy beyond the immediate geographical region. Some can even be deployed intercontinentally. This means any state might be a security concern for any other state regardless of geography. It also means that the nuclear practices of one state, in one region, might affect non-regional actors shockingly more than regional actors, depending on the level of securitization or politicization of the nuclear weapons and nuclear proliferation in the latter state.

Both the United States and Israel, for instance, are affected by the results of an Iranian nuclear weapons program. A regional response alone is not sufficient to adequately confront the issue. Turkey, however,—which is another regional actor—although clearly states not to allow Iran to be a nuclear weapons state, differs in the
nuclear approach to Iran and on its own nuclear policies. According to Buzan and Waever's security complex theory, Israel and Turkey are linked through security interdependence, which is the Iranian nuclear proliferation. If, however, there is security interdependence, why doesn't it result in similar state policies?

Although regional proliferation security complexes may explain an expected level of interdependence in a region, it cannot explain the question of why Egypt is so supportive of a non-nuclear region, whereas Iran is all into acquiring nuclear weapons, and Turkey follows a strict new nuclear energy approach rather than focusing on the nuclear weapons program, especially as Israel has nuclear weapons.

Security complex theory is useful, as it prevents us from viewing security as monolithic. On the contrary, it allows room to capture security in terms of clusters. Security does not mean the same for all actors, and a security issue that is vital for one state may not be that vital for another. This causes the differences among regional actors on any securitized issue.

Security complex theory is useful for explaining nuclear practices of states because it places securitization theory at the center of the study. With securitization the issue at stake, like nuclear proliferation, gains a momentum where state agenda shifts to the issue. In practice nuclear proliferation has never been totally securitized. It has always been highly politicized especially in the United States. The issue is regarded as a security issue, but the policies to tackle it encompass only one dimension; the national security perspective. Solving proliferation in this way generates particular state policies and does not unlock the problems. The securitization of the nuclear issues means to take into the
international level, where national policies and posture melts away, which opens up a room for change.

CONCLUSION

To conclude this chapter, issue-based security complexes do not dismiss regional perspectives. An alternative to examine proliferation is through an issue-based approach. It is sufficient to say that both regional and issue-based security complexes aim to explain state behavior. Both are significant, and complementary in understanding nuclear practices and only when they are considered together, is comprehensive analysis possible. The next chapter focuses on nuclear proliferation as the security issue at stake, and seeks to group states in terms of their state characteristics that shape nuclear behavior.
CHAPTER 3

EXAMINING NUCLEAR LITERATURE THROUGH GROUPING METHOD

Nuclear proliferation is the spread of nuclear weapons, their delivery systems, and the necessary nuclear technology into the hands of more actors.1 This chapter is structured to use the grouping methods of the existing literature. The focus is given to the nuclear proliferation and nonproliferation debates. The existing literature uses grouping as a method but this has never been exposed as a special undertaking. In this chapter, I briefly introduce nuclear proliferation and then examine the nuclear literature through the use of the grouping method. Later, I introduce to group states in terms of state characteristics. In the theoretical realm, grouping states in terms of state characteristics related to nuclear posture enables one to utilize the three core theoretical approaches in International Relations (realism, liberalism, and constructivism) at the same time. The proposed grouping, however, is not an eclectic approach because each group feeds from one dominant theory rather than several theories. There is little work in either the policy or theoretical realm on utilizing grouping methods in the nuclear field, so far.

This chapter first demonstrates the nuclear literature where grouping methodology is utilized. Depending on the questions asked different groupings emerged in the nuclear literature. To unfold these questions, this chapter looks into the proliferation debates and reveals how researchers grouped states, their policies, and capabilities. One of these debates is the explanation of proliferation by answering the question: why does nuclear proliferation takes place? This debate identifies factors from three core theories (realism, liberalism, and constructivism). Another debate asks: what are the methods to prevent

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proliferation? This debate identifies deterrence, non-proliferation, and disarmament as the core policies. Based on this particular debate, the chapter highlights the problems with the deterrence strategy in the 21st century as it seeks to maintain the status quo. The trend on nuclear especially in the European realm is to outlaw nuclear weapons and to follow nuclear disarmament. States are grouped, indirectly, in the literature as nuclear nonproliferation supporters, nuclear disarmament supporters and peaceful use of nuclear energy supporters. This chapter concludes by positing that non-proliferation policies should be parallel to nuclear disarmament policies in which international will can balance national interest. By international will, I mean the will of the states in the international arena, such as at the United Nations General Assembly, International Atomic Energy Agency and Nuclear Nonproliferation Treaty Preparatory Commissions. Although states mainly strive to preserve their national interest in the international arena, these organizations still represents the will of the collective.
GROUPING METHODS

Grouping in terms of Legal Possession:

Many scholars in the nuclear field implicitly group states while conducting research. Depending on the question, different groupings emerge. One of the questions often asked is what constitutes a nuclear weapon state? This question is derived from the main comparison of nuclear weapon states with non-nuclear weapon states. This comparison initially grouped nuclear weapon states as the ones that possess nuclear weapons before the initiation of the Nuclear Nonproliferation Treaty (NPT) in 1967. Nuclear weapon states, then, are the group of five states, acknowledged by the treaty. Non-nuclear weapon states are the rest of the world, which pledged not to acquire nuclear weapons. This grouping is important as it draws the line in international law and created the vocabulary we still use today. This does not show the “reality” of today as there are de facto nuclear weapon states—India, Israel, North Korea, and Pakistan. The possession of nuclear weapons then cannot be reduced to a legal perspective where de jure nuclear weapon states are the only nuclear weapon states. The proposed model of nuclear security complex theory, considers India, Pakistan and Israel as nuclear weapon states even though these states acquired nuclear weapons after 1967.
Grouping in terms of Theoretical Posture:

What is the reason for proliferation and non-proliferation? This is another question that has led to grouping in terms of theoretical posture. This question has resulted in realist, liberalist, and constructivist camps. In the realist camp, scholars argue that states proliferate due to threat existence with the logic of national survival. Regional insecurities are motivation for states to consider nuclear proliferation but they are not the only reason. This argument maintains that threats travel more easily in geographically close locations than in others. Stephen Walt’s argument that contradicts Kenneth Waltz for instance, revolves around a similar idea.

According to Walt, states do not balance against the strongest state but rather they balance against the most threatening state. The level of threat, for Walt, depends on "aggregate power, geographic proximity, offensive power, and aggressive intentions." Offensive power projection correlates with geographical proximity as well. On the role of geographical proximity, "states that are geographically close can threaten one another more easily." As a result of offensive power perception, states mirror each other’s behavior. In the end, this mirror imaging results in a security dilemma and can cause an arms race. Susan F. Burk, Special Representative of the President for Non Proliferation in Brazil, indicates, “when one state acquires nuclear weapons, its neighbors may feel the

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3 Stephen, Walt. 1987, p. 22.
4 Mirror-image perception in psychology is “reciprocal views of one another often held by parties in conflict, for example, each may view itself as peace loving and the other side as evil and aggressive.” See David G. Meyers. Social Psychology Glossary, 7/e. McGraw Hill Higher Education 2002.
5 Mirror-image perception in psychology is “reciprocal views of one another often held by parties in conflict, for example, each may view itself as peace loving and the other side as evil and aggressive.” See David G. Meyers. Social Psychology Glossary, 7/e. McGraw Hill Higher Education 2002.
need to do likewise, leading the entire region down the path of insecurity."⁶ According to Burk, Latin America is the “opposite” example for this logic where “mutual security” has prospered by abolishing nuclear weapons in the region.

Realist school argues that threat existence decreases in the formation of alliances. With regards to nuclear weapons, the United States nuclear umbrella continues to provide the main alliance dynamics of today. With the nuclear umbrella, the United States assures its allies that in the case of a nuclear attack, it is the United States who would protect them. The nuclear umbrella ensures states not to proliferate for security reasons. Not to acquire nuclear weapons may rest purely on national interest calculations, such as the economic costs of nuclear weapons program. Not to acquire nuclear weapons may also rest on trust and cooperation between actors. In that case, parties follow a liberal worldview. The nuclear umbrella is not all encompassing; it excludes most of the states from protection. Therefore, although nuclear umbrella seems to create unification and non-proliferation, it also drives other states to consider proliferation.

Alliances are a form of security assurance. They are “outward oriented and are intended to increase the security of the members vis a vis external parties.”⁷ According to realists, alliances are formed for national interest and they would dissolve if the interest diminished. If more states acquired nuclear weapons, the role of nuclear umbrella would diminish and the “credibility” of the United States’ as a protective ally would be

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undermined.\(^8\) Alliances are like building blocks for non-proliferation; a function for realism, where alliances are formed for “offensive reasons” and dissolve easily.\(^9\)

For liberalism, alliances generate cooperation. States realize that national security is assured by and with the security of others. In other words, security in the contemporary era is not independent of other states’ security. This logic stems from the liberal-constructivist view, where security of one state provides *security of all*, not *against all*. In this circumstance, states feel they are “part of a larger political community,” and are more likely to preserve the alliance.\(^{10}\) When alliances exist within the *security for all*, rather than prioritizing national interest, a liberal posture can prevail.

Second difference between realism and liberalism is on the role of democracy and nuclear nonproliferation. The literature misleadingly states that democracies are more likely to acquire nuclear weapons. Jo and Gartzke’s quantitative research finds “no difference between democratic states and autocracies to produce nuclear weapons.”\(^{11}\) Jo & Gartzke’s finding was the result of an analysis of three nuclear weapons states which are full democracies (United Kingdom, United States, and France) and three de facto states, two of which are “clear democracies” (Israel, India), and one, which is a partial democracy (Pakistan), based on the Polity dataset. The problem with this analysis is that *de jure* nuclear weapons states proliferated before the ratification of NPT. Israel is believed to acquire the nuclear weapons in 1960s, yet it never declared publicly.

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\(^{10}\) John Duffield, Cynthia Michota, Sara Ann Miller, 2008, p. 299

The tendency of proliferation by democratic states in the post-NPT world has significantly decreased. The dissolution of threat from Europe is perhaps related to the nuclear abstention as well. This tendency highlights how nuclear capable democratic states have abstained from following the nuclear path for the last decades. This literature does not take into account the ongoing commitment of the non-nuclear weapon democratic states under the NPT ruling, as Sagan highlights. A future analysis with two time periods may capture this distinction.

Democracy as an indicator for nuclear weapon programs should focus on the level of democracy in relation to the nuclear posture. A transparent nuclear program for peaceful nuclear energy is one of these indicators. All of the de jure nuclear weapon states that are democracies in the POLITY IV dataset became so in non-democratic conditions, without public consent and approval. In democratic states, the domestic pressures are high to change the course of any nuclear activity of a state. The Cold War environment was tense where European states created a security paradigm of which the public consent for military affairs was not required due to intense level of hostility. The post-Cold War environment, however, did not allow national security matters to outlaw nonproliferation posture in Europe.

The liberal camp also states the economic burden to initiate nuclear weapons program. Threat might trigger states to acquire nuclear weapons program, but it is not

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13 While modeling nuclear security complexes, the liberal security complex (group) uses democracy as an indicator. I do not however make a distinction between nuclear weapon states or nonnuclear weapon states in this regard. Democracy is an indicator for nuclear transparency and nuclear domestic pressures with regards to follow or abstain nuclear weapons program.
sufficient to follow economically and politically costly path when states would rather focus on strengthening their conventional military.

The constructivist camp uses factors like established norms, treaties, and the nuclear taboo for using nuclear weapons. Safeguards compliance is also based on a checklist of rules that groups states. This grouping is based on the nuclear posture of a state. Non-nuclear weapon states are obliged “not to manufacture, or otherwise acquire nuclear weapons or other nuclear explosive devices.” 14 Noncompliance is determined through a checklist, such as diversion of materials to nuclear weapons, refusal of safeguards inspection, the overall record of the state on performance of safeguards and nonproliferation commitments, and the context of safeguards breaches. 15 This checklist groups states in line with the treaty terms.

The realist-liberalist debate on nuclear proliferation did not progress much but a new thinking emerged from the debate. This thinking, blended with the constructivist approach, enables an alternative understanding and explanation by which to group states. The constructivist explanation supports the logic that states do not act similarly at all times.

The constructivist scholars added ideational reasons to explain proliferation. In this new approach, the debate has shifted from the question “how to prevent proliferation” to “why do some states not consider proliferation an option?” 16 If all states act similarly under the same conditions—which is the existence of threat—then we would expect more and more states with nuclear weapons in time. Constructivist scholars

16 Tanya Ogilvie-White, 1996, p. 45.
emphasize that state characteristics differ in the international system; thus, states’ nuclear proliferation ambitions also differ from one another.\textsuperscript{17} Constructivism does not disregard the role of threat in decision-making but it includes national identity, norms and rules in the equation. To follow this premise, grouping states in terms of ideational and institutional characteristics is a method for the constructivist approach in the nuclear field.\textsuperscript{18}

Sagan tested three groups in \textit{Three Models in Search of a Bomb}—the security model, domestic model, and norms model—to explain the motivation for proliferation through a theoretical filter.\textsuperscript{19} This article is an inspiration for following an eclectic theoretical approach in the nuclear field. By analyzing the three models, Sagan implicitly groups states into three categories.

For Sagan, the security model is the realist explanation of proliferation where external security concerns drive states to acquire nuclear weapons. This model assumes that states do not trust each other and acquiring nuclear weapons causes a security dilemma, which results with proliferation.\textsuperscript{20} According to the security model, states are restrained from acquiring nuclear weapons only when they do not face “military threat.”\textsuperscript{21}

The domestic politics model articulates nuclear proliferation by prioritizing the interests of leaders, scientific communities (nuclear energy experts) and military personnel. It takes into account the effect of the scientific-military-industrial complex on

\textsuperscript{17} Tanya Ogilvie-White, 1996, p. 46.
\textsuperscript{18} Chapter 4 is designed on the categorization of states through a theoretical framework: realist, liberal, and constructivist theories are the core ones in this grouping.
the decision making process.\textsuperscript{22} The norms model signifies the symbolic role of nuclear weapons in association with national identity and increased status.

Sagan’s three models open up new dimensions of thinking by following theoretical dividing lines. Sagan’s work results in an eclectic posture, concluding, “each theory explains some past cases quite well and others quite poorly.” Sagan does not evaluate the issue from a regional standpoint explicitly. However, from his writings, it is implied that the security model might assume threats would travel easily within the regions; therefore proliferation is most likely the result of regional insecurities. The historical examples that Sagan states also support this view, as he looks at Chinese and Indian nuclear proliferation as a result of regional threat existence as well as the Argentinian and Brazilian nuclear reversals. Even when the author examines the domestic model, Sagan states that internal actors may use external threats as their cause for proliferation.\textsuperscript{23}

Sagan shows that the security, domestic, and norm models might all be affective to explain a state’s nuclear posture. This is an eclectic posture where “more than one reason might explain nuclear proliferation or restraint.”\textsuperscript{24} Regional approaches with a mere focus on threats are necessary, but not sufficient, to explain all cases.

\textsuperscript{22} Scott Sagan, 1996, p. 64.  
\textsuperscript{24} Scott Sagan, 1996, p. 85. Although this dissertation acknowledges the benefits to follow an eclectic stance, it differs from Sagan’s point as well. Nuclear proliferation security complexes here suggest that some states are eager to proliferate primarily for security reasons, and some states primarily for normative reasons. Similarly, if a state restraint from proliferation even though an external threat exists, that state might have other primary driving motives to restrain. In this regard, this dissertation follows different theoretical explanations for different case groups. This is different than an eclectic approach where all different theories explain a case.
Grouping in terms of advantages and disadvantages of proliferation:

The initial question of why states proliferate opened up a new debate on the proliferation advantages and disadvantages. During the Cold War not all scholars agreed that proliferation begot proliferation. There were two groups of scholars; proliferation-optimists and proliferation-pessimists. Kenneth Waltz and Scott Sagan were the heads of these two groups respectively. The difference between the two groups laid on the question whether proliferation creates stability or not.\(^{25}\) Waltz was a supporter of proliferation (a proliferation optimist), whereas Sagan was concerned (a proliferation pessimist) with the spread of nuclear weapons. Mearsheimer contributed this debate, suggesting controlled proliferation, which is to allow certain regions to proliferate, such as Europe, to reestablish balance of power.\(^{26}\) With this view, Mearsheimer groups states regarding their geographical positioning. Simply put, Mearsheimer has followed controlled proliferation logic where proliferation would bring stability to Europe but not to the Middle East.

This debate revolved around the main terms in international relations such as peace, stability, conflict and balance of power at the system level.\(^{27}\) It rested on the question “what will be the risk of war in an international system of tens of nuclear weapon states?”\(^{28}\) Waltz believed that the more the states acquire nuclear weapons, the more stable is the system. From Waltz’s logic, states would be more “cautious” in a

proliferated world, and this would prevent nuclear catastrophe.\textsuperscript{29} This also meant that the chance of war in a proliferated world is less likely.\textsuperscript{30} For Waltz, the third image, which is the international system, is deterministic in state decisions.

In Waltz's defense, there are several reasons for acquiring nuclear weapons. One of the reasons was state security and survival. According to Waltz, "if a state does not have a nuclear ally, it would want the nuclear weapons all the more if some of its adversaries have them."\textsuperscript{31} Although Waltz did not acclaim a regional pattern, his examples were driven from regional threat existence. Waltz explained Israel's interest in nuclear weapons through regional adversary relations as well.\textsuperscript{32}

Unlike Waltz, Sagan argued, "more [nuclear weapons]\textsuperscript{33} will be worse."\textsuperscript{34} Sagan stressed that the proliferation debate lacks an "alternative approach where the debate only shows the likelihood of war when the nuclear weapons is spread to more actors."\textsuperscript{35} Sagan's argumentation is two-fold: Nuclear proliferation might result in catastrophe because of organizational failure (military) or because of the lack of "civilian control" in

\begin{itemize}
\item \textsuperscript{31} Kenneth Waltz, 1981.
\item \textsuperscript{32} Kenneth Waltz, 1981.
\item \textsuperscript{33} \textit{Emphasis added.}
\item \textsuperscript{35} Sagan, 2003, p. 47.
\end{itemize}
future nuclear dealings. Sagan argues that deterrence optimism is a "mistaken nostalgia" and a "faulty analogy." Sagan acknowledges that "external security threat" is the primary cause for nuclear proliferation; but satisfying domestic actors and the symbolic power of nuclear weapons being an object for status should not be dismissed from the analysis.

The main difference between Sagan and Waltz is on the level of analysis. The level of analysis is also a kind of grouping in terms of units of analysis. Specifically, Waltz follows systems level of analysis, whereas Sagan follows a domestic politics approach. For Waltz, states are the primary actors and decisions are taken within rational decision-making. For Sagan, it is not the states per se but the domestic actors, such as military organizations and scientific cadre, that are significant on the decision-making. The organizational characteristics like offensive culture and bureaucratic politics play role on this decision. For Waltz, states aim to increase their power at the expense of others; which is known in the International Relations literature as relative gain seeking behavior. Suffice to say this debate at the general level, relates to realist and liberal claims on nuclear proliferation.

Waltz argued that states are expected to behave similarly under the same conditions. This means it is futile to group states to examine their proliferation behavior,

39 The debate on the levels of analysis exists not only in the issue of nuclear proliferation but it is also a micro-theoretical one. In the macro level, realism observes state behavior through an international level of analysis where states dwell under anarchy, whereas liberalism observes state behavior with regards to institutions and cooperation. In the micro-theoretical level, different approaches feed from the level of analysis. As it is discussed in this dissertation security complexes literature also feeds from the levels of analysis debate, where Barry Buzan has created a mid-level analysis between states and the system. This mid-level is called regional level of analysis. See Chapter III.
since they would choose to proliferate to maximize national interest anyway.\textsuperscript{40} Following this logic, Mearsheimer predicted a nuclear Germany in the post-Cold War era.\textsuperscript{41} Germany, however, followed a new "role" that rested on nonproliferation.\textsuperscript{42} The case of Germany shows that not all states are in favor of acquiring nuclear weapons because national interest is not related solely to the logic of survival or relative gains. To compare the United States and Germany’s nuclear posture today, the United States’ nuclear policy stems from the interests of the United States; whereas Germany regards proliferation as a "universal problem rather than a national one."\textsuperscript{43} The latter approach objectifies the proliferation problem in a universal manner whereas the former personalizes/nationalizes it.

Waltz had a few supporters if not more, which claim positive aspects of proliferation for creating stability in a bipolar world.\textsuperscript{44} Proliferation optimists like Waltz indicated the regional stability that nuclear weapons may bring when there are two superpowers in the system. Steven Rosen, for instance, suggested that mutual deterrence

\textsuperscript{40} Kenneth, Waltz. 1979. Theory of International Politics: McGraw-Hill.
\textsuperscript{42} This is the constructivist approach to explain why some states choose not to proliferate even though they have the incentive to do so. Constructivist school follows the role of identities, norms, and "nuclear taboo" to be affective in the decisions. See, Harald, Müller. Summer 2003. "Germany and WMD Proliferation." The Nonproliferation Review, p.16. For nuclear taboo, see Nina, Tannenwald. 2008. The Nuclear Taboo: The United States and the Non-Use of Nuclear Weapons since 1945: Cambridge University Press.
\textsuperscript{43} Harald, Müller. 2003, p. 5.
\textsuperscript{44} For an extended analysis on the proliferation of nuclear weapons in the Cold War see Frank Barnaby, 1989, The Invisible Bomb: The Nuclear Arms Race in the Middle East, I.B. Tauris: London. According to Barnaby, nuclear weapons can create stability in one region only when the system is bipolar, when parties have mutual recognition and communication with each other, and both have second strike nuclear capability with conventional deterrence capability as well. See also Bhatia Shyam, 1988, Nuclear Rivals in the Middle East, Routledge: London & New York; Greenwood Ted, 1977, The Proliferation of Nuclear Weapons, in The Diffusion of Power: I. Proliferation of Force, Adelphi Papers, Number: 133, pp. 24-33; Karem Mahmoud, 1988, A Nuclear-Weapon-Free Zone in the Middle East: Problems and Prospects, Greenwood Press: New York.
is viable in the Middle East, as nuclear weapons would equalize Israeli military capability with the Arab states. Rosen asked whether nuclear weapons help regional powers to ameliorate existing problems. It is suffice to say that proliferation optimists rely on their cases of regional balancing as a stabilizing outcome of proliferation. The neglected point in this type of grouping, however, is the global consequences of nuclear proliferation. Grouping based on nuclear stability filtered through regions does not disqualify the transnational aspects and the role of nuclear weapons. In the 21st century, a nuclear proliferator state has negative impact on the established nuclear regime, which is based on non-proliferation dynamics.

In late 1970s, the nuclear proliferation optimists supported “selective proliferation” to create stable regions. Selective proliferation is closely linked to following a policy of regional deterrence, since it integrates “fear of retaliation” as the cause for non-action. Wentz, for instance, suggested the United States to help Japan acquiring nuclear weapons to create balance in the far East. This is also a grouping method—where Japan is checked in to proliferate while others do not—based on national interest of the United States. Following a national interest based approach to tackle proliferation is not sufficient in the long run, because it creates a biased approach.

Grouping in terms of regional versus global considerations:

There are two groups of studies considering the value of a regional approach. The first group of scholars argues that some regions are prone to proliferation. Nuclear weapons are a regional issue, the decision-making to acquire nuclear weapons feeds from regional threat identification, and nuclear weapon free zones are the solution to prevent the spread of nuclear weapons. The second group of scholars argues that proliferation is not regional. Nuclear weapons are transnational in nature and have global impact; thus, they are not limited to regional calculations. Nuclear security complex model favors the latter approach and builds upon transnationalism for the nuclear proliferation puzzle.

a- Regional Considerations: According to the supporters of regional approach, some regions are prone to proliferation. Betts, in Paranoids, Pygmies, Pariahs and Non-Proliferation Revisited, for instance, argues firstly that proliferation is a political problem that is not related to the capabilities of states.\(^{48}\) It is a political problem because even though states have the capabilities, they might not consider pursuing a nuclear proliferation policy based on their political preferences. The post-Cold War era showed that states such as Germany, Italy, Japan, and many others have abstained from acquiring nuclear weapons, although they have the economic and technological power to do so. According to Betts, states proliferate either to gain status\(^{49}\) or to ensure national security. With regards to security, the author groups states into three categories: pygmy states, pariah states, and paranoid states. Pygmy states are the ones when states are “threatened by powerful neighbors;” pariah states are the ones when a nation is surrounded by


\(^{49}\) Betts label Iran as a status seeker power rather than a security seeker one. Although it might be true in early post-Cold War, today Iran also seeks security because it gets the threat perception not only from Israel but also from the United States and its Middle Eastern allies.
neighboring enemies; and paranoid states are the ones when states create the threat when there is no actual threat to a nation’s survival.\textsuperscript{50} This grouping follows a regional framework. Pygmy states would feel threatened by the “local enemies or regional hegemonic powers,” says Betts.\textsuperscript{51} The nuclear non-proliferation treaties as well as the safeguards regulations are not solutions for the pariah, paranoid, or pygmy states.\textsuperscript{52} The solution, the author claims, is to “reaffirm and extend the protective alliances” since alliances would decrease “insecurity.”\textsuperscript{53}

Nuclear proliferation behavior in the same region differs due to different understandings of the leaders. Thus, claiming that some regions are prone to proliferation is an exaggeration. Early in the Cold War, Brazil followed a nuclear weapons program with the help of West Germany against Argentina. It had its uranium mining and limited reprocessing facility, and research centers with adequate scientific knowledge.

Historically, both Argentina and Brazil were powerful rival states in Latin America. During the military ruling while Brazil pursued a clandestine nuclear weapons program, as Hymans uncovers, Argentina’s enrichment program was directed to produce a nuclear submarine to follow a policy of nuclear nationalism, which was to master nuclear technology for nationalistic reasons.\textsuperscript{54} However, Brazil had the transition to democracy and renounced upon its ballistic missile program in 1990s.\textsuperscript{55} Although the rivalry between the two states did not disappear overnight, their perspectives have changed. Both

\begin{thebibliography}{9}
\bibitem{50} Richard Betts, 1993, p.107.
\bibitem{52} Richard Betts, 1993, p. 115.
\bibitem{53} Richard Betts, 1993, p.118.
\end{thebibliography}
states signed the Treaty of Tlatelolco that prohibited nuclear weapons in Latin America. Additionally, they created the Brazil-Argentine Agency for Accounting and Control of Nuclear Materials. In recent years, Brazil has also followed a general nuclear policy as it presses nuclear weapon states to eliminate their nuclear weapons and to comply with NPT Article VI.\textsuperscript{56}

It is suffice to say that, for Betts, the problem is regional (threat identification from neighbors) but the solution is global (alliance formation). For other scholars, the solution is to establish Nuclear Weapon Free Zones (NWFZ), because nuclear weapons free zone create an “environment for nonproliferation, diminishes the risk of arms race, and strengthen peace and security.”\textsuperscript{57}

Others, like Holst, would argue that NWFZ is a “reassurance about intensions” and part of confidence-building measures. NWFZs are not an ultimate solution to create a secure region, as some regions have already existing problems, such as “rising tensions, absence of direct channels of communication, defiant leadership, and religious feuds” in the Middle East.\textsuperscript{58} Barnaby also supports the view that a NWFZ in the Middle East at least, is hard to establish because of the mutual security concerns.\textsuperscript{59} Barnaby is in favor of controlling proliferation because of its destabilizing effect. The author concludes that the solution rests on recognizing the Israeli state, and satisfying Palestinian Arabs by giving them their political rights. Another solution that the author indicates to stop proliferation

\textsuperscript{56} NPT Preparatory Committee. May 8. 2007 NPT Preparatory Committee Cluster 1 Debates by Brazil.
is by putting measures in place to prevent the nuclear states from selling nuclear
technology to third parties. In this regard, Barnaby rests his position on the early 1960s
when France helped Israel with its plutonium production and did not share this
knowledge with the United States. Therefore, if proliferation occurs in the Middle East, it
does through the transnational assistance of other states.

A regional understanding persists in the nuclear scholarship. Although thinking
through regional distinctions assists in creating an overall nuclear understanding with
regards to the existence of threat; it does not explain the different postures and policies of
states in the same region. The policy realm overburdens proliferation with spillover
effects in a region. For instance the premise that Egypt, Turkey, and Saudi Arabia are
likely to proliferate if Iran acquires nuclear weapons is an overestimation with little
factual analysis. Campbell et al advocated this point, arguing that a nuclear Iran would
cause instability in the region.60 Among the three likely proliferators, Saudi Arabia was
shown to be the most likely country to proliferate in the scholarly literature. On contrary
to these claims, in Nuclear Proliferation: The Case of Saudi Arabia, Bahgat suggested
that Saudi Arabia does not face imminent threats from “Iran, Iraq, Israel, and Yemen.”
Previously, Saudi Arabia had a balancing role between Iraq and Iran.61 The nuclear
umbrella that protects allies, such as Saudi Arabia, Turkey, and Egypt, thus diminishes
the possibility of a nuclear Middle East.

The regional approach can be found in the cases that Waltz, Mearsheimer, and
Sagan used in their analysis of the Cold War. This approach continued into the post-Cold

60 To read a political analysis for possible nuclear proliferation scenarios, see Kurt Campbell,
Robert Einhorn, Mitchell Reiss (eds.), The Nuclear Tipping Point: Why States Reconsider their
Nuclear Choices.
no. 60 (3): 421-443.
War nuclear scholarship as well. Etel Solingen for instance, has offered a regional comparison of nuclear ambitions with a focus on the domestic political environment with regards to integration into the global economy.

According to Solingen, states in the Middle East differ from East Asia in their nuclear pursuit, and this suggests a regional pattern. There is a correlation between East Asia not following nuclear weapons program and their integration to the global market, says Solingen. Likewise, the Middle East follows inward looking market economy and nationalistic policies, which end up with an increased likelihood of establishing a nuclear weapons program. In the Middle East, leaders utilize nuclear logics to stay in power.  

There are some problems however with Solingen’s generalizations. Egypt for instance does not follow a nuclear weapons program, neither Turkey in the Middle East. North Korea—by following nuclear weapons program—is another anomaly on the East Asian side, if East Asia is less likely to follow nuclear weapons program. Solingen’s findings are valuable for state-to-state evaluation rather than regional generalization. Global integration into world markets could be one of the indicators for the liberal based security complexes. The idea derives from the proposition that liberal economies value integration into world markets more than following nationalist pursuits. Yet, not all liberal economies follow global integration to a similar level. Other factors also play role in the nuclear pursuit of states. Due to this reason, there are regional anomalies in Solingen’s analysis. Interdependence level is also another indicator in the nuclear equation as not all states are similarly interdependent and some states value nuclear capabilities more than the costs associated with a nuclear weapons program.

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b- Global/Transnational Considerations: Proliferation is not limited to regional calculations, more so it is a global issue. This perspective, which is the main theme of this dissertation, is underscored in the nuclear literature. The power of nuclear weapons comes from the destructive capability when these weapons are deployed. They can be deployed over long distances through intercontinental ballistic missiles. This provides a transnational perspective to these weapons. Transnationalism means actors and issues cut across state and regional boundaries. In other words, nuclear weapons can cross borders easily and may be used outside a particular region.

Transnational issues require multilateral approaches to ameliorate the problems. Nuclear weapons as a transnational issue involve the interest not only of states but also of non-state actors, such as civil society and terrorist groups as well as transnational network groups. Secondly, for states to specialize in a nuclear weapons program requires all the technology and material needed to do so. It is extremely hard to be self-sufficient without external help in the nuclear field. A state needs all the nuclear fuel cycle capabilities to make a single bomb. This nuclear fuel cycle is composed of mining, milling, fuel fabrication, power reactors, conversion plants, storage places, reprocessing facilities, waste storage capacity, repositories, and weapons fabrication. In simple terms, a state needs to have uranium or be able to reprocess plutonium to make a single bomb. Even if it does have the material, it still needs the scientific knowledge and also the units to enrich it. When a state lacks nuclear fuel cycle capabilities, it turns to third parties to sell the material or technology. In this way the issue crosses the interest of different actors in the world. It is well known, for instance, that North Korea helped Syria to start its nuclear program even though these countries are in different regions.
Nuclear weapons are a global threat and this does have regional consequences. Focusing on the regional dynamics per se is to focus on the surface of the issue however. Many states aligned with the United States during the Cold War due to its nuclear capability. This alignment was not limited to regional calculations. According to Duffield, Michota, and Miller alliances in a transnational setting have three primary characters: 1) alliances are institutionalized through organizations and bureaucratic settings, 2) institutional capabilities need to be in place to preserve alliance, 3) there is a socialization process needed to create an alliance identity. The nuclear alliance works properly with regards to all of these characteristics. To apply, nuclear alliance is reinforced through an “institutionalization process” via Nuclear Non Proliferation Treaty (NPT) and the International Atomic Energy Agency’s verification structure. The United States provides the main capability — a nuclear umbrella — to preserve the alliance’s coherence. The nuclear alliance identity is to agree on non-proliferation and to push for nuclear disarmament. This socialization is a major statement point in the constructivist school under “nuclear taboo” as well.

The third-nuclear test of North Korea in 2013 alarmed the United States and the allies because a nuclear weapons program jeopardizes the established nuclear regime and norms. A nuclear North Korea could threaten world powers due to nuclear weapons’ long-range trajectories. The North Korean nuclear test was a clear rebuke to the

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63 Socialization is a contested process. It rests on the idea that states interest can transform through institutional socialization. This type of socialization is a part of learning process. How long will this process take is not known as well as whether socialization would continue without institutions is contested. For further analysis on socialization see Barnett, Michael. 2009. "Evolution without Progress Humanitarianism in a World of Hurt." International Organization no. 63 (4): 621-663.

universally supported Comprehensive Test Ban Treaty (CTBT). Right before the
meetings in the United Nations to employ tougher sanctions, North Korea raised the
threat of a "pre-emptive nuclear strike on its enemies, of which the United States ranks
first." Using its nuclear weapons program as a bargaining chip, North Korea’s foreign
policy behavior rests on intimidation and it utilizes nuclear weapons both symbolically
and materialistically in its policies.

Transnational issues like nuclear proliferation, have the ability to establish
common settings across actors through ideas, treaties, and norms. Transnational issues
are "framed" in a certain way by social movements or political parties. Framing is a part
of coverage for the social movements, according to Tarrow, to bring popularity to the
issue and to create awareness. Nuclear weapons are framed as lethal weapons that have
destructive capability. Nuclear framing is more than micro-cultural and ideological; it
rests also upon the sheer morality of acquiring nuclear weapons. Framing is fixed in the
memory of both the decision-makers, as well as the population, through the
documentaries, photography, and political satire in relation to the bombings of Hiroshima
and Nagasaki. This provides the anti-humanistic character that is associated with the use
and acquisition of nuclear weapons. The present nuclear framing results in a culture that
is against the use of nuclear weapons and results in questions about the efficacy of even
having nuclear weapons, if they are never going to be used.

Since nuclear weapons have intercontinental deliverability capability, the
geographical proximity of the opponent does not matter. Geographical calculations play a

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65 Rick Gladstone and David E. Sanger. March 7, 2013. "New Sanctions on North Korea Pass in
66 See Anne Harrington de Santana. 2009. "Nuclear Weapons as the Currency of Power:
role in threat identification, yet, Intercontinental Ballistic Missiles (ICBMs) have long-range trajectory that spreads the threat across borders and regions. General deterrence policy in the Cold War was between the Soviet Union and the United States; two geographically distant states.

Nuclear weapons serve the purpose of deterrence. The logic of deterrence is to take no-action, keep the status quo and have bargaining power over the opponent. When the opponent parties are geographically proximate, the bargaining power of nuclear weapons in decision-making disappears. For bargaining, decision-makers need sufficient time to assess the options. In a situation of proximate actors relying on nuclear weapons for bargaining purposes, this time frame dissolves. It takes approximately three minutes for a missile launched from Iran hit an Israeli city and vice versa, for instance. In such a case, relying on nuclear weapons as a bargaining chip for decision-making is not logical.

It is the existing nuclear framing that includes nuclear weapons into this kind of national interest calculations, even though decision-makers are cognizant of their non-use. Regardless, states in the same region may follow different nuclear policies.

**Grouping States in terms of nuclear policy posture:**

States follow different nuclear policies. In general terms, these policies are part of deterrence, nonproliferation, and/or disarmament approaches. The main nuclear policy and strategy that states follow throughout the Cold War onwards is nuclear deterrence.

Deterrence as nuclear policy posture: Deterrence rests on preserving status quo, which means to keep nuclear weapons intact, believing they serve a purpose. Deterrence views nuclear weapons as an asset rather than liability. Tailored deterrence is a "refined
deterrence strategy” where states “determine” what is a threat; and when and how to respond it.68 It is to shape policies based on the opponent's nuclear posture. It is projected as the viable United States' nuclear policy. The National Security Strategy of the United States indicates that the United States follows “tailored deterrence to stop both state and non-state actors to acquire nuclear weapons.”69 States following tailored deterrence adapt their foreign policy for each opponent. Therefore, tailored deterrence is an actor-specific approach. It rests upon initiating policies subject to particular actors rather a general nuclear non-proliferation policy based on tangible security threats.70

Deterrence in the 21st century is highly debated in terms of its effectiveness. The first group aims to revitalize nuclear deterrence through tailored deterrence policies; the second group of scholars rejects the value of deterrence today.71 For the supporters of tailored deterrence, there is no need for immediate deterrence because there is no longer the Cold War environment. Yet, deterrence needs revitalization72 today to minimize horizontal and vertical proliferation.73 For instance, the Obama administration is being

68 Patrick M. Morgan, 2003, p.103.
70 Nuclear issues in many states is politicized rather than securitized. In the United States for instance although nuclear proliferation is labeled as a security issue, it is claimed to receive the attention of the general public. It never reaches a point to generate security policies or concrete effort by the policy makers. Nuclear proliferation is not the top three problems that the Obama Administration works on today. The reason for this is it is not securitized.
accused of dismissing “containment” and “deterrence” with regards to the policies it is adopting towards Iran.\textsuperscript{74}

Contrary to deterrence supporters, others suggest that deterrence is “at the core of the problem of nuclear proliferation.”\textsuperscript{75} Nuclear deterrence is not the solution to establish peace; therefore, another policy should be adopted. This group does not neglect the given purpose of nuclear weapons during the Cold War; but it does not associate value with this policy in the post-Cold War era. Nuclear deterrence suffers from four nuclear trends in the contemporary world order. There is an “increased danger of proliferation after the Cold War, the threat of nuclear terrorism, the growing relevance of international law, and nuclear taboo.”\textsuperscript{76} Nuclear deterrence as a strategy does not prevent states initiating nuclear weapons program.\textsuperscript{77} Nuclear deterrence relies on preserving status quo with nuclear weapons rather than transforming the “irrelevance of nuclear weapons.”\textsuperscript{78} The main question today is whether nuclear deterrence can take the nuclear world order a step further where nuclear weapons are no longer a threat to national security and are not the tools of foreign policy?

Deterrence preserves status quo, which serves the powerful to remain in power. To expect different result while keeping same policies is not a rational strategy, especially in issues related to international security. Nuclear deterrence serves a conceptualization where nuclear weapon states keep their nuclear weapons while others

\textsuperscript{74} Stephen M. Walt. March 18, 2013. Why I hope Obama is Bluffing. Foreign Policy.
do not acquire them. The system is biased towards the powerful. Today, the less powerful actors challenge the powerful actors in the international arena, through diplomatic channels. Power embraces not only tangible military capability but also less tangible characteristics. This suggests that nuclear dynamics are now in a flux.

Nuclear Nonproliferation as Nuclear Policy Posture: The main supporters of nuclear nonproliferation are the nuclear weapon states and states that have tangible power capability. There are different policies under nuclear nonproliferation efforts. Counter proliferation is one of these efforts. Safeguards and verification methods through the IAEA are also part of non-proliferation efforts. Creating links between different proliferation cases is significant for nonproliferation policies as well. The United Nations Security Council Resolutions for instance, explicitly point out the benefits of eliminating the Iranian nuclear weapons program to “nuclear non-proliferation elsewhere.”\footnote{United Nations Security Council. 24 March 2007. Resolution 1747.} If made a binding resolution this would create the middle ground between the United States’ national interest and international common will to tackle nuclear proliferation.

Nuclear Disarmament as Nuclear Policy Posture: The main supporters of nuclear disarmament are states, favoring impartial nuclear policies due to national interest, which ask parity in non-possession, and/or which value the humanitarian dimensions of non-possession. These states have less tangible capabilities. The lethality of these weapons started discussions for nuclear disarmament as a viable policy. With this aim, George P. Shultz, William Perry, Henry A. Kissinger, and Sam Nunn published three consequent articles from 2007-2010. The overall argument was the world faces a “tipping point”
where the new nuclear vision should be the total elimination of nuclear weapons. These policy makers of their time argued that "relying on the nuclear weapons is hazardous" for the future. In the first two articles, these authors suggested an institutional approach, which was to boost the role of international actors and factors to cope with proliferation. In the last article, the authors suggested to empower the United States' leadership to shape nuclear decisions to "maintain the safety, security, and reliability of the United States weapons." Suffice to say, these policy suggestions generally revolve around the role of the United States in shaping the international nuclear regime.

Nuclear disarmament policy is reinforced by ideas like nuclear taboo. Nuclear taboo suggests that nuclear weapons are not used after 1945 because there is an established moral dimension for non-use. The nuclear disarmament supporters suggest that in devaluing the role of nuclear weapons, and delegitimizing nuclear weapons through international law enforcement the taboo for non-use increases international security.

Non-governmental organizations generally push states in the direction of nuclear disarmament. The International Campaign to Abolish Nuclear Weapons (ICAN) and Global Zero are two activist movements with this aim. Both NGOs aim to create a treaty to eliminate nuclear weapons through awareness campaigns. The problem lies in the debate between arms control versus disarmament. We are accustomed to think about

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arms control in conjunction with disarmament; however, in practice the two do not always complement each other. The actual question becomes whether to prioritize arms control or disarmament in nuclear policies. Nuclear disarmament needs a combination of policies and aspirations to be in effect.\textsuperscript{84}

This chapter summarized the existing literature in the nuclear field through the lens of grouping methods. It fed off theoretical and political debates mainly from Cold War onwards. The reason to cover theory and practice together is to show that there is disagreement between the theoretical schools of thought on the methods and strategies to approach nuclear proliferation. This disagreement is visible in the political postures as well.

Theoretical debate in the literature on why states proliferate shows that states are categorized in different theoretical groups regarding their tendency to proliferate. National interest, domestic groups interest, threat existence, and international norms are fundamental factors shown in the nuclear literature to differentiate the nuclear postures of states in terms of their proliferation tendency. The policy debate in the literature indicates that tailored deterrence is viable for supporting the national interest of the United States in particular, and the nuclear weapons states in general. An alternative policy approach is to follow parallel nuclear disarmament and non-proliferation approaches where all parties are content with the outcomes. Strengthening the international nuclear regime at the

\textsuperscript{84} This approach is similar to Kenneth Booth's call for “utopian realism.” According to Booth, the word utopian becomes “a kiss of death” in social studies; yet, it does not have to be negative. Utopian realism is to “critique what is politically, semantically and philosophically contestable”, to “set goals and be catalyst to action”, and to “create a desire to have better living in the culture.” Every conscious policy with a focus on the utopian ideal then is a right one, and should be appreciated. Nuclear disarmament, then, is similar to “utopian realism” where policies direct you to the ideal. There is no right or wrong policy but a process to achieve the ideal. See Kenneth Booth. 1991. "Security in Anarchy: Utopian Realism in Theory and Practice." International Affairs no. 67 (3): 527-545.
expense of a particular national interest is a policy that the United States should volunteer because other actors have already started to challenge the United States in this field.

There is a rivalry and a never-ending debate among realism, liberalism and constructivism. States choose to follow nuclear weapons projects for different reasons and they follow different nuclear policies; therefore a single theory is not sufficient to explain everything. Eclectic studies, like Sagan’s three models to explain nuclear behavior, also have problems because they end up explaining a single case with multiple theories. Thus, the recommendation to unfold the proliferation puzzle suffers. In nuclear security complexes, discussed in Chapter 4, I group states in terms of state characteristics (threat existence, nuclear democracy, institutions and nuclear treaty compliance) that shape nuclear posture (through policies and speeches) and employ a single theoretical framework to each group of states. By this approach, I aim to create an alternative understanding where a country’s nuclear ambitions can be explained by a single theory; but not necessarily that all nuclear capable states’ nuclear ambitions derive from that theory. In other words, a theoretical approach is visible for every group of states in the nuclear security complexes.

Grouping states through theoretical and political undertaking does not aim to predict future proliferation. In a globalized world, it is extremely hard and perhaps futile to predict the future environment. The false Cold War predictions establish an example of this. Rather, grouping states enables us to envision a future in which nuclear proliferation is under control, nuclear weapons are diminished in quality and quantity, or may even be totally abolished; while ameliorating the current condition where states follow different nuclear proliferation policies. Grouping in this way opens up an alternative political
thinking, where nuclear weapons become a security rather than a policy issue of national interest.

The literature on nuclear proliferation and non-proliferation is trapped either in case-by-case explanations or in abstract generalizations. Scholars could not find a mid-way where they would not lose focus on the practice of proliferation and the theoretical underpinning of the practice at the same time. Following a group-based approach—which is called nuclear security complexes—is a mid-way analysis. To tackle both theoretical and policy based problems, the next chapter proposes the nuclear security complexes model.

The arguments that alert us to regional spillover effects are part of the politicization of nuclear weapons rather than securitizing them. The politicization of nuclear weapons means that states make nuclear weapons an issue of policy. This has been stated as a valuable debate during the Cold War when the discussion was whether nuclear weapons were a military or political issue. In the 21st century, the military value of nuclear weapons stays only in contingency planning exercises of states and international organizations. The political value prevails through deterrence policy. The politicization of nuclear weapons means that Iran or North Korea cannot acquire nuclear weapons but if an ally country was to acquire them, the United States might be less concerned because these nuclear weapons would not necessarily damage its national interest. Threat existence is both real and perceived and the politicization of nuclear issues makes this perception more rigid because state policies create and reinforce the facts. Securitization of nuclear weapons, on the other hand, works to uplift nuclear weapons to the international level, where the collective will prevails. In this aspect, the
nuclear weapon states, and especially the United States, should be willing not to
dominate international decision-making so as to reflect their national interest because
politicization only reinforces the problems in the nuclear field.

Lastly, the method of grouping, through state characteristics, bypasses bias based
on national interest. It rests fundamentally on the speeches of decision-makers as well as
nuclear actions. Therefore, it is easy to group states from different regions in the same
category. The nuclear decision-making in the political sphere is chained to national
interest, especially of the nuclear powers, such as the United States. When national
interest prevails over international interest, decision-makers follow similar policies over
and over again. Whilst following these policies they expect different results. Expectedly,
the same policies result in the with same outcomes. Doing the same thing over and over
again and expecting a different result, as Einstein said, is stupidity. Nuclear security
complexes, in this regard, aim to create an awareness that is above national interest, an
alternative approach to nuclear thinking in the hope of changing existing policies and
outcomes.
CHAPTER 4
NUCLEAR SECURITY COMPLEX THEORY

Scholars utilize the method of grouping or taxonomy in foreign policy making to understand and explain the international system and state policies. In the security field, Barry Buzan and Ole Waever follow the grouping method to explain regional patterns to security studies. This is called the regional security complex theory, which is structured on neo-realist and constructivist theoretical frameworks. This chapter adds the nuclear dimension to the conventional theory and further develops the theory by grouping states regardless of their regions.

The conventional security complex theory is composed of five characteristics: geographical proximity, number of states, mutual exclusiveness, mutual recognition of membership, and patterns in relations among the member states. Nuclear security complexes develop from these five characteristics. The argument in this chapter is that the conventional security complex theory provides the grounding for an understanding of grouping; however, firstly, it is not sufficient to express nuclear nonproliferation policy implications. Secondly, nuclear proliferation does not strictly rest upon regional settings.

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2 Regional Security Complexes, according to Buzan are cluster of states “whose primary security concerns link together sufficiently closely that their national securities cannot realistically be considered apart from one another.” See Chapter 2 for detailed analysis of regional security complexes.
3 See Chapter 2, pp. 21-24.
Nuclear security complexes group states in terms of their state characteristics and nuclear postures. Nuclear posture is identified in three categories: nuclear weapons states, non-nuclear weapons states, and nuclear transitioning states. Nuclear posture feeds from the current national nuclear agenda of a state with regards to whether nuclear weapons are viewed as an asset or liability. State characteristics are identified through regime type, treaty compliance, institutional standing, adherence to nuclear norms and regulations; and threat existence. Why to take the nuclear posture and state characteristics as the main variables for grouping? Nuclear posture projects the short and mid-term nuclear aspirations of states, and state characteristics design the long-term vision. This enables a relatively stable study that benefits from current and enduring features of states.

The main aim of grouping is to apply policy per group to create awareness on the similarities of certain states in their nuclear posture. Tailored deterrence suggests “to understand the psychology of the adversaries and the operating environment to assess the things that are most valued by their leaderships.” Keith Payne and Colin Gray originally discussed tailored deterrence in 1980, supporting that deterrence needs to be adversary specific. Lantz specified the link between tailored deterrence and strategic culture.

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4 Depending on the nuclear posture, states view nuclear weapons either as an asset or liability. Nuclear weapons can be an appreciating or a depreciating asset. They can also be an issue of liability in terms of responsibility to protect non-nuclear weapon allies against any sort of nuclear attack, which is called positive nuclear assurance. When nuclear weapons are an issue of liability, a limited group protects the existing nuclear regime. The limited number of states protecting the nuclear regime creates a “destabilizing provocation with invaluable consequences.” Liability also brings about the issues with nuclear safety, to protect the nuclear facilities and materials (e.g. secure the nuclear wastes, ensure the safety of nuclear reactors, and provide security to nuclear material.) According to Graham, nuclear weapons are depreciating assets. See Thomas, Graham. June 13, 2013. Vocabulary and History of Nuclear Proliferation and Nonproliferation. Brookhaven National Laboratory; and Jacques E. C. Hymans, 2001. "Of Gauchos and Gringos: Why Argentine Never Wanted the Bomb, and Why the United States Thought it did." Security Studies no. 10 (3): 155.

shifting the rational focus by following a constructivist model of incorporating cultural dimensions.\textsuperscript{6} As discussed in Chapter 3, tailored deterrence has shortcomings.\textsuperscript{7} Out of these shortcomings, following a culture or adversary specific deterrence approach limits the ability to tackle proliferation at a higher level. Tailored deterrence is biased towards the question “who is the proliferator state?” If the proliferator is an ally of the United States, deterrence strategy does not take place at the same level as a non-ally state. The neglected if not allowed Israeli nuclear proliferation in 1960s is an example of a biased nuclear policy where Israel was not deterred to acquire nuclear weapons capability. The value-added part to group states is to prevent national interests to kick in the policy structures at least in the international bodies.

To put it into practice of the shortcomings of deterrence, the United States' nuclear policy towards North Korea and Iran are almost identical. The current policy identifies the possible threats and offers a range of options but, in the end, employs the same policy regardless of Iranian or North Korean state characteristics and nuclear posture. This policy is the issue of United Nations Security Council Resolutions and employment of economic sanctions. Yet, these states are not in the same nuclear security complex (group). In a nutshell, Iran is still responsive to institutional pressures whereas North Korea is not party to NPT, thus does not follow the IAEA inspections as part of international rule of law. It is problematic to expect a single policy to work for two such drastically different states. This dissertation, therefore, proposes to model a nuclear security complex theory that employs distinct group policies for nonproliferation.


\textsuperscript{7} See Chapter 3, page 17 for why tailored deterrence does not work in the 21\textsuperscript{st} century.
There are seven nuclear security complexes identified in this chapter. Each security complex is composed of indicative variables. A triple Venn diagram would be helpful to picture this grouping. The first three security complexes, called the material, liberal, and norm based security complexes, are the core parts of the Venn diagram. Security complexes four through seven lay on the interactions between one, two, and three, where seven lies at the center. The United States, as an exception, is the single member of the seventh nuclear security complex. This chapter concludes, suggesting an alternative approach to develop policies for each security complex rather than following tailored or general deterrence.

NUCLEAR SECURITY COMPLEXES METHODOLOGY

Nuclear security complexes are non-territorial, issue-focused grouping of states. Neither general deterrence doctrine nor tailored deterrence is viable in the contemporary nuclear proliferation setting; therefore, a middle ground—group method—is proposed as the alternative way. This argument moves away from deterrence because deterrence strategy of today cannot prevent the happening of the nuclear events. This argument is discussed in Chapter 3 of this dissertation. To remind, deterrence aims to prevent states to acquire nuclear weapons and to keep the status quo. In the current nuclear situation, North Korea and Iran follow nuclear policies that challenge the current nearly universal Nuclear Nonproliferation Treaty (NPT) regime. Secondly, keeping up with deterrence means not to challenge the existing power dimensions between the nuclear weapons

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See Figure 1 of this dissertation on page 9.
states and non-nuclear weapon states. However, as long as the nuclear weapons exist through deterrence, the system will be challenged by some states. Nuclear terrorism is also a challenge to the current strategy, as tailored deterrence cannot prevent non-state actors to use the nuclear weaponry, ever if acquired. September 11 resembles a challenge to the general deterrence theory as well. This method suggests that there is a pattern of relationships and pattern of interactions within and among the states inside and outside a security complex.

In the nuclear field, several scholars group states to explain nuclear proliferation behavior. This literature is given in Chapter 3, however, briefly, Betts clusters states with regard to their likelihood to proliferate as "paranoids," "pygmies," and "pariah."9 Similarly Chafetz clusters states through a hierarchical setting similar to the World Systems Theory of Immanuel Wallerstein.10 Chafetz argues, the core states have already acquired nuclear weapons and the periphery depends on the core group.11 These previous attempts to group states stuck at the theorizing level and they lack the understanding of states that are in transition. Chafetz dismisses the examination of the "semi-periphery," as there are states in the middle of nuclear decision-making. Additionally, in the 21st

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10 There is an economic gap between the North (rich countries) and South (poor countries) in the world order. According to Wallerstein, modern nation states with economic wellbeing and with the capacity to manufacture goods are called the core states. States that have the raw material but do not have the manufacturing capability are the periphery states. The latter group is dependent on the core states to sell the raw material in low-price; the former are composed of developed countries that enjoy the cheap commodity by making a surplus. See world system theory: Immanuel, Wallerstein. 1976. "The Modern World-System." In The Modern World-System: Capitalist Agriculture and the Origins of the European World-Economy in the Sixteenth Century, 228-230. New York: Academic Press.
century, explaining the nuclear ambition through nuclear security complexes aim to align nuclear theory/theorizing with policy implications.

The following section applies the characteristics of traditional regional security complexes from Barry Buzan and Ole Waever, discussed in Chapter 2, to nuclear proliferation in order to highlight certain differences and similarities and to sketch out a new model for nuclear security complexes.

**a- Geographical Proximity in Nuclear Proliferation:** As discussed in Chapter 2, conventional security complex theory suggests that threats travel easily within a close geographical proximity. States in the same region have “security interdependence,” closely linked to regional existing threats. This view is overemphasized in realist literature because threats in the globalized and transnational world travel easily regardless of geographical positioning. When nuclear proliferation in the Middle East is examined for instance, fear resulting from the Iranian nuclear weapons program does not lead technologically and economically capable Middle Eastern states to proliferate. Contrary to the geopolitical settings, Iranian nuclear weapons program do not necessarily lead Turkey, Egypt or Saudi Arabia to proliferate. These three neighbors view Iranian threat differently. Yet, the United States’ threat assessment to Iranian nuclear proliferation is high, as a nuclear Iran would shift the balance in the Middle East. Similarly, the Israeli nuclear weapons program that started in 1960s did not let Iran to seek nuclear weapons program back at the time as well (See Chapter 5 and Chapter 6 for implementations).

Egypt follows a relatively vague nuclear nonproliferation policy. It plays a leading role in nonproliferation conferences but does not dismiss the possibility of proliferation from its national security agenda. Egypt keeps the possibility of nuclear
proliferation on the table to use it as leverage within the regional setting; primarily to address potential threats from Israel and Iran. When compared to Egypt, Turkey follows relatively transparent nuclear energy program whilst paying close attention to the Iranian nuclear threat. Turkey currently is a supporter of the nuclear nonproliferation regime through institutional and organization settings; however, it does not have concrete nuclear policy. This example shows that states from the same region may follow different nuclear policies regardless of a regional threat existence.

Since nuclear weapons are easily deployable and have different ranges, their deterrent impact reaches beyond regions. The traditional security complex theory did not respond to the challenges brought by these transnational issues. In other words, traditional security complexes have territoriality baseline, whereas nuclear security complexes have loose territorial foundation.

b- Number of States in Nuclear Security Complexes: In the conventional theory, a minimum of two states form a security complex. Two states initiate the necessary interaction and interdependence for collective security building. The result of this interaction can determine the main characteristics of that security complex. In the proposed model of nuclear security complexes, this characteristic is further developed.

The quasi-hegemonic nuclear security complex actually represents a micro version of the international system. Due to its hegemonic power to shift the international nuclear regime and to influence other states, the hegemon represents a cluster by itself. For this reason, the United States represents the quasi-hegemonic security complex.

The United States has the ability to mold and shape the nuclear proliferation framework alone. Although the United States does not have the ability to prevent
proliferation, it sets the bar on nuclear nonproliferation, arms control, and disarmament. It also has the ability to transform states from one group to another. It has the power to shift the debate from a national interest to a general focus, if it desires.

**c- Mutual Exclusiveness in Nuclear Security Complexes:** Similar to traditional security complexes a state that is characterized in one security complex is exclusively characterized in that complex. It can move to other security complexes when its nuclear posture and state characteristics shift. However, a state cannot be a member of two security complexes at the same time. Mutual exclusiveness does not result from geographical location *per se*; rather, it comes from state characteristics that identify and describe a state. These characteristics become a part of its identity. That is why, nuclear security complexes are in constant change and need to be further developed over time if policy remains adequate.

**d- Mutual Recognition of Membership in Nuclear Security Complexes:** The traditional security complexes rest on mutual recognition. Because the members are not geographically located in the nuclear security complexes, the mutual recognition becomes nil. States do not need to recognize which state is in that security complex and which is not.

**e- Interaction within and among Nuclear Security Complexes:** A state’s nuclear posture may cause change in other states’ posture regardless of the region. This makes proliferation a transnational issue as it has security impact across the borders and regions. The security complexes are just a starting point to identify this impact. The interaction level between security complexes determines the future of proliferation. The United States, in this regard, is the main stakeholder because it has the ability to employ
power over other states. This power does not have to rely on physical force projection. All security complexes are in constant interaction with each other regardless of the region. This interaction makes the security complexes almost a living organism that is subjected to change. Among the security complexes, interaction may be visible through assistance, endorsement, coercive diplomacy approaches, and deterrence, persuasion and compliance methods.\textsuperscript{12}

PROPOSED STATE CHARACTERISTICS

This section groups states in terms of their state characteristics that shape nuclear posture. To achieve this end-state, a structure is established to describe each security complex. First, I describe the variables that characterize each security complex. Second, I briefly discuss the role of nuclear weapons in that security complex. Third, I talk about the theoretical link of that security complex with the mainstream International Relations theories—realism, liberalism, and constructivism—with a connection to Alexander Wendt and Robert Cooper’s grouping method that is discussed in Chapter 3. Fourth, I identify several possible member states to each nuclear security complex. Fifth, I talk briefly about the anticipated political implications for that particular security complex. I conclude with significant points for each security complex.

States in the nuclear security complex of 1, 3, and 5 are the core complexes. The nuclear security complexes of 2, 6, and 4 are composed of nuclear transitional states. The

\textsuperscript{12} The level of interaction is not explicitly discussed in this dissertation. The last chapter, however, that lays out future issue areas to study, stresses a thorough examination of interaction.
first group’s nuclear posture is relatively stable compared to the second group. The “quasi-hegemonic security complex” is composed of only the hegemon in unipolar system. States in one security complex may shift from one to another over time. If a shift occurs, policies towards that state are also adjusted in line with its new positioning.

Security Complex #1: Material Nuclear Security Complex:

Variable—Threat Existence. The material security complex is composed of states that have hostile relations with each other and negative patterns of interaction with the hegemon or neighboring states and are affected by the anarchic international system. These states have the common security problems resulting from the patterns of relations with other actors. They securitize issues based on threat existence. Nuclear weapons are an issue of maximizing national interest through relative gains as well as a matter of national pride.

The threat existence is related to the endurance of the regime or the government. The authoritarian governments, literature shows, assume the mantle of a peaceful nuclear program to the domestic public, whereas, in reality, it follows a weapons grade nuclear program. Due to the lack of transparency, limited information sharing within the nation and lesser network connectivity with other nations, public support for the nuclear program is high in the material security complexes. The nuclear program, regardless of its intent, is a matter of national pride. Nuclear weapons are an issue of maximizing national interest through relative gains.

Role of nuclear weapons. Nuclear weapons are a means of power that provide immunity from domestic and outside threats. An outside threat is a threat from another
state or a non-state actor regardless of proximity. An inside threat is a threat to the survival of the government and to the governmental regime where the government uses nuclear weapons program to unite the population to its cause. In this security cluster, decision-makers securitize their nuclear weapons program to protect their well-being.

**Theoretical Link.** Realism provides a theoretical understanding of the material security complex. Threat existence and lack of trust are prominent variables to explain state behavior to maximize national interest. Relative gains are important to explain the security issues. States compare their military capability and power with other states. These variables are given special importance in realism. The material security complex, in realist terms, is a zone of conflict. According to Robert Cooper’s three stages of modernism, states in this security complex may resemble the pre-modern stage. In pre-modern world, positive interactions among two or more clashing actors are at minimum level.

**Member State.** North Korea lacks institutional and international links with other states within and outside the material security complex. The pattern of interactions with other security complexes is very limited because of lack of trust. It terminated the NPT binding rules and regulations; consequently detached from the IAEA safeguards and verification system since 2009. Today, North Korea claims to have a special NPT status. North Korea has declared the purpose of its nuclear weapons program is to “deter a U.S. invasion and hostile policy against it with South Korea.”13 After all, there is a common belief that the Western powers, particularly the United States, do not intervene nuclear

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weapons states. It aims to increase its military capabilities at the expense of other states; mainly from the ones that it perceives threat. After conducting a third nuclear test in February 2013, the North Korean ability to demonstrate a deterrent capability has increased.

**Political Implications (Anticipated).** In the material security complex, state policies are defined through power and military capabilities. The power struggle among states has an impact on the nuclear nonproliferation regime. Historically speaking it is not only North Korea that shows non-compliance to the nonproliferation regime through treaty compliance. Non-compliance to the United Nations Security Council Resolutions has been issued for six states, so far: Iraq in 1991\(^{14}\), Romania in 1992, North Korea in 1993, Libya in 2004, Iran in 2005, and Syria in 2011. There are two more states that received particular attention from the Board of Governors, South Korea in 2004 and Egypt in 2005. These two states latter signed the Additional Protocol and were observed for compliance in 2007. There is no proof for nuclear material divergence in Egypt\(^{15}\) and South Korea follows a policy of “nuclear free Korean peninsula.”\(^{16}\) On 2 February 2011, Iran, Syria, and DPRK received caution from other states.\(^{17}\) IAEA safeguards system is strengthened as a result of non-compliance.\(^{18}\)


\(^{16}\) United Nations Office for Disarmament Affairs. "Status of Multilateral Arms Regulation and Disarmament Agreements."


To sum, states focus on relative gain on security issues. In this security cluster, states compare their nuclear posture with other states within and outside of their complex. Third-party nuclear policies, therefore, should focus on the benefits that these states think to gain from nuclear proliferation. Possible policy suggestion is to integrate these states to the international system not through international treaties and institutions but through trade and economic incentives. Creating economic dependency is the suggested method to curb nuclear proliferation ambitions for this group of states.

Security Complex #2: Material-Liberal Nuclear Security Complex:

Variable—Threat Existence & Regime Type. This security complex positions in between the material and liberal spheres. Transitional security complexes are less predictable compared to the core security complexes. States in this security complex face threats to national security in traditional sense; however, they do not securitize threats at the policy level like states in the material security complex do. These states do not totally disregard the existence of threat but neither is their policy driven by the existent threats around them.

Threats posed by competitors and enemies are assessed relatively. Bureaucratic politics is significant in the decision-making process. Government agencies are able to shape the national interest and further national policies regarding the nuclear nonproliferation issues. This is not a stable security complex because member positions are likely to shift depending on changes in government or as a result of pressure from outside the security complex. The member states are not stable democracies; they may be ruled by autocratic regimes.
Role of Nuclear Weapons. The possibility of acquiring nuclear weapons has not disappeared from this security complex. The material-liberal security complex assigns asset value to nuclear weapons. It does not dismiss the reality of possessing the nuclear weapons, if conditions necessitate. This is a transitional stage because there is still a possibility for nuclear proliferation, if the state in question perceives a significant threat or makes a cost-benefit analysis in which the benefits outweighing the costs.

Theoretical Link. The theoretical link for the material-liberal security complex is not defined in Alexander Wendt or Robert Cooper’s world systems. This transitional phase has been dismissed from the theoretical literature. It is vitally important however to acknowledge that states do not shift from one core security cluster to another within a day. They may strategically choose to remain in a transitional stage. Thinking through the lenses of cooperation versus competition in state-to-state patterns of interaction, the material-liberal security complex would value competition in security issues, but would value cooperation in economic issues.

Another characteristic of this security complex is to keep the nuclear status-quo as steady as possible. States do not sign or ratify new treaties if the competitor states are not already party to a treaty. This creates a vicious circle, if two states are competitors and belong to the material-liberal security complex. Egypt and Israel, where neither side agrees to ratify new nuclear treaties are the good examples. Neither is party to the Chemical Weapons Convention nor to The Biological and Toxin Weapons Convention. Regionally, Egypt presses for nuclear weapons free Middle East with the inclusion of Israel. Politically, it presses for executing the Middle East Conference to create nuclear weapons free zone even after the Arab Spring. In May 2013, the Egyptian delegation
exited the talks on the Nuclear Non-Proliferation Treaty (NPT), claiming, “the nuclear weapons free zone process is too slow.” An officer in the United States called this move as Egyptian “theatrics.”

Egypt is not a stable country and it does not have the democratic tradition most liberal states have. It has been ruled in authoritarian regime for several decades. Nonetheless, it has shared interests with the West; the United States in particular. The United States provides foreign aid to Egypt and Israel with the expectation that the Egypt-Israel Peace Treaty following the Camp David Accords, holds. The United States’ army conducted joint exercises with the Egyptian army during President Mubarak’s ruling. The pattern of interactions between the United States and Egypt enable the latter’s security closer to the liberal security complex.

Policy Implications (Anticipated). States in the material-liberal hybrid security complex are not party to major treaties on purpose. They maintain their nuclear posture whilst assessing the regional and international security environment. These states have the ability to either block or to press other states with their dubious nuclear posture. These states benefit from an ambiguous nuclear posture and decision makers may promote nuclear nonproliferation in some statements whilst hinting at a shifting national policy in others, if and when the international structure changes.

Another policy implication is the pattern of interaction that states within this security complex have with the outsiders. The dubious nuclear status presses outside parties—especially the ones in the material security complex and material-norms-based security complex—to a level that creates tension in the nuclear regime. For instance,

19 Jenny, Nielsen. 2 May 2013. "Egypt Exits Non-proliferation Meeting."
Egypt's dubious nuclear posture—of not ratifying major treaties and signaling uneasiness to the status quo in the Middle East—is a result of the Israeli nuclear posture.

To sum, the role of nuclear weapons is not dismissed, even though the desired emphasis is given to nonproliferation. These states are likely to proliferate only when the posture of states in other security complexes changes.

**Security Complex #3: Liberal Nuclear Security Complex:**

*Variable-Democracy in Nuclear Field.* The members of the liberal security complex optimize the role of anarchy through regime type (democracy). The referred regime type in this security complex is mainly democratic ruling with public will. The pattern of relations in the liberal security complex is based on rivalry within the economic setting. Even though states might face problems within and outside the liberal security complex, they do not prioritize threat existence to acquire nuclear weapons, if they do not already possess them. National interest prevails; yet, it is linked to the rights of the public. Under the democratic setting, the domestic society has the upper hand on the states' nuclear posture and choices. Nuclear-weapons states with democratic ruling are also part of this security complex. However, their nuclear policies do not correspond with the liberal-democratic norms that these states should be preserving. The members of the liberal security complex follow main treaties and nuclear norms because these treaties are associated with the liberal posture by default.21 Domestic accountability, public knowledge and acknowledgement of the nuclear program are crucial, regardless of the

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21 The international system is constructed through the Western ideals and norms. Any international treaty that follows the liberal posture has the pattern to follow the hegemonic posture as well as the main norms in the system.
weapons related programs. Nuclear weapons and nuclear power program are discussed in the public sphere; they are not used as a political power by governments.

Economic regulations and free trade are also another characteristic of this security complex. In states with nuclear power, there is a nuclear lobby that feeds the military-industry complex. Nuclear lobby, especially in states like the United States, is part of this economic cycle.

**Role of nuclear weapons.** Nuclear weapons have a role in the nuclear deterrence in policy for nuclear-weapons states with democratic ruling. The non-nuclear weapons states are mainly protected through the security assurances made by the nuclear weapon states in this security complex. The role of the nuclear weapons in this security complex is not disappeared or diminished; however, there is a debate about the compatibility between democracy and nuclear deterrence policies.

The main question in this security complex though is whether nuclear weapons protect the public and does it serve the public will or not? In the nuclear-weapons states, the nuclear projects are kept secret, claimed to be part of the national security policy. Public knowledge and involvement on the nuclear matters—such as arms control or nuclear disarmament—is low because decision-makers claim that nuclear issues need technical expertise, thus, public is mainly excluded from the nuclear debate.

The democratic settings merge all the members into an understanding of shared security. Nuclear weapons, as Deudrey claims, are despotic; therefore should not be in the democratic agenda. They are despotic because “the decisions to use nuclear weapons rely on a short decision-making time, the concentration of nuclear use decisions are in the
hands of small group of individuals, there is a lack of accountability." According to Deudrey, reliance on nuclear deterrence produces nuclear despotism. The anarchic international system has effect on the member of the liberal security complex. Nuclear policies of the liberal non-nuclear weapon states however are transparent. The nuclear material for peaceful energy usage is declared and subjected to international safeguards.

**Theoretical Link.** The theoretical link in this security complex is connected to the debate between realism and liberalism in the question; does democracy impede conflict? The democratic peace theory posture indicates that democratic states do not fight with each other because "the greater the democracy level, the more constrained the military usage." Going further, democratizing states are the most "violent of all because of the power competition in the country."

According to the democratic peace theory, the role of nuclear weapons still exists as a deterrent. Nuclear deterrence is a strategy that is employed by both nuclear weapons states and states under the security assurances of the nuclear weapons states. Considering the liberal-democratic theoretical tradition, the nuclear weapons states collide with the treaties and norms by possessing nuclear weapons. This argument states that nuclear weapons are against the democratic tenets. Following, Robert Dahl for instance argued that the issues of "national security policy, war fighting strategy and technology of

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nuclear weapons are above the pay grade” of ordinary citizens. In other words, voters ignore the issue of nuclear weapons. In Dahl’s words “we are living in a democracy based on guardianship, not equality, when it comes to nuclear weapons.”

Noting Dahl’s contribution during the end of the Cold War, public knowledge in nuclear issues (such as the nuclear safety and security issues, nuclear materials of a state as well as nuclear weapons possession sites, amounts etc.) are still limited in the 21st century. Generally, nuclear weapons are an issue of foreign policy rather than an issue of domestic politics.

Elaine Scarry, Cabot professor of aesthetics and the general theory of value, stresses this problem in the *Thermonuclear Monarchy*, addressing two problems with the compatibility with the United States’ constitution and nuclear weapons. First incompatibility is the fact that the Congress needs to declare war by law and the second is the “requirement that distributes to the entire adult population shared responsibility for use of the country’s arsenal—the provision known as ‘the right to bear arms.’”

According to the author, bypassing the Congress in the nuclear decision-making is against the United States legislation. Although Scarry is off the point with regards to the relationship on right to bear arms and the possession of nuclear weapons, the author makes a fair point that “in second amendment the civic stature and military stature goes

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Taking that point forward, then, in democracies the nuclear policies expected to be transparent.

Nuclear weapons jeopardize the social contract between the citizens and the government, when the population gives consent to the state for representation to create security. This security aims to create peace and well being of the individuals and it does not have a clause of “at the expense of others.” The possession of the nuclear weapons in a democratic state comes with that clause because the mere idea of using nuclear weapons comes with fatal consequences to another nation. Nuclear weapons are not a good representative of peace, where a state’s main role is to protect people and create peace—again not at the expense of others—but with others. Although it is too much of a stretch to claim that nuclear weapons diminish the likelihood of major wars, quasi-wars or small wars still take place. Nuclear weapons states fight without resorting to nuclear weapons.

Policy Implications (Anticipated). The regime type, which is democracy in the liberal security complex, matters because democratic leaders are accountable for their decisions in the next electoral cycle. The pattern of relations within the liberal democracies creates a collective understanding of nuclear nonproliferation. The two nuclear weapons states in Europe—Britain and France—are also in this complex because their nuclear weapons proliferation is mostly eclipsed by the United States and Russia’s nuclear weapons capabilities. Britain, Germany, and Italy have asked the United States to remove its tactical nuclear weapons from the European theater. Britain as a nuclear state clearly does not see the utility of having the United States nuclear weaponry within its

theater of operations. The main reason is that these weapons lack a deterrent capability because of the disappearance of threat and unaccountability to sixty years old weaponry.

To sum, members of the liberal security complex follow peaceful relations with each other, which creates a pattern of cooperation. The cooperative nature of the relationship leads to a longing the shadow of the future.\textsuperscript{30} Inherently, the liberal security complex is not a peaceful way to cope with proliferation but it is a utilitarian approach.\textsuperscript{31}

Security Complex #4: Liberal-Normative Nuclear Security Complex:

Variable—Institutions. This hybrid security complex takes the liberal approach to a further level and adds an institutional framework to it. The states are members of a particular institutional dyad and are part of the routine IAEA inspections and verifications system. They follow similar proliferation and nonproliferation policy postures through an institutional link. The pattern of relationships is cooperative engagement through institutional membership. Economic or even security-wise rivalry is not common due to the normative standing. Security of the member states is shaped through the security for all principle. States are involved in political actions that do not have necessarily had an impact on their national security.

\textsuperscript{30} The shadow of the future is the probability of two actors (states) meeting under a similar setting. When the actors are aware that the shadow of the future is long, cooperation is more likely. For the debate, see Grieco, Joseph M. 1988. "Anarchy and the Limits of Cooperation: A Realist Critique of the Newest Liberal Institutionalism." International Organization no. 42 (3); Milner, Helen. 1992. "International Theories of Cooperation among Nations: Strengths and Weaknesses." World Politics no. 44 (3): 466-496; Oye, Kenneth A. 1986. Cooperation Under Anarchy. Princeton, N.J.: Princeton University Press.

\textsuperscript{31} For a classical analysis on utilitarianism and the link to liberalism in the categories of individual rights of privacy, property, and freedom of speech, see Russell Hardin. 1986. "The Utilitarian Logic of Liberalism." Ethics no. 97 (1): 47-74.
**Role of Nuclear Weapons.** Nuclear weapons represent a liability in this security complex. Based on the liability, states question the role of nuclear weapons and they do not generally follow a nuclear weapons program. None of the state parties in the liberal-norms security complex possess nuclear weapons. In the past, some member states might have followed a nuclear weapons research program but they have not continued due to domestic and economic constraints and/or normative reasons. The norms however are not as definitive as they are in the norms-based security complexes.

**Policy Implications (Anticipated).** The nuclear forces of NATO serve to protect the member nations in the Euro-Atlantic Alliance. NATO’s strategic nuclear capability derives from the United States and United Kingdom’s nuclear forces. NATO's institutional role to prevent the proliferation of Chemical, Biological, Radiological, and Nuclear weapons is a long-term process. Within NATO, the Nuclear Planning Group (NPG) is a senior body, composed of 27 member defense ministers to discuss the nuclear issues on an annual basis.\(^{32}\) France follows a nuclear policy but remains outside of the nuclear decisions within the Alliance structure. NATO defines deterrence through conventional and unconventional means, but the member states within NATO’s framework stress their commitment—Figuratively—to nuclear disarmament. In the NATO Strategic Concept 2010, however, “NATO remains a nuclear power as long as the nuclear weapons exist.”\(^{33}\) This means NATO states will not be the initiator of nuclear disarmament policies but follow the suit of others. This logic creates a loop that may well jeopardize the logic of disarmament.


\(^{33}\) NATO. 19-20 November 2010. NATO Strategic Concept for the Defence and Security of the Members of the North Atlantic Treaty Organization. p. 5
Security Complex #5: Norms-based Nuclear Security Complex:

Variable—Nuclear Nonproliferation Regime and International Nuclear Community. States in the norms based security complex follow the nonproliferation regime regardless of their capabilities. The commitment to the nonproliferation regime is an enabler for creating security communities. The nonproliferation regime is composed of characteristics like treaty compliance, nonproliferation norms, and voluntary actions for transparency and openness through diplomatic engagements both at a bilateral or international level. The pattern of interaction among the states is through the established nonproliferation rules and norms. Nuclear Threat Initiative (NTI) for instance, identifies legal commitments, voluntary commitments, and nuclear security and materials transparency as components of the global nuclear norms. Norms create an international community, the English School argues, where the non-use of nuclear weapons is a "pattern of behavior" that is chosen even when there is no punishment.

Role of Nuclear Weapons. The members of the norms-based security complex do not possess nuclear weapons or may have given up a nuclear weapons program. Nuclear weapons are a burden rather than an asset for national security. They are irrelevant, if not obsolete, for the international security environment in the contemporary world. Nuclear nonproliferation is an internalized norm within this security complex. The role of deterrence is diminished because norms feed from "legitimacy" not from the "threat of punishment" through the use of nuclear weapons.

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The members aim to delegitimize the role of nuclear weapons through the integration of humanitarian and international law. In 1996, the International Court of Justice (ICJ) questioned the “legality of the threat or use of nuclear weapons” referring to the Article 2 Paragraph 4 of the United Nations principle. The 2010 NPT Review Conference was the first attempt to refer to the “humanitarian consequences from the use of nuclear weapons” and the need to “comply with international humanitarian law.” The attendees of the 2010 Review Conference, aligning with the International Committee of the Red Cross (ICRC) called for a shift in the political “debate” on nuclear weapons from its usual arena—“military sphere and power politics” to human security.

In the Vancouver Declaration of March 23, 2011 through the Simons Foundation, “non-use” and “elimination” of nuclear weapons are stressed as the humanitarian aim. The experts initiating the Vancouver Declaration utilized human security and environmental challenges as the framework for challenging deterrence through nuclear weapons possession. In this regard, the Vancouver Declaration calls for the abolition of nuclear weapons.

37 ICJ advices, nuclear weapons are indiscriminate and non-proportional; therefore, they are not in line with the international humanitarian law and customary international law. However, ICJ also states that “it could not reach a conclusion the threat or use of nuclear weapons would be lawful or unlawful in an extreme circumstance of self-defense, in which the very survival of a State would be at stake.” See Chapter I: Purposes and Principles. Accessed from: http://www.un.org/en/documents/charter/chapter1.shtml
38 The UN Article 2 Para 4 says: “All members shall refrain in their international relations from the threat or use of force against the territorial integrity or political independence of any state.”
The norms-based security complex goes hand-in-hand with humanitarian norms and laws. As nuclear weapons’ damage is indiscriminate and nuclear weapons have uncontrollable effects, their usage is against the international humanitarian law. The International Court of Justice (ICJ) advises “a weapon that is already unlawful per se, whether by treaty or custom, does not become lawful by reason of its being used for a legitimate purpose under the Charter.”\textsuperscript{42} The Court also advises that “if the use of force is illegal for certain weaponry than the threat to use it should also be illegal.”\textsuperscript{43} This claim, however, only challenges the role of nuclear deterrence from a legal standpoint. Nuclear nonproliferation is a matter of collective security rather than an individual choice.

**Theoretical Link.** Norms-based security complex connects to the Kantian culture, described by Alexander Wendt. It is a form of post-modern society. The norms are shaped together through ideas and interests. The pattern of relationships between the nuclear weapons states signifies this logic, as not all nuclear weapons are same. The “shared understanding” that constitutes nuclear weapons is as important as the material power that revolves around the weapon. The United States is not concerned, in this sense, about the United Kingdom’s nuclear weaponry or the latter’s nuclear trajectory for the future. It is not the quantity of weaponry that makes the United States to dismiss the United Kingdom’s military capability; rather a “shared understanding” and common vision over the nuclear weapons, which led to the development of the United States nuclear policy.\textsuperscript{44} Suffice to say, when nuclear is the issue at stake, there are strategic

\textsuperscript{43} ICJ Advisory Opinion: Legality of the Treaty or use of Nuclear Weapons. para. 47, http://lcnp.org/wcourt/opinion.htm
nuclear allies of the United States. The shared nuclear history from the 1950s onwards links these states. As the ideas and cultures separate, the nuclear posture and interaction also changes, as in the contemporary cases like North Korea or Iran.

In norms-based security complex, Germany and Japan’s nonproliferation posture are two significant examples. Japan constitutionally prohibits a nuclear weapons program. Germany follows a constructive foreign policy of non-aggression, which also impacts its nuclear policy posture. The Swiss government particularly follows the international humanitarian law to abolish nuclear weapons. There is special awareness in the Scandinavian countries about the humanitarian consequences of nuclear weapons. The Norwegian government held a conference, addressing key points such as the “regional and global effects of nuclear weapons regardless of the detonated territory.”

Humanitarian law does have consequences on policy making, even if it is very hard to challenge the existing reliance on the nuclear weapons.

**Political Implications (Anticipated).** One of the aspects of norms-based security complex is to ratify the Comprehensive Test Ban Treaty (CTBT), which bans the nuclear testing in all environments (from atmosphere, in space, underwater). By eliminating testing, states will not rely on the accuracy and the credibility of nuclear weapons. Condemning nuclear testing also prevents “non-nuclear weapons states to build bombs” as well as not to rely on the bombs. As of March 24 2013, 159 states have ratified the

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46 Nina Tannenwald; Elbridge, Colbry; Benno, Laggner; Li, Bin. 2013. Humanitarian Dimensions of Nuclear War, Deterrence, and Disarmament. Paper read at Nuclear Policy Conference, at Washington DC.

CTBT. 48 44 of them are Annex 2 states. To be in force, the treaty needs to be ratified by all 44 states. 8 out of 44 states have not signed or ratified the CTBT yet. These 8 states are the United States, China, India, Pakistan, Israel, Iran, Egypt, and North Korea. There is a regional pattern on non-ratification in the case of India-Pakistan-China, and Israel-Iran-Egypt. However, China officially postulates neither India nor Pakistan but the United States as threat to its national security. Therefore, even if there is regional pattern, it transfuses to a global threat existence. 49 Annex II states’ non-ratification blocks the CTBT’s verification system to be in effect; consequently endangering the nonproliferation regime in the long-term. 50

Another aspect of the norms-based nuclear security complex is to follow IAEA safeguards regulations. The members of this complex abide not only to generic rules of the Comprehensive Safeguards, but are also party to the Additional Protocol (AP). The AP allows inspectors to conduct inspections without a state’s prior knowledge on the whereabouts and timing of the inspections. The AP enhances the rights of the Agency. States not only sign but also ratify the AP in order to give the amendment force. By being part of the AP, states voluntarily restrict their nuclear behavior, show good will, and guarantee a transparent nuclear energy program. All these measures assure their nonproliferation posture and create a pattern of relationships within the security complex. The AP that may pull the strings to prevent non-compliance; otherwise the whole

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48 Annex 2 states have nuclear power and research centers but have enrolled in CTBT talks between 1994-1996. Eight of the 44 Annex states still need to ratify the treaty to enter into force.
49 James Acton, The Future of Multilateral Arms Control Verification, 2013 CTBT Diplomacy and Public Policy Course, 15-19 July 2013, Vienna, Austria
50 CTBTO. July 2013. CTBT Diplomacy and Public Policy Course. Vienna.
verification approach, as El-Baradei explains, “rests only on declared nuclear material.”\textsuperscript{51}

The United Nations should also focus on the undeclared material and the clandestine activity, according to the former IAEA Director General, El-Baradei.

Another aspect of the norms-based security complex is related to the conduct of safeguards. There is an ongoing debate between the methods of state-level safeguards and traditional safeguards. The former approach incorporates state-level characteristics (e.g. political and non-material methods); the latter counts nuclear material before reaching broader conclusions at the IAEA level on a state’s compliance.\textsuperscript{52} The state-level concept aims to conduct an objective analysis of state level factors by minimizing the allocated resources of the Agency and time of the inspectors.\textsuperscript{53} The state-level concept groups states as: “‘suspects,’ ‘good standing,’ and ‘nuclear weapons states.’”\textsuperscript{54} This concept caused drawbacks from states because it considers past compliance (through previous safeguards implementation) for good standing.\textsuperscript{55} Recently, the Board of Governors is

\textsuperscript{51} See Arms Control Verification Website, http://www.armscontrolverification.org/2009/06/elbaradei-intervention-to-bog.html
\textsuperscript{54} The material counting for safeguards is an objective approach based on certain “criteria” whereas state-level concept analyzes all “nuclear activities and “nuclear technologies” of states regardless of its relevance to technical capability. The latter approach uses acquisition pathways for states as a method. For more information on state-level concept, see, Tape, James W. October 2008. "The State-Level Approach: Moving Beyond Integrated Safeguards." Tokyo INMM ESARDA 1-8; Cooley, Jill. 17-20 October 2011. Progress in Evolving the State-level Concept. In Future Directions for Nuclear Safeguards and Verification. Aix-en-Provence, France: Seventh INMM/ESARDA Joint Workshop;
\textsuperscript{55} George, Anzelon. June 4-8 2012. The State-Level Concept: Tailoring Safeguards Activities to Analysis of the State as a Whole. Paper read at International Nuclear Safeguards Policy and Information Analysis, at Monterey, CA.
consulted on the "conceptualization and development" of this concept, to assess and advance its possible implementation.\textsuperscript{56}

The norms-based nuclear security complex differentiates from the liberal nuclear complex. The former prioritizes the nonproliferation regime whereas the latter rests on rivalry among actors that result in cooperation and mutual discussion. This means the nonproliferation regime has special value. States internalize the established nuclear norms in their policies. As a result of internalization, state interest and ideas merge.

To sum, members of the norms-based security complex have internalized the norms in their nuclear policy; therefore, their national security framework does not project enmity.

**Security Complex #6: Material-Norms Nuclear Security Complex:**

**Variable.** The material-norms hybrid security complex is composed of two variables: threat existence and membership to international and regional nuclear organizations and semi-compliance to nuclear treaties. States in this security complex are not compliant to the international treaties, although they are party to these treaties. Non-compliance is a result of national security concerns either from neighboring or non-neighboring states. These states find the option to proliferate appealing; however do not want to go beyond the established international rules and norms because their economic, defense, and security structure are likely to be affected from states in different security

\textsuperscript{56} IAEA Board of Governors. 12 August 2013. The Conceptualization and Development of Safeguards Implementation at the State Level.
complexes. The United States (the quasi-hegemon security complex) has the power to impact these states' nuclear policy through diplomacy, sanctions, and military action.

**Theoretical Link.** Since material-norms is a hybrid security complex, it corresponds to the transition phase between the *zone of peace* and *zone of conflict*. The member states are in between the Hobbesian and Kantian cultures, a fine line between aggression and non-aggression.

The main example is Iran. Although the Iranian nuclear program has not started for weaponry purpose during the Shah period, it turned out to be a clandestine weapons program after the Shah period. Iran does not follow a compliant nuclear posture that corresponds with the international expectations. The facts of such expectations are provided through the UN Security Council Resolutions and Board of Governors reports. Iran, however, is still party to the NPT. This dual approach puts Iran in a transitional nuclear stage.

In being party to the NPT, Iran is subjected to the IAEA safeguards and verification system. The United Nations stated in 2006 that Iran should "build confidence," yet it does not follow this course of action despite seven resolutions. The UN Resolutions are operative to link the Iranian nuclear weapons quest to the wider problem of nuclear nonproliferation efforts. On 18 December 2003, Ambassador Salehi

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of Iran signed the Additional Protocol but the Iranian government has not ratified the agreement.\textsuperscript{60} Similarly, Iran did not ratify the CTBT.

According to former President Ahmadinejad, the Iranian nuclear program is not the problem but rather the nuclear hierarchy that is established by possessing nuclear weapons.\textsuperscript{61} To put pressure and to question the existing nuclear hierarchy, Iran follows an objective of “a Middle East free of weapons of mass destruction” that was formerly stressed by the IAEA Board of Governors in 2006.\textsuperscript{62}

**Political Implications.** With regards to the Iranian example, the policy implication is a bargaining process that ranges from negotiations to economic sanctions. The problem with the economic sanctions is it is a feature and an outcome of the liberal nuclear security complex. The economic sanctions\textsuperscript{63} might not show effect in the long run

\textsuperscript{62} IAEA Board of Governors. 4 February 2006. Implementation of the NPT Safeguards Agreement in the Islamic Republic of Iran.
\textsuperscript{63} Economic measures can be used as either foreign aid or economic sanctions. Economic sanctions do not work all the time because globalization pathways create new interconnection areas. One of these pathways is to have variety of trade partners. States generally have sensitivity interdependence rather than vulnerability to the break up of the trade partnership. Also, when the target population does not hold liberal democratic values then the imposer may receive negative response from them because the targeted population would have clashing values with the imposer state. Foreign sanctions are also a type of economic power that the powerful side can imply on the other to achieve what the former wants. For economic sanctions to be successful, the other side should not be valuing the cause of an action more than the costs associated to that cause. Harrison Wagner (1988) argued on this subject. Wagner argues that if a state values the issue in concern more than the costs that is associated to it, then it would not give up that cause. In line with Wagner, Parsi and Yetiv (2004) argued similarly on why Iran does not forgo its nuclear ambitions. A quantitative study shows that 1/3 case, economic sanctions do not work (Hufbauer, Schott 1985). This study is later explored further as the authors suggest a change saying that out of 115 cases 34% had success (Hufbauer, Schott, and Elliot 1990). In *Why Economic Sanctions do Not Work*, Robert Pape (1997) criticized the findings of Schott et al. suggesting a qualitative in depth analysis. Pape argues that only in 5 cases economic sanctions actually work. It is quite less than what Hufbauer, Schott, and Elliot found out. Nossal (1999) argues that to have economic sanctions work, the targeted state needs to be a liberal democratic country as 12 out of 14 cases show positive to economic sanctions in liberal states. Drezner (2000) follows a realist explanation
when and if the concerned party values the cause more than the costs associated to it. Iran does not have direct link to the liberal nuclear security complex. The liberal normative grounds are not established with Iran. This is one of the flows of the current United States policy towards Iran that may need revision at the group level.

To sum, the members of this group do not respond well to the commonly established nuclear regulations because of threat existence. The policies derived from the liberal security complex, such as employing economic sanctions or creating interdependence, may not be applicable, because these states may simply value nuclear weapons more highly than the costs or the norms associated to non-possession.64

Security Complex #7: Quasi-Hegemonic Security Complex—The United States:

The quasi-hegemonic security complex is the micro version of the international system. The name refers to the current power by the United States of the international system. Under the condition of a unipolar world order, this security complex finds form. It is “quasi” because what the United States can do is limited because of the existence of other nuclear states in the system. Still, with that limited power, the United States is the


64 The value of the nuclear weapons is linked to the materiality aspect of which the destructive capability of the nuclear weapons is linked to.
credible power to change the nuclear proliferation course of action through persuasion and coercion in the nuclear arena.

**Variable.** There are three interconnected variables to consider in the quasi-hegemonic security complex. The first one is power. The hegemon attains hard and soft power at the maximum level. The hegemon can use this power through capability to persuade and/or punish states, or it can use to impact the nuclear nonproliferation course of action through diplomatic and engaging means. The hegemon possesses political, economic, and military power. Stemming from the capability, the second variable is the leadership. The hegemon initiates the nuclear nonproliferation posture and should show leadership ability for arms control and disarmament agreements. Connected to the leadership, the hegemon also shares this "public good" with other states. For this public good sharing, the issue at stake should have two inclusive tenets: non-rivalry and non-exclusiveness. In issues of non-rivalry, states do not compete with each other to be better off. Free riding the hegemon's power is acceptable. As part of non-exclusiveness, the hegemon cannot exclude others from the public good. In a simple sense, pollution, for instance, is a public good where states do not act in terms of rivalry.

**Theoretical Link.** The nuclear umbrella is the main public good that the United States shares with its allies and partners. It, therefore, provides collective goods to the allied countries.\(^65\) Theoretically, the debate on the American decline\(^66\) is visible in the nuclear realm as well. The political positioning of the United States in the nuclear field is and will be challenged. The U.S. has the ability to shape other security complexes, but

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has done poorly so far because it has pursued tailored deterrence, with a focus on nuclear threshold countries, at the expense of utopian realism.\textsuperscript{67} The stagnated decision whether to intervene in Syria even after the alleged use of chemical weapons by the Assad government contributes to a narrative of declining power. The British Parliament’s vote to prevent its government from any sort of intervention in Syria created a break in the United States-United Kingdom strategic alliance as well. As a consequence, the United States’ ability to shape decisions is jeopardized.\textsuperscript{68}

**Policy Implications.** The United States’ nuclear umbrella is provided through extended deterrence, and the deterrence capability is in three folds: “the nuclear triad,” “deployed” strategic nuclear weapons in the European theater, and nuclear weapons on United States soil.\textsuperscript{69} The pattern of relationships between the hegemon and other security complexes is shaped through the buying power of the sides in the political realm. The hegemon is likely to relate with others collectively. It can lead the security communities and can create the order (\textit{ordnungsmacht}) through “influence, rulemaking, and leadership.”\textsuperscript{70} This argument suggests that the United States’ nuclear preferences find form in the international system. Alternatively, the hegemon’s power might be challenged, such as in the Syrian case. When the preferences of the hegemon are not

\textsuperscript{67} Utopian realism is to lead states towards a common achievable vision and away from hollow commitments to disarmament. See Booth, Ken. 1991. "Security in Anarchy: Utopian Realism in Theory and Practice," International Affairs no. 67 (3): 527-545.

\textsuperscript{68} Initially Robert Pape has written on soft balancing the hegemon. The Iraq War in 2003 is one of the cases. In the case of Syria, although the allies do not challenge the United States, due to domestic choices, they could not assist the United States. See Robert Pape. 2005. “Soft Balancing Against the United States” International Security, Vol.30, No.1, pp. 7-45.


fulfilled, it is not only the United States interests that are hurt but also the whole nuclear international system and regime that is established around it.

CONCLUSION

This chapter builds the nuclear security complexes model, stemming from the major works of Buzan and Waever. The nuclear security complexes propose to group states in terms of their state characteristics and current nuclear posture. This grouping needs updates when a state’s nuclear posture or state characteristics change. The change, however, should be durable rather than being effected from daily politics.

The changes in the international system, such as a shift in the power of the hegemon or shifts in the nuclear posture or state characteristics of a state may necessitate to revise that state’s membership in a security complex. Change might be temporary rather than permanent; therefore, the new nuclear posture of a state necessitates a tedious analysis of its decisiveness to change.

How can change in nuclear posture and state characteristics can be analyzed objectively? To explain it with an example, Iranian decision to halt its nuclear program and to come to the negotiation table with the P5 +1 is a result of the successful economic sanctions that the United States and Europe employ over Iran. The change of nuclear policy in Iran would not make Iran to shift from material-norms based security complex to another complex just yet because it is a single policy decision without any preceding, comprehensive, and futuristic policy implications. To reassess Iran’s nuclear ambitions,
an analysis of steady, progressive nuclear non-proliferation policies should follow. This whole process is time-bound.

This chapter has outlined the nuclear security complexes model. It identified seven nuclear security complexes with regards to state characteristics that forms nuclear posture. In simple terms, nuclear security complexes are a method of grouping states regardless of regional conditioning. The shift of focus from regions to state characteristics is the difference between traditional security complex theory and proposed nuclear security complexes.

The nuclear security complexes model applies for finding the best level policies to nuclear nonproliferation by comparing states in the same group and following a similar international policy to the ones in the same group. The next chapter will identify and group selected nuclear capable states—Iran, Israel, Turkey, United States—in terms of state characteristics that shape nuclear posture. The model will be applied as follows:

1. Identify the 44 nuclear capable states that are defined in Comprehensive Test Ban Treaty (CTBT).

2. Group selected states in terms of state characteristics based on threat existence, democracy in the nuclear field, membership to nuclear organizations and compliance in treaties.

3. Analyze selected states in terms of nuclear proliferation and nuclear disarmament policies.

4. Identify problems with existing nuclear policies and discuss the United States’ role.
This chapter groups nuclear capable states in terms of the state characteristics that lead to nuclear posture. This grouping is conducted in a non-regional manner and as such, states in the same region end up in different groups (complexes). That being said, two states from the same region can end up in the same security complex (group) because of similar state characteristics. Regional understanding is considered only through identifying a characteristic of a certain complex. For instance, threat existence is the main variable for the Material Security Complex. While identifying threat existence for the material security complex, hostility with neighboring states is taken into consideration through historical wars or crisis situations. Examining membership of the European Atomic Energy Community, a regional organization, could also result in what might appear a regional grouping on first sight.

This chapter aims to show the practice of the proposed model in Chapter 4. There are forty-four nuclear capable states\textsuperscript{1} as of January 2014. These are Annex II non-signatory states, defined under the Comprehensive Test Ban Treaty. All of these states can be grouped into seven categories. To show this application, the chapter rests on four nuclear capable states as case studies. Three of the cases are selected from the Middle East (Israel, Iran, and Turkey), and the last case is the United States. The reason to select the first three cases from the same region is to demonstrate how traditional security

\textsuperscript{1} Algeria, Argentina, Australia, Austria, Bangladesh, Belgium, Brazil, Bulgaria, Canada, Chile, China, Colombia, Dem. Republic of Congo, Egypt, Finland, France, Germany, Hungary, India, Indonesia, Iran, Israel, Italy, Japan, Mexico, Netherlands, North Korea, Norway, Pakistan, Peru, Poland, Romania, Russia, Slovakia, South Africa, South Korea, Spain, Sweden, Switzerland, Turkey, Ukraine, United Kingdom, United States, Viet Nam.
complex theory is not capable of explaining different nuclear policies. Since the amendment of the regional security theory for nuclear nonproliferation studies is the main thesis of this dissertation, this selection is vital. United States is the last case because the supplementary argument of this dissertation is that the United States has the power—even if it is limited to a certain degree—to influence and shape other state’s nuclear posture.

The particular reason to choose Israel is because of the nuclear exceptionalism that it has in the international arena. The nuclear ambiguity in Israel’s policy may also lead us to expect that there should be many proliferators in the Middle East, if the assumption of regional dynamics held. Its nuclear posture; therefore, is significant in understanding the regional and non-regional patterns in nuclear policies. Iran is a significant case because it is one of the non-compliant parties to the non-proliferation treaties and norms today. It follows clandestine nuclear activities and an opaque nuclear posture. Turkey is selected because its power and military capabilities are similar to Israel and Iran. All are middle-power states that seek to assert power in the Middle East.

This chapter relies different sets of data. The first one is The World Factbook by the U.S. Center for Intelligence Agency. Main and general information about a country, such as its history, natural resources, exports, imports of materials and partners as well as energy capacity and capability levels are gathered from the CIA World Factbook. The second information comes from the Nuclear Threat Initiative (NTI) Index, prepared by the Economist Intelligence Unit and voluntary country feedback. The NTI Index uses five variables: quantities and sites, security and control measures, global norms, domestic commitments, and risk environment. The third source is the analysis of the Preparatory Committee Meetings in the Review Conference of the Parties to the Treaty on the Non-
Proliferation of Nuclear Weapons. I have analyzed the country positions of Iran, Turkey, and Israel through the working group statements of the each delegation. The forth data is the analysis of the declassified documents—memorandum of conversations, cables, and leaked sources, on the Israeli nuclear weapons program.

In this chapter, I specifically look at the application of the nuclear security complex model. By application I mean the implementation of the proposed model to the real world practices. The application, in other words, is to put states into one of the groups in the nuclear security complex. In the material security complex, the model looks for nuclear capable states with clear threat identification to national interest and survival as these states render proliferation as a get away from the threat existence. This threat existence can be from domestic powers, neighboring countries, or from international actors. In the material-liberal security complex, the model looks for nuclear capable states with both threat existence through national policies and liberal-democratic posture. These states have high defense spending and less transparency in their nuclear policies. Threat existence is acknowledged by the parties but not prioritized in foreign policy. In the liberal material security complex, the model looks for states with liberal nuclear policies; such as transparency and public accountability in nuclear energy or weapons program. This group of states prioritizes nuclear nonproliferation over nuclear disarmament.

In the liberal-norms based security complex, the model looks for states that follow both liberal-democratic policies and have integrated nuclear norms and regulations into national policy. These states value nuclear norms and treaties and they internalize international nuclear posture through their national nuclear policy. In the norms based security complex theory, the model looks for states that ratify almost all nuclear
agreements, prioritize nuclear disarmament over nuclear nonproliferation, and internalize nuclear agreements in the national nuclear posture. In the material-norms based security complex, the model looks for states that are signatory to some nuclear treaties but do not rigidly follow them. These states value threat existence over compliance to treaties. Therefore, they seek for security assurances. In the quasi-hegemonic security complex, the model looks for the structure of the international system, whether it is bipolar, unipolar, or multipolar and it situates the state(s) depending on their power in the international arena.
Table 1. Variables in Main Nuclear Security Complexes

<table>
<thead>
<tr>
<th>Variables in Main Nuclear Security Complexes</th>
<th>Iran</th>
<th>Israel</th>
<th>Turkey</th>
<th>United States</th>
</tr>
</thead>
<tbody>
<tr>
<td>Threat Existence</td>
<td>Yes</td>
<td>Yes</td>
<td>Partially</td>
<td>No</td>
</tr>
<tr>
<td>Nuclear Democracy</td>
<td>No</td>
<td>Partially</td>
<td>Partially</td>
<td>Yes</td>
</tr>
<tr>
<td>Party to Main Nuclear Treaties</td>
<td>Yes</td>
<td>No</td>
<td>Yes</td>
<td>Partially</td>
</tr>
<tr>
<td>Compliance to Nuclear Treaties</td>
<td>Partially</td>
<td>N/A</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Hegemonic Power</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>Yes</td>
</tr>
<tr>
<td>Nuclear Security Complex</td>
<td>Material-Norms Based Sec. Complex</td>
<td>Material-Liberal Sec. Complex</td>
<td>Quasi-Hegemonic Sec. Complex</td>
<td></td>
</tr>
</tbody>
</table>

Table 1 summarizes the selected cases (Israel, Iran, Turkey, and the United States) using the variables threat existence, democratic values, nuclear transparency, being party to main nuclear treaties, internalized nuclear treaties through national policies, compliance to nuclear treaties, and being a hegemonic power, in a dichotomous measurement (Yes/No). The “yes” labeling in every variable determines the security complexes of Israel, Iran, Turkey, and United States.

The purpose of this grouping is to show biases in current nuclear policy, which are driven mainly by the United States. The United States policies are generated through national interest but these policies are presented in an international setting. Such presentation is not problematic if it is followed and replicated for each state that has similar nuclear posture. If not, then not only the United States but also the whole international nuclear order is jeopardized. What I am trying to say is that a nuclear Iran is as unhealthy as a nuclear Israel in the Middle East and the international organs, regardless of the United States’ power to influence the decision-making, should make an
unbiased judgment in both of the cases. This grouping makes explicit for the United Nations or IAEA’s Board of Governors, to make fair assessment, regardless of a third-party national interest.

When nuclear capable states are grouped in this way, a group-level policy can be employed with states such as North Korea and Israel, as they end up in the material security complex. National interest based calculations prevent the United States from following similar policies with both states, because foreign policy usually stems from a dichotomous division: an ally versus an adversary. The traditional foreign policy perspective feeds ongoing nuclear policy, which has become fixed. This policy; however, is not helpful in changing nonproliferation dynamics. It is not helpful in directing states either towards nonproliferation or to disarm.

There are at least two advantages in grouping states for practicality:

(1) Grouping states decreases biases that emerge from national security calculations. Grouping, therefore, opens up room for international organizations like United Nations (UN) and International Atomic Energy Agency (IAEA), or states like the United States to reconsider existing policies and revise them for a fair approach to all state parties to the Nuclear Nonproliferation Treaty (NPT).

(2) Grouping states allows a non-regional approach and shows that states in the same region may follow different nuclear proliferation policies regardless of threat existence or existing nuclear states in the region. The preferences of states can change regardless of regional nuclear threat. In the Iranian case, for instance, even if Iran where to acquire nuclear weapons and their delivery capability, we might not necessarily expect
this to trigger nuclear proliferation across the Middle East. Later in this chapter, Israel is
used to demonstrate this point.

IRAN: MATERIAL-NORMS BASED SECURITY COMPLEX

Since Iran has an ongoing nuclear deal with the IAEA, its nuclear posture is
analyzed in this chapter through its past commitments and present activities. Iran is a
nuclear transitioning state. It does not have an explicit non-proliferation policy. On the
contrary, considering its ambitious nuclear investments and nuclear power plants, it tilts
towards acquiring at least the nuclear weapons technology if not the weapons themselves.
Whereas the Western powers specify a focus on preventing nuclear proliferation, Iran
focuses on nuclear disarmament as its policy objective. By following a nuclear
disarmament policy, Iran tries to accuse nuclear weapon states for non-compliance to the
revised Nuclear Non-Proliferation Treaty (NPT) of 1995.

Iran’s nuclear posture stems from contradictory tenets. Threat is a significant
motivation for following a nuclear weapons program. Yet, Iran still abides by
international treaties, at least, it continues to be party to major nuclear treaties. Whilst
Iran’s nuclear policies are not transparent and shared with the Iranian public in a
transparent way, the public does support a peaceful nuclear energy policy. These entire
factors (threat existence, party to international treaties and non-transparent nuclear
posture) place Iran in the material-norms based security complex.
History of Iran's Nuclear Program:

Iran's nuclear program dates back to the late 1950s. This program is a result of the Atoms for Peace initiative, initiated by President Eisenhower to encourage peaceful nuclear programs. The United States and Iran made agreement on civil nuclear cooperation in 1957 under Shah Mohammed Reza Pahlavi’s rule. Iran researched nuclear energy production at Tehran University during this period. In November 1967, the Tehran Research Reactor, which was originally commissioned for medical radioisotope production went critical, “using 93 percent enriched uranium supplied by the United States.”

Iran signed the NPT in 1968 and ratified it in 1970 through parliamentary consent. The comprehensive safeguards agreement was in place started by 1974. In the same year, the Atomic Energy Organization in Iran was established. Later in 1975, the West German company Kraftwerk Union A.G. started two Siemens 1,200 megawatt nuclear reactors at the Bushehr Nuclear Power Plant. Likewise, Iran signed a contract with France for two 900-megawatt reactors and the provision of training for Iranian technicians in 1977. Both Germany and France agreed “to supply enriched uranium of ten years’ worth of supply.”

The history shows that Iran and the Western countries had good nuclear relations until the fall of the Shah. Even though Israel started its nuclear weapons program in

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1960s, Iran did not pursue this ambition. The United States’ alliance with Iran during the Shah’s period was insurance against Iran following a nuclear weapons program.

When the Shah lost power, nuclear policy shifted into the hands of the Ayatollah’s regime. This Islamic cadre was believed to reject nuclear weapons at first, claiming it was against Islamic law. Later however, it started to pursue nuclear research once again. The newly reestablished regime opened a nuclear research center with Chinese assistance in 1984.\footnote{Anthony Cordesman, Khalid R. Al-Rohdan. 2006. *Iran’s Weapons of Mass Destruction: The Real and Potential Threat.* Washington, D.C.: Center for Strategic and International Studies: 101.} Iran’s fuel cycle facilities received foreign assistance from China, and Russia. The Iranian public supports the nuclear program, and the regime claims that because Western powers do not want a powerful Iran they refuse the country a “peaceful nuclear program.” This claim, however, does not reflect the facts, most of which support the argument that Iran is engaged in clandestine nuclear activities with the aim of producing nuclear weapons.

This dissertation places Iran in the material-norms based security complex. The national security decisions of Iran are seen through the calculation of threat to the Iranian regime, economic benefits, and its decision to remain party to the international nuclear order, even if it does not fully support all the treaties and norms.

\textbf{a- Threat Existence:} The nuclear ambiguity behind Iran’s nuclear program can be explained through domestic and external threat identification. The Iranian leadership aims to hold the Islamic regime intact, and the technically complex and prestigious
nuclear program are perceived to indicate Iranian superiority and power. Domestically, this posture resonates with the public, supporting the nuclear program.\footnote{Christine Fair and Stephen M. Shellman. 2008. "Determinants of Popular Support for Iran's Nuclear Program: Insights from a Nationally Representative Survey." \textit{Contemporary Security Policy} no. 29 (3): 538-558.}

First of all, Iranian leaders explicitly state threats against the survival of the Islamic regime. Iran claims these threats are from Israel and the United States. The threat identified from Israel is a result of the power struggle in the Middle East and the threat from the United States rests on a historical animosity, originating from the toppling on a secular Iran in 1970 by the current religious regime.

From the fall of the Shah, the relationship between the Iranian decision makers (Iranian Presidents and Clerics/Ayatollahs) and the United States has declined. The United States started to employ sanctions on Iran; which was followed by United Nations sanctions. The United Nations Security Council Resolutions called Iran to adhere to the Nuclear Non-Proliferation Treaty, as Iran was accused of “seeking nuclear weapons program”, “not complying to the International Atomic Energy Agency Comprehensive Safeguards agreement” in which it should allow inspections in declared nuclear facilities and “not suspending its enrichment and reprocessing programs.” \footnote{United Nations Security Council. 9 June 2010. Resolution 1929; United Nations Security Council. 27 December 2006. Resolution 1737.}

The Iran-Iraq War from 1980 to 1988 further cultivated Iranian nuclear ambition. During this war, Iran suffered from a lack of international interest, even after Iraq used chemical weapons against Iranian civilians. Iraq attacked the Bushehr nuclear power plant several times during this war. Iran safeguarded the material in Bushehr through IAEA observation, claiming, “no country has the right to attack the nuclear
establishments of another country." This rhetoric was later used over and over again in the speeches of Iranian leaders, to assert Iran's "inalienable right" to develop a peaceful nuclear program. The term inalienable rights, originates from Article IV of the NPT. So, Iran legitimizes its nuclear activities using NPT terminology.

Over the passing years, Iran failed to assure and build confidence concerned parties and as a result, it was subjected to heavy sanctioning. The lack of consensus on Iran's capabilities and intention to build a nuclear weapons program created international disputes as well. In 2003, Iran wanted to negotiate its nuclear program but the Bush administration dismissed it. The European states (Britain, France, and Germany) stepped in from 2003-2005, but Iran continued its enrichment program. Turkey and Brazil sought to play a middle-power role and arranged an immature nuclear fuel swap deal with the Tehran Declaration in 2010. President Obama criticized the deal in a letter to Prime Minister Erdogan and to President Lula da Silva. In the same year, the United Nations issued Resolution 1929, the Congress passed additional sanctions and the United States and the European Union agreed to employ additional sanctions.

Threat identification continued when Iran discovered a computer virus, named Stuxnet, had infected Iranian nuclear centrifuges in 2010. The United States and Israel were said to be behind the Stuxnet virus. Later, the United States was identified as the perpetrator. As a counter-proliferation method to slow down the Iranian nuclear

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9 In his letter, President Obama clearly states the United States will continue to sanction Iran and the only possible negotiation way is through the IAEA proposal because the Turkish-Brazilian fuel deal still leaves room for proliferation for a year at least. See: The White House. April 20, 2010. To: Luiz Inacio Lula da Silva-President of the Federative Republic of Brazil. Washington.
program in general and specifically in introducing a new type of warfare (cyber warfare) to the nuclear arena, Stuxnet was a significant milestone.

All these efforts could not convince Iran to stop enrichment. As a result, Israel started to threaten an attack in the name of counterproliferation on Iranian nuclear facilities. Iranian leadership, in return, responded by blocking the Strait of Hormuz, through which 20% of the worldwide oil supply is transported. In 2011, the Nuclear 5 (United Nations Permanent 5 countries) met, but the outcome of the Istanbul Initiative has not proved significant. In April 2012, the parties met again and negotiations continued at a low level. In the 2012 United Nations General Assembly, Israeli Prime Minister Netanyahu made his famous speech, a "clear red line for action", as he predicted that within a year Iran would have enriched enough uranium to make a bomb. Before Prime Minister Netanyahu’s speech, former Iranian President Ahmadinejad stressed the unfair international structure that "hegemonic powers" possess through "nuclear weapons." The Iranian former President stayed away from directly mentioning the Iranian nuclear program.

Until the election of Hassan Rouhani in June 2013, the multilateral negotiations, with two rounds of talks in Almaty, Kazakhstan, failed and no progress was achieved.

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11 Israeli Prime Minister Binyamin Netanyahu addressed the U.S. Congress for two times during the Obama administration. The second speech in 2011 majorly focuses on the Iranian nuclear proliferation and said "Israel has the right to defend itself." See: Jerusalem Post Staff. 24 May 2011. "Text of Binyamin Netanyahu's Speech to the US Congress." The Jerusalem Post


After Rouhani’s election talks restarted at the foreign ministerial level, Javad Zarif—the new face of Iran in nuclear talks—met John Kerry, the U.S. Secretary of State, and negotiations started to warm up. The negotiations in Geneva heralded a new phase as European Union High Representative Catherine Ashton and Zarif signed the Joint Action Plan on November 24, 2013. The plan has initiated the first step of negotiations and is time bound to months, voluntarily asking Iran “not to enrich uranium over 5% for 6 months, to stop the production of 20% enriched uranium, to stop further activities at the Natanz enrichment Plant, Fordow, and at the Arak reactor, not to establish new locations of enrichment, not to install new centrifuges, not to reprocess and to allow enhanced IAEA monitoring and inspections.”15 In return, the United States and Europe agreed to lift sanctions on “petrochemical exports, gold and precious metals, auto-industry.” Most importantly the agreement states that no “new United Nations Security Council sanctions or EU nuclear related sanctions,” will be issued and that “the United States’ Congress will refrain from imposing new sanctions.”16 Regardless, the U.S. Senators Menendez-Kirk initiated the “Nuclear Weapon Free Iran Act of 2013,” a bill (S1881) to expand sanctions on Iran, which was initially signed by more than 50 Republican and Democrats in the Senate.17

Cognizant of the damage of such a bill if passed, Senator Dianne Feinstein, a California Democrat and the Intelligence Committee Chairman, stated crucial facts about the ongoing negotiations before the Senate. Believing that “state policies can change through diplomacy,” Feinstein pointed out that P5 +1 (the United Nations Permanent

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Members plus rotating member: Germany) had agreed to “lift sanctions only of $7 billion,” which is mostly composed of the “Iranian repatriation of 4.2 billion, of its own money.” Senator Feinstein also pointed out Iran’s continued “loss of $4-5 billion a month of the oil” that could not be sold in international markets due to sanctions.

Sixty-two organizations also issued a joint letter to the Senate to stop the bill. Non-governmental nuclear organizations, such as Global Zero, have initiated a “hotline call” to Senators asking them to “stop jeopardizing the nuclear diplomacy.” These initiatives pressured President Obama into addressing this point in the State of the Union 2014 speech. As hoped, President Obama said, he would veto the “new sanctions bill that threatens to derail” the negotiations with Iran. President Obama made it clear that the existing sanctions will remain in place and that if Iran did not comply with the Joint Action Plan terms then he would directly implement new sanctions. The President’s firm stance must have been heard, as the bill halted in the following days.

The historical process of the Iranian nuclear program is significant in understanding and analyzing the transition in Iranian nuclear politics. There is a clear difference between the policies of former Iranian President Ahmadinejad with the policies of current Iranian President Rohani. However, the status of the clerics and

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21 This is an e-mail that has been received from John Michael Donahue, U.S. Campaign Manager of the Global Zero movement in January 27, 2014. Donahue, Joh-Michael. 27 January 2014. An Urgent Call.
23 Barack, Obama. 28 January 2014.
Ayatollah of the Islamic regime remain the same. The Iranian nuclear rapprochement with the Joint Action Plan, although positive in the short-run, does not reflect Iran’s nuclear posture in the long term. Iran’s state characteristics, such as consistent threat identification and hostile relationships with neighboring states, as well as its weakened and loose relations with the Western economy are all significant obstacles that will need to be overcome for policy to change. In this respect the value that Iran associates with nuclear weapons may continue to exceed the economic costs, such as sanctions, from the Iranian perspective.²⁴

Due to its ongoing hostility with Israel, Saudi Arabia and other Gulf countries, as well as its assistance to the military branch of Hezbollah, a Shi’a terrorist organization mostly based in Lebanon, and its assistance to the Syrian regime, Iran is a state that faces constant threats to its national security, if not to its survival. To some extent, the ongoing state policies perpetuate these threats. Due to its membership to the nuclear agreements and its very recent commitment to employ the IAEA Safeguard measures that enable increased confidence on the peaceful structure of the Iranian nuclear program through verification and inspection systems, Iran follows the international rules. It does not totally comply with the treaties, however.

b- Non-democratic Nuclear Program: There are multiple concerns with the Iranian nuclear program. One of them is related to a lack of transparency around the knowledge shared with international authorities. The other one is the lack of transparency around the knowledge shared with the Iranian domestic public. Lack of transparency in Iran’s nuclear weapons program coupled with a history of establishing clandestine

nuclear infrastructure without notifying the IAEA, results in a non-democratic character to the Iranian nuclear program.

In 2003, IAEA investigation revealed undeclared fuel cycle activities in Iran. Iran was not transparent on the “two new facilities located at Natanz.” This occurred at the same time as Iran “confirmed heavy water production plant” in Arak. As the NTI points out, Iran later acknowledged the allegations for “small scale enrichment experiments, planned to construct an enrichment facility, a heavy water production plant, a heavy water-moderated research reactor, and a fuel fabrication facility.” All of these are parts of the nuclear fuel cycle that could result in clandestine nuclear weapons activities. These undeclared activities put Iran in a difficult situation with IAEA as the latter found Iran in non-compliance with the Comprehensive Safeguards agreement for the timely declaration of nuclear activities. Iran failed to declare nuclear materials including where and when they are received, stored, and processed, or timely update the IAEA with design information for MIX Facility, or the waste storage at Esfahan.

On the domestic side, the Iranian public does not have complete knowledge of the Iranian nuclear weapons program. A study conducted to find the “public support for Iran’s nuclear program” revealed that the Iranian public supports a “full nuclear fuel cycle” which does not need to be a nuclear weapons program both for “energy needs”

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28 This study uses the data from United States Institute of Peace in which the institute followed face-to-face interviews to address public opinion divergent points from the Iranian government.
and "to deter countries from economically and politically dominating Iran." The authors of this study also questioned the reasons for Iranian public support of the full nuclear fuel cycle, comparing military threats to expected economic benefits. The polling showed that 77% of the respondents regard "the United States' foreign policy as an important threat" to Iran. The authors run a quantitative analysis as well on the U.S. Iranian relations. When opinion on the United States is positive, individuals are less likely to support Iran's fuel cycle program. Additionally, the polling showed that a nuclear Israel does not "drive support" for Iranian nuclear ambitions.

Based on the above polling and data, the Iranian domestic public supports the government's nuclear policies. This polling, did not ask the respondents specific questions about the nuclear weapons program, rather it used the term "full nuclear fuel cycle," due to domestic considerations in Iran. It would be good to see the results of a question regarding the Iranian government's transparency with regards to its nuclear program. How much information is shared with the public about undeclared material or satellite imagery that discovers new nuclear infrastructures, for example, needs further evaluation.

c- Party to Nuclear Organizations/ Partial Compliance to Nuclear Treaties:

Regardless of the ambiguity of the Iranian nuclear program, Iran is part of the international nuclear regime. It has been party to the NPT since 1970 and fiercely pushes forward the nuclear disarmament agenda. The Iranian Representative's speech in the

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2005 Review Conference was focused mainly on the "13 practical steps to implement Article VI of the treaty." In later years, Iran consistently criticized nuclear weapon states for not following the treaty regulations, such as not reducing their tactical nuclear weapons.

Over the NPT statements, the Iranian Representatives explicitly state the role of NPT extension to the non-party states, particularly to Israel, since it is a "real threat to all countries in the Middle East and to the international peace and security." Iran particularly asks for an end to "nuclear sharing," accusing the United States of "non-compliance" to the NPT, by sharing nuclear knowledge with the "Zionist Regime of Israel" and has shown the "top secret document dated 23 August 1974" between Israel and the United States. The Iranian delegation stresses "full support" to the Nuclear Weapons Free Zone (NWFZ) in the Middle East and regards Israel as "the only obstacle"

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33 The 13 practical steps are implemented with the 2000 Review Committee for the nuclear weapon states to follow. These steps are ratification to the Comprehensive Test Ban Treaty (CTBT), banning nuclear testing, banning the fissile material for use in nuclear weapons, need for a subsidiary body in Conference in Disarmament, irreversibility of nuclear reductions, elimination of nuclear arsenals to total nuclear disarmament by the nuclear weapon states, entry into force and implementation of the START II and START III, completion of the Trilateral Initiative between U.S., Russia, and the IAEA, other steps that nuclear weapon states to follow such as diminishing the role of nuclear weapons in security policies, reduce non-strategic nuclear weapons, unilateral reductions and so on, to put excess fissile material into verification, reaffirmation of ultimate objective of nuclear disarmament to be general, regular reports on the disarmament process, verification of capabilities for assurance reasons. See The Representative of the Islamic Republic of Iran. 19 May 2005. Before NPT 2005 Review Conferences, Main Committee I On Nuclear Disarmament. edited by Islamic Republic of Iran Permanent Mission to the United Nations. New York: United Nations.


to this zone.38 The Iranian claim, in this regard, captures the international norms and regulations, when the Iranian Representative says:

"The Regime’s [Zionist Regime] clandestine development and possession of nuclear weapons not only violate basic principles of international law, United Nations Charter, the Treaty on the Non-Proliferation of Nuclear Weapons, and numerous General Assembly and Security Council resolutions, but also clearly defy the demands and concerns of the overwhelming majority of the UN member states and constantly and obstinately disregard the international community which have time and again, called the regime to renounce nuclear weapons and accede to the Treaty on the Non-Proliferation of Nuclear Weapons." 39

Iran asks for a non-discriminatory and non-selective approach, based on the terms of nuclear equality, in which nuclear weapon states abolish their nuclear arsenal as part of Article VI of the NPT. Otherwise, according to the Iranian logic, non-nuclear weapon states would have the right to proliferate. The latter part is not explicit in the Iranian official statements; however, the clandestine nuclear weapons program of Iran supports this point. Iranian delegation continuously stresses the “inalienable right” of Iran to acquire nuclear technology for peaceful purposes.40

Similar to the North European countries like Norway, Iran highlights that “usage of nuclear weapons is against the rules of international law;” therefore Iran takes the “advisory opinion” of the International Court of Justice as a “universal disarmament

obligation.”\textsuperscript{41} For the 2015 Review Conference, it “proposes to establish an ad hoc committee to work on the illegality of nuclear weapons” and to create negative security assurances.\textsuperscript{42} This approach, however, is against, for instance, the nature of NATO’s existence, which is to provide security to its member states (collective defense). By extending the U.S. nuclear umbrella to all parties, the established alliances will lose power. Iran, furthermore, presses especially the United States to adhere to its commitments under Article VI of the NPT, and proposes to establish a "standing committee for monitoring and verifying the implementation of the nuclear weapon states" for reduction of nuclear arsenal and total disarmament.\textsuperscript{43}

Iran, in conclusion, is in the material-norms security complex and the ongoing negotiations through the Joint Action Plan are very significant for the Iranian nuclear posture in the future. Iran is not a state that does not adhere to the international norms. It has a very different nuclear policy than Democratic Republic of Korea or Israel.

ISRAEL: MATERIAL SECURITY COMPLEX

Mr. Warnke: "Then in your view, an unadvertised, untested nuclear device is not a nuclear weapon." Ambassador Rabin said: "Yes, that is correct."45

The dominant variable is threat existence in the case of Israel. This is also the main reason that Israel is grouped in the material security complex rather than in other groups. Below I examine the existence of threat in Israel’s nuclear rhetoric from its establishment as a state onwards, and its nuclear posture that does not correspond to democratic values.

History of Israel’s Nuclear Posture:

Israel neither confirms nor denies possessing nuclear weapons officially. This policy is called nuclear ambiguity. Israel’s nuclear program is known to have started around 1963 with French assistance. The holocaust rhetoric and war with Arab states have been considered the catalysts for the Israeli nuclear project. Consistent with the nuclear ambiguity policy, then-Prime Minister Levi Eshkol said, “Israel will not be the first nation to introduce nuclear weapons to the Middle East.” Israel’s opacity in the possession of nuclear weapons is the result of threat existence from the neighboring countries. Israel does not want to be the state that generates conflict but also does not want to be caught empty handed either. This policy was generated in 1948 and became part of the Israeli national security program through time.

44 Declassified conversation between Ambassador of Israel, Lieutenant General Yitzhak Rabin and Assistant Secretary of Defense (ISA), Paul C. Warnke, regarding the meaning of “introducing” a nuclear weapon. See
How did the policy of nuclear ambiguity begin? In 1968, Paul Warnke, U.S. Assistant Secretary of Defense, and Yitzhak Rabin, Ambassador of Israel, had conversations about the meaning of the “introduction” of a nuclear weapon. This correspondence’s main aim was to settle 50 F-4 Phantom aircraft sales from the United States to Israel, when the United States wanted to clarify that these aircrafts would not be used to carry nuclear warheads. The agreement was reached without a consensus on the meaning of an introduction of a nuclear weapon.

According to the United States, an introduction of a weapon meant the “physical possession and control of nuclear arms by any Middle Eastern power,” whereas for Rabin an introduction of a nuclear weapon was when the weapon is “actually tested” and “advertised.” The United States’ was worried how the “world would see” the Israeli nuclear weapons and not the physical existence of the weapons. Two months after, Israel had shifted its discourse; suggesting that Israel would not be the first to introduce nuclear weapons and that it would remain a non-nuclear state. Kissinger then said “what Israel has done now is to define the word “introduction” by relating to NPT”

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46 The United States’ official position in this era was to keep the U.S.-Israeli cooperation limited in purpose and to encourage Israel to make military agreements and sales with European states, so that Soviet Union would not get into rapid arms deals in the Middle East with other countries. The U.S. delegation asks three assurances from Israel with regards to the sale of F-4s: 1- Israel, not to deploy nuclear warheads to an aircraft sold by the United States, 2- no development or manufacturing of nuclear weapons, 3- Israel to sign Nuclear Non-Proliferation Treaty (NPT). See Memorandum of Conversation. November 4, 1968. Negotiations with Israel-F4 and Advanced Weapons. Washington, D.C.: Assistant Secretary of Defense; Memorandum of Conversation. November 8, 1968. Negotiations with Israel - F4 and Advanced Weapons. Washington, D.C.: Assistant Secretary of Defense. (Third Session).


The diplomatic cables revealed that Israel did not want to state non-possession of nuclear weapons in their nuclear discourse, as that terminology would disserve the policy of nuclear ambiguity. The Israeli nuclear policy was established in these years, when decision-makers, both from the Israeli and the United States’ side, were trying to figure out how to respond to Israel’s nuclear program.

The United States was divided on whether to pressure Israel not to acquire nuclear weapons, and if so, how far to pressure them? The democrats, from Johnson’s administration, noticed the possibility of acquiring nuclear weapons when Israel asked to have “two CDC 6400 computer systems, which are critical” for a nuclear weapons program. Pentagon officials, such as the Deputy Secretary of Defence David Packard, wrote a memorandum to Secretary of Defence Melvin Laird to put more pressure on Israel, but that request failed. Henry Kissinger, according to William Burr and Avner Cohen’s analysis, was convinced that it was in the best interests of the United States “if Israel kept their nuclear activities secret.”

By June 30, 1969, only the United States’ top officials knew Israel’s nuclear capability. At the Review Group meeting, The Under Secretary of State, Mr. Richardson listed the objectives of the United States, one of which was “to create circumstances in which Israel would not “announce” a nuclear capability and would maintain secrecy on its research and development activity.” The choice of the phrase, “maintain secrecy”

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52 Henry Owen to the Secretary of State. March 17, 1969. Stopping the Introduction of Nuclear Weapons into the Middle East. Washington, D.C.: The Secretary of Defense. This document does not refer Israel as the buyer state. However, the subject of the memorandum, “introduction” of nuclear weapons is directed to the Israeli nuclear posture, as it is the only state that uses “introducing” a weapon as part of its policy.
rather than “maintain ambiguity or opacity,” discloses the United States’ knowledge of Israel’s activities by that time. The group advised Israel “not to deploy its produced missiles but to hide them” since missiles technology is an expensive program and no state would acquire this weaponry without considering attaching a nuclear warhead to it. Consistently, General Cushman from the CIA, noted that Israel had “eleven missiles” by that time and was expected to have nearly thirty by the end of 1970, “ten, reportedly, with nuclear warheads.” In 1979, the Vela satellite program detected a double flash on the ocean, which turned eyes towards Israel and South Africa. Today, speculation favors a joint South African-Israeli test. Israel has not declared any responsibility for this nuclear test and kept its nuclear ambiguity policy in tact.

Avner Cohen, a Professor at the Monterey Institute of International Studies, indicated that the United States during the Nixon Administration made a deal with Israel, known as the Nixon-Golda Weir secret deal. There is no publicly disclosed recording available for this deal. According to Cohen, “Israel agreed not to make unilateral changes in its nuclear ambiguity” policy and in return the United States accepted the Israeli nuclear weapons program. This policy is in direct opposition to the United States’ nuclear posture on nuclear transparency and nuclear non-proliferation. However, a

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58 It is through Avner Cohen and William Burr, that we reach these documents now. There are 31 declassified material and Cohen and Burr originally published the article “Israel crosses the threshold” based on this documentation.
strategic ally like Israel needed security assurances and it was in line with the United States’ national interest not to take an action against the Israeli nuclear ambitions of the time.

**a- Threat Existence:** Israel’s security concerns date back to the Holocaust. The idea of survival when there is an existential threat is bred into the bones of the Israeli national discourse in history. Today, Israel is in the material security complex because of threat identification and not being party to major nuclear treaties. The threat identification dates back to the formation of the Israeli state. Below, I will examine the role of threat in Israel’s nuclear ambiguity.

The Israeli Defense motto of “never again” serves a collective response to the Holocaust and is an analogy that has been used in the nuclear setting. This has consequences for Israel’s nuclear secrecy. Israel learned in history that national interest prevails any kind of coalition, and if Israel is going to survive, it needs to be powerful. This understanding dates back to the historical instances that Israel has faced not only with its Middle Eastern neighbors but also with the western allies.

In the 1956 Suez Canal Crisis, Israel learned by experience that the United States would not support Israel in all circumstances. During the Suez Canal Crisis, the United States accused France, Britain, and Israel of aggression, and sided with Egypt when Nasser was nationalizing the Suez Canal. Following this crisis, French-Israeli military cooperation in arms deals strengthened. In 1958, Israel started to build the Dimona reactor with French assistance. This was, unlike the Soreq reactor for peaceful nuclear

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60 December 19, 1960, President Eisenhower and his defense group decided to ask for an “inspection” to the Dimona reactor. The reactor, as President Eisenhower said, should have “cost $100-$200 million dollars,” which was an amount that Israel could not afford without diverting public and private aids from the United States. In the declassified documents examined,
energy production, a secret project. The United States’ intelligence could not make a timely assessment of the reactor, as the intelligence unit learned about the project only in 1960\textsuperscript{61} when Dr. Gomberg, a whistleblower who visited Israel as a guest of the Israeli Atomic Energy Commission, leaked the information to the United States Secretary of State, saying “France intends to do anything to regain its place as a major power.”\textsuperscript{62} Dr. Gomberg said that Israel was calling the project a “large agricultural experimental station” and explained the possible French assistance with nuclear forensics.\textsuperscript{63} This corresponds to the establishment of the Dimona Reactor.

The Dimona reactor was a secret plutonium production nuclear facility. The reactor was a result of Israel’s national security paradigm in the Cold War. The bipolar international system and instability in the Middle East brought about the maximization of power and capabilities in Israel’s national policy. Uncertainty also played role in the Israeli decision. Israel today is believed to have 100-200 nuclear warheads, reprocessed in the Dimona reactor. Table 2 shows the estimated numbers of Israeli nuclear weaponry from different sources\textsuperscript{64}:

\footnotesize

\begin{itemize}
  \item Israel refuses all the requests of the United States to “inspect” the Dimona reactor. Israeli response, in this regard, was sharp and clear, stating that the U.S. could only “visit” the reactor but not to “inspect” it. The United States conducted one-day visits per year to this reactor; however, the memorandum conversations stated the limitations that the group faced in each visit. The visits were also not conclusive to examine the Israeli nuclear program. See: President Eisenhower, Secretary Herter, Asst. Secretary Berding et al. December 19, 1960. "Memorandum of Conference with the President."
  \item Memorandum of Conversation. December 1, 1960. Israeli Atomic Energy Program.
  \item IISS Strategic Dossier. 2008. "Israel: Nuclear Monopoly in Danger." in \textit{Nuclear Programmes in the Middle East; in the shadow of Iran}, 119-140.
\end{itemize}

\normalsize
### Table 2. Estimates of Israeli Nuclear Arsenal

<table>
<thead>
<tr>
<th>Source</th>
<th>Weapons Estimated</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sunday Times (1986)</td>
<td>As many as 200 nuclear weapons</td>
</tr>
<tr>
<td>Frank Barnaby (1989)</td>
<td>100-200 weapons worth of plutonium; up to 35 thermonuclear weapons</td>
</tr>
<tr>
<td>Seymour Hersh (1991)</td>
<td>Hundreds of nuclear weapons, ranging from low-yield, enhanced radiation ‘neutron’ designs, mines and artillery shells to thermonuclear weapons</td>
</tr>
<tr>
<td>Anthony Cordesman (1996)</td>
<td>60-80 nuclear weapons</td>
</tr>
<tr>
<td>Wisconsin Project on Nuclear Arms Control (1996)</td>
<td>Up to 175 bombs worth of plutonium</td>
</tr>
<tr>
<td>Jane's Intelligence Review (1997)</td>
<td>Over 400 nuclear weapons</td>
</tr>
<tr>
<td>US Defense Intelligence Agency (1999)</td>
<td>60-80 nuclear weapons</td>
</tr>
<tr>
<td>Stockholm International Peace Research Institute (2007)</td>
<td>100-200 warheads</td>
</tr>
</tbody>
</table>

The existential threat identification to the Israeli state’s survival continued into the late 1960s. Israel started to lose Western support. French restrictions started on Israel’s supply of uranium in 1963. Israel then turned into Argentina as an alternative supplier. The Israeli government acquired 80-100 tons of Argentine uranium oxide (yellowcake), which is a vital process in the uranium enrichment program.65 Two-days before the Six-Day War in 1967, French President Charles de Gaulle issued a partial arms embargo on Israel. On December 29, 1968, France “suspended all arms deliveries,” after an Israeli raid on an airport in Beirut, which destroyed Lebanese planes, of which one-third was owned by Air France.66


The relations deteriorated further when Israel destroyed the Osirak reactor in Iraq, which was designed through Iraqi-French cooperation. The Six Day War, then, was a war of survival for Israel. This time, however, Israel annexed Sinai Peninsula and Golan Heights. Israel’s “never again” motto was reconfirmed to work through these expansionist policies, which were condemned by Western powers. These historical records show the threat identification in Israel, which creates consequences for other parties in the region. During the Lebanon War (July War) in 2006, for instance, Iran supported the Lebanese paramilitary group against Israel. In these circumstances of ongoing threat survival, keeping the nuclear weapons is the only guarantee for the Israeli government.

b- Non-Democratic and Transparent Nuclear Program: Democracy is another variable that affects Israel’s nuclear posture. Although Israel is said to be a democratic country by the Polity IV report of 2010, it does not follow a democratic nuclear policy. The Polity IV dataset ranks Israeli democracy with the highest score (+10 points, in a -10 to +10 scale). In textbooks such as the Essentials of Comparative Politics, Israel is considered as an advanced democracy as well. According to O’Neil, the author of this book, the degree and institutionalization of participation, competition, liberty, open-markets, private property, and the high level of gross domestic product at purchasing-power parity and small agricultural sectors” are indicators of an advanced democracy. Although the above-suggested indicators are necessary, they are not sufficient to be a democratic state with regards to nuclear matters. If Israel is a full democracy then how

one can explain its nuclear ambiguity policy? This policy clearly clashes with tenets such as public knowledge, transparency, and accountability in democratic states. Only when the national public is cognizant of and as a result, supports national security policies, can democratic rule prevail. In democracies, the public has the upper hand over the government because governments come and go with elections. Nuclear secrecy or nuclear ambiguity cannot be a policy in a full democracy. In Israel, even the Israeli representatives do not have fully-fledged knowledge of the Israeli nuclear undertaking.

Israel’s nuclear discourse, based on ambiguity/opacity, has democratic consequences. Nuclear policy is not an issue in Israeli public policy debates and has not been discussed outside closed doors. As Cohen and Burr say: “Israel’s nuclear posture is inconsistent with the tenets of a modern liberal democracy.”\(^6^9\) The Israeli government follows a nuclear policy based on malformed relations with neighboring countries and Western powers. The fluctuation of relations with France from the Cold War onwards, decline in relations with Turkey after the Mavi Marmara Flotilla Incident, and long-term problems with Egypt, Iran and other neighboring countries are some of the reasons for Israel’s continuation of its nuclear policy. If Israel could normalize relations with neighboring countries, it could eventually result in the normalization of nuclear policy. The United States’ nuclear policy towards the material security complex is significant in this aspect.

**c- Non-party to Major Nuclear Treaties:** Israel is not party to major nuclear agreements and organizations. The Israeli nuclear ambiguity policy prevents the Israeli state from signing and ratifying any major treaty that could jeopardize its long-

established nuclear stance. Membership of the Nuclear Nonproliferation Treaty (NPT), in this regard, is a must for creating mutual trust through treaty obligations. The United States Administration in late 1960s demanded Israel to ratify NPT in order to limit a possible nuclear outbreak in the Middle East and to prevent the Soviet confrontation.

In July 28, 1969, Joseph Sisco created the talking points for the Acting Secretary, and reiterated the United States' request for Israel to sign and ratify the NPT. This time, the discourse changes to stress the NPT's power over "unilateral assurances at the highest governmental level or in private meetings." At first, the Israeli government responded to the request with a delay in NPT ratification, then the Israeli delegation asked to wait for the election of the new government because NPT ratification was a hot topic that could not be handled during the election year. Four months after the elections, in February 23, 1970, Rabin, Ambassador of Israel, said to Kissinger, "Israel did not have intentions to sign NPT." According to Kissinger, this was "the end of the long decayed U.S. effort to stop the Israeli nuclear program."

Israel, today, is still not a party to NPT and this is highly criticized by other states. It is not party to Chemical Weapons Convention (CWC), Biological and Toxin Weapons Convention (BTWC), Comprehensive Test Ban Treaty, and Missile Technology Control Regime. The CWC is a universal treaty that is ratified by majority

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72 Angola, Democratic People's Republic of Korea, Egypt, Israel, Myanmar, Somalia, and Syria are not party to CWC.
of the states in the world.\textsuperscript{74} There are only six states,\textsuperscript{75} including Israel, that have not acceded the CWC.\textsuperscript{76} By not ratifying CWC, Israel damages the disarmament and cooperation efforts of the international arena. This leaves Israel outside nuclear regulations and norms much like North Korea.

As a result of projected threat existence, non-democratic nuclear policies, and not being party to major nuclear non-proliferation and disarmament treaties, Israel causes unrest in the Middle East’s nuclear dynamics as well. The likely proliferators in the region legitimate their nuclear policies in reaction to the Israeli policy. This nuclear rhetoric results in a self-perpetuating nuclear policy. The Israeli nuclear program, therefore, has grand consequences compared to its small value. The nuclear deterrence strategy where Israel rests its nuclear policy on the value of nuclear weapons is not shown to be effective in limiting non-proliferation because nuclear weapons cannot be a bargaining chip between geographically close neighbors as they can result in mutual destruction.

\textsuperscript{74} The universal adherence to CWC is practiced recently in the Syrian case, where Bashar al-Asad agreed to become party to the treaty and return its chemical stockpiles to the United Nations. The Organization for the Prohibition of Chemical Weapons helps Syrian government to transfer the stockpile.

\textsuperscript{75} Israel and Myanmar signed the Chemical Weapons Convention Treaty in 1993 but never ratified, whereas Angola, Egypt, North Korea, and South Sudan do not even sign the treaty.

TURKEY: MATERIAL-LIBERAL SECURITY COMPLEX

Turkey is in the material-liberal security complex because threat existence and democratic rule have an impact on its nuclear decision-making. Turkey still identifies threats from domestic actors and/or outside powers. In terms of nuclear policies, Turkey has the potential to acquire a nuclear weapons program but it is not interested in it. Its existing nuclear policy is a result of balancing threats and maximizing economic interest through diversifying energy routes with nuclear energy programs. Iran's nuclear ambitions do not turn Turkey towards nuclear weapons projects, although they are in the same region. However, the Turkish government clearly states that it would not let any country acquire nuclear weapons in the Middle East.

a- Threat Existence: Turkey possesses the characteristics of material-liberal security complex because there is a clear definition of threat in Turkish domestic and foreign policies. Although the AKP government tried to create a policy of 'zero problems with neighbors', unexpected circumstances due to the Arab Spring rendered a new threat setting. The Turkish government has significantly increased its defense expenditure in recent years. The Turkish government states Bahar Al-Assad of Syria as a clear threat to Turkey. Turkey, after Syrian forces shot down a Turkish aircraft, requested from NATO to deploy ground-to-air guided Patriot missile defense batteries to protect Turkish airspace.\(^{77}\) The North Atlantic Council responded positively to the request, stating that it would deploy six batteries for defensive purposes.\(^{78}\) The gathering of terrorist groups in Syria (such as ISIS or Al Qaeda affiliated terrorist cells) is also seen to be threat in the


\(^{78}\) Germany, Netherlands, and the United States provided two Patriot batteries each to Turkish air defense. North Atlantic Treaty Organization. February 2013. Fact Sheet: Patriot Deployment.
long run to Turkish security and stability. ISIS captured forty-nine Turkish citizens, including a Turkish Ambassador, after a raid to Turkish Consulate in Mosul. Before, Turkish forces shot down a Syrian warplane, claiming that it violated Turkish air space. Additionally, a leaked tape from a conversation among Ahmet Davutoglu, the Foreign Minister, Hakan Fidan, Chief of the National Intelligence Organization, and top military officers, indicated that Turkey considered—allegedly as an alternative scenario—to attack Turkey from Syria to legitimize war, if necessary. This conversation also revealed fears of instability on the Turkish-Syrian border for years to come and the possible repercussions this might have on Turkey's national interest and security.

Threat is identified not only from outside actors. There is a domestic unrest and the Turkish government has been challenged by both the Turkish youth and also from the Hizmet group that serves the Fethullah Gulen, an Islamic scholar living in Pennsylvania. This power struggle is visible between the government and different domestic actors, such as the police department, armed forces, judiciary, the Hizmet movement, and PKK (officially claimed to be an ethnic terrorist organization). This power struggle was explicit when demonstrators clashed with the police forces in the Gezi Park. Before Gezi Park, there were demonstrations against Internet censorship at Taksim Square, and demonstrations against government control of lifestyles; the government took none of

79 Turkish Foreign Ministry states that Turkey has acted in accordance with the Article 51 of the Charter of the United Nations, which is self-defense. See, Ministry of Foreign Affairs. 23 March 2014. Press Release Regarding the Engagement of a Syrian Warplane Violating Turkey's Airspace. Ankara: Republic of Turkey.
those seriously. This clash caused instability in the regime when the Hizmet group began
the alleged graft probe that involves high-cadre government officials and their sons.\textsuperscript{81}

The changing landscape of the Middle East due to the Arab Spring is also an
underlying factor in threat perception. Before the start of the Arab Spring, the threat
identification was kept at the lowest level. Turkish foreign policy, as President Gul
described, was “proactive” rather than “reactive” in the first years of the AKP ruling.\textsuperscript{82}
AKP’s foreign policy was to follow a zero problems with neighbors approach, a term
coined by the Foreign Minister Ahmet Davutoğlu. This approach was “visionary” rather
than “crisis-oriented” and was “consistent and systemic”\textsuperscript{83} to initiate tools of soft power
and alignment in the “Western axis, Middle Eastern axis and Eurasian axis.”\textsuperscript{84} Within the
zero problems policy economic initiatives and diplomatic maneuvers were the tools for
employing soft power. The Arab Spring shattered this policy since Turkey could not use
these tools to shape events in neighboring counties. Western powers proposed Turkish
governing structure as the two countries dismissed a model to Egypt and Tunisia, but
these states dismissed this proposal. Kirisci indicated the problem in the Middle East
foreign policy as from “zero problems with neighbors” to “zero neighbors with
problems” approach.\textsuperscript{85}

\textsuperscript{81} Robert, Siegel. 25 December 2013. \textit{Turkish Leaders Resign In Anti-Graft Probe, Erdogan
Claims Conspiracy}: National Public Radio.
\textsuperscript{82} Abdullah, Gul. 2007. \textit{Yeni Yüzyılda Türk Dış Politikası Ufukları: Horizons of Turkish Foreign
\textsuperscript{83} Ahmet, Davutoğlu. May 20 2010. Turkey's Zero-Problems Foreign Policy. Foreign Policy
Magazine.
\textsuperscript{84} Abdullah, Gul. 26 February 2007. \textit{Yeni Küresel Düşünme Arayışları, Yeni Ortaklıklar: Türk
Perspektifi}. Paper read at Rusya Federasyonu Dışişleri Bakanlığı Diplomasi Akademisi, at
Moskova.
\textsuperscript{85} Kemal, Kirisci. \textit{The Rise and Fall of Turkey as a Model for the Arab World}. The Brookings
Although Turkey's foreign policy was based on seeking opportunities, the new context required a new regional risk assessment that the AKP government failed to conduct. The loss of power in the neighborhood and increased hostility, especially with the Assad regime in Syria, shifted Turkey's threat perception and identification as well. Prime Minister Erdogan has given explicit messages and asked for support from the United States for military intervention to Syria. Considering Turkey's Kemalist policy of non-violence — the peace at home peace in the world motto — and non-expansionist policy, the new policy against the Syrian regime captured the attention and protest of the domestic public as well.

_b- Mixed Democratic and Transparent Nuclear Posture:_ Turkey enjoys the liberal economic international order and follows an approach where economic benefits are linked to security needs. In this sense, the Turkish government encourages foreign direct investment and increased level of trade in Europe and the Middle East.

Regardless of the threat identification, Turkey does not follow a nuclear weapons policy because it values economic benefits as highly as it does the nation's security. Turkey, moreover, does not have natural resource fields (uranium and plutonium). The zero problems with neighbors approach was based on intensive trade, to decrease the likelihood of tensions and crises; because states with mutual economic ties are less likely to enter into conflict with each other.87

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86 Abdullah Gul states that the new foreign policy is based on opportunities rather than assessing risks. This claim holds only when Turkey lies at the center of all the events, and it is the one that shapes the events. To have such power, Turkey needs to be a regional hegemony—which was not the case—when one considers Egypt, Iran, Saudi Arabia, and Israel to have equal powers in the region. Turkish foreign policy failure then is a result of a self-centered and focused policy without taking into consideration the external factors and dynamics that surrounds Turkey.

87 This approach that links trade and conflict is examined in Chapter 4 while characterizing the liberal security complex.
The economic incentives rest mainly on an increasing thirst for energy resources as Turkey imports almost 90% of its oil. Natural gas consumption is also high in Turkey, where the country uses gas for the electric power sector and as an alternative resource for transportation. In terms of gas import, Russia, Iran, and Azerbaijan are the top choices for Turkey. Turkey’s demand for nuclear energy, technological knowledge on dual-use weaponry, and its military doctrine of not being transparent do lend Turkish policies some ambiguity. Turkey wants to decrease its dependence to third parties by investing in a nuclear program. While following this policy, Turkey also wants to acquire scientific knowledge on missile programs, which complicates the issue.

To decrease the demand on natural gas and to create an alternative and cheap way to meet electricity demand, Turkey works on two nuclear power plant deals—four nuclear reactors in each—with Russian and Japanese companies, in Akkuyu and Sinop respectively. These nuclear deals are extremely costly, around $20 billion - $22 billion each, and obvious technical problems (such as the prospect of the nuclear waste in the Japanese deal is not known, although the Russian company will receive the waste in the Akkuyu nuclear program.) Spent fuel—which is the nuclear waste—is one of the proliferation pathways, if a state wants to acquire a nuclear weapons program.

In terms of dual-use weaponry, as part of its Long-Range Ballistic Missile and Air Defense System (T- LORAMIS), Turkey signaled an agreement with a Chinese

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90 The reason given for being costly is because Turkey’s bidding system is different than others. Turkey follows “build-operate-transfer” system in its procurements where a foreign company builds and operates the system for certain years and then transfers its agreed percentage to Turkey. In this way, Turkey nationalizes and expected to profit from the foreign investment in the long run.
company, sanctioned by the United States, for a HQ-9 ballistic missile system. Compared
to the European (EUROSAM) and American (Patriot) missiles, the Chinese system is
claimed to be cheaper and technologically satisfactory. One of the benefits that Turkey
receives from this agreement is to acquire the technological know-how of the ballistic
missile system through the involvement of a Turkish national company in the process.91
HQ-9 missiles, however, are not interoperable with NATO forces and they need
“interface data” for interoperability.92 Not only do they lack interoperability but also
losing a NATO member state to competing markets is against NATO’s collective security
understanding. If NATO members do not show solidarity in the market economy and
defense sector, it will be easier to go elsewhere for security needs in the future, thus
undermining the alliance. All these actions worried the NATO Allies as they pressured
Turkey to change its decision. Turkey backed down from the agreement with the Chinese
comp any and extended the deadline for the bidders until April 30, 2014.93

Interdependence through NATO and the defense sector, in this sense, creates certain level
of trust, binds the members and also limits the members in diverting to find other ways of
achieving security. Interdependence is one of the features of the liberal economic
understanding and has place in the liberal security complex. Turkey’s call for an

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91 Historically, Turkey showed interest to the Israeli Arrow missiles because their effectiveness in
the neighborhood is tested. However, in 2008 the United States opposed the agreement between
Turkey and Israel, supporting the fact that missile technology cannot be exported to third parties.
Peace: The Carnegie Papers.
93 Burak Ege, Bekdil. 30 January 2014. "Turkey Extends Deadline for US, European Missile
independent defense sector is alarming, especially when the Turkish parliament has approved a 6.71% increase in its defense budget.94

Turkey does follow most of the liberal tenets but its democratic posture in defense agreements is problematic. The tender system is not transparent in Turkey. Koc Holding for instance, known to support the Gezi protests by sheltering the protestors in Divan Hotels and awarded to design six corvettes in the MILGEM (National Ship) project had to step down, after Sedef Limited, a company said to have close ties with AKP, opposed the bidding. The court acknowledged this concern and cancelled Koc Holding’s contract. Later, Sedef Limited, with a Spanish company, won the next round of bidding. As of March 6, 2014, the Prime Minister Erdogan admitted his interference in the project, after leaked tapes of his correspondence with Metin Kalkavan—the owner of Sedef Limited—were revealed to the public.

There is clear reluctance to share information related to defense and security with Turkish public, which also endangers the democratic values. The Turkish National Security Policy is a secret document and cannot be shared with the public.95 Only the highest officials know the national policy; not even the elected parliamentarians. Turkish Court of Accounts Law should have sent audits to the Parliament regarding the expenditures that include defense sector.96 However, this democratic procedure does not

95 My efforts through requesting at least the unclassified parts of the Turkish National Security Document were to no avail. I have received a bureaucratic response to my e-mail from the Secretariat-General of The National Security Council that “no parts of the document are open to public.” Personal Communication: Republic of Turkey, Secretariat-General of National Security Council. 10 February 2014. Bilgi Edinme Basvurusu: Information Act.
take place in Turkey. The opposition parties or the media cannot check the defense expenditures

**c- Party to Nuclear Organizations and Compliance to Nuclear Treaties:** Despite problems with the democratic settings of its defense sector and identifying threats to national security, Turkey still follows the nuclear treaties. It has a good standing in all of the nuclear treaties. Turkey ratified the Additional Protocol in 2001 to voluntarily give consent for supplementary access to International Atomic Energy Agency inspectors. Regardless, Turkey does not internalize these treaties. Internalization of treaties means to employ the international treaty regulations to domestic structures and to follow a single nuclear nonproliferation policy both at home and abroad. Turkey’s eagerness for energy independence and its ambitious defense projects, such as to make its first national Satellite Launch Vehicle (SLV), and successful projects like Turkish drones, named Anka, put Turkey in a hard position. SLV’s are known as dual-use systems and the technology opens up new routes for ballistic missile proliferation. The two-nuclear power plant deals are also open to nuclear proliferation risks. Last but not the least, Turkey’s wish to acquire the know-how in ballistic missiles technology by initiating agreements with Chinese companies, is worrisome since it is party to the Missiles Technology Control Regime (MTCR) which is a voluntary group with the aim of creating a common export policy to limit transfer of materials, including the technology[^97] that could contribute to making weapons of mass destruction delivery systems[^98]. Although Turkey

[^98]: For the general guideline for the Missile Technology Control Regime, see: Missile Technology Control Regime. *Objectives of the MTCR.* Available from: http://www.mtcr.info/english/objectives.html.
does not export technology to other states to jeopardize it’s standing in MTCR, it would like to receive the technology. This shows the gap in the current voluntary agreement.

THE UNITED STATES OF AMERICA: QUASI-HEGEMONIC SECURITY COMPLEX

The United States is the only state in the quasi-hegemonic security complex. It has the ability to reach to the nuclear capable states in other security complexes and has the ability to transform their nuclear posture in the short-run. The power of the United States in the nuclear field comes from its military, economic and political capabilities, and its power to drive nuclear nonproliferation; disarmament and arms control policies in the international arena. In the traditional Cold War sense, it also has sufficient stockpiles of nuclear weaponry to deter a nuclear attack on the United States or its allies.

History of the United States Nuclear Program:

The United States has a “stockpile of 4,650 nuclear warheads for delivery by more than 800 ballistic missiles and aircraft.” It follows also a nuclear weapons modernization project to be accomplished in thirty years, which will cost $1 trillion, to “maintain the current arsenal, but replace systems, and upgrade existing nuclear bombs

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and warheads" in three decades. The modernization of the nuclear weaponry is a must, if the United States government does not agree to dismantle them.

In the domestic setting, there is a debate to cut off one leg of the nuclear triad—Intercontinental Ballistic Missiles (ICBMs), Submarine Launch Ballistic Missiles (SLBMs), or Heavy Bombers—but to remain as a credible nuclear deterrent. The Obama Administration, responding to this debate, stated its policy to keep the nuclear triad, acknowledged in the 2010 Nuclear Posture Review. All the legs of the triad, however, need modernization and thus are costly to the United States. Some suggest there is no need for “three separate systems for deterrence” in the post-Cold War environment. In the global arena, the United States decided to cut the strategic nuclear weapons arsenal to a maximum of 1,550 deployed warheads, as part of the New START Treaty with Russia. However, there are problems with the initiation of this treaty.

The United States has “destroyed 90% of its non-strategic nuclear weaponry so far” with the exception of the withdrawal of its tactical nuclear weapons from Europe.

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104 Although ICBMs are less costly, SLBMs have better chance to survive in a nuclear attack, whereas heavy bombers can be recalled after launch. For an analysis on the risk assessment of the each leg of the triad, see Kingston Reif, Travis Sharp, Kirk Bansak. May 16, 2013. "Pruning the Nuclear Triad? Pros and Cons of Submarines, Bombers, and Missiles." The Center for Arms Control and Non-Proliferation.


These were deployed to five countries—Belgium, Germany, Italy, Netherlands, and Turkey, during the Cold War and still stay in European territory, as part of the Cold War legacy.

The United States’ tactical nuclear weapons through the North Atlantic Treaty Organization (NATO) in the European territories are an example of the United States’ commitment to the European countries. To assure the United States’ authority over these warheads, a dual key procedure was established. Within this procedure, both a U.S. custodian and an officer in the host country hold a key. The system works only by “inserting two keys to the launch control panel.”107 There are almost 200 nuclear weapons deployed in European territory today within the NATO command. This number is a “nearly matched with the declared Chinese nuclear stockpile.”108 Host countries either lack political leadership or the nuclear expertise to ask for the withdrawal of these nuclear weapons; which are in essence obsolete.109 The tactical nuclear weapons in Europe need modernization and are not reliable after more than forty years of deployment.

The European countries are still eager to host these weapons because they create a sense of security and limit threat, by their mere existence. These weapons have never

109 Obsolescent weaponry is not completely useless; therefore it differs from being obsolete. According to John Mueller for instance nuclear weapons are obsolete and they do not serve any purpose; neither political nor military. Obsolescent technology, still serves a purpose, at least an idea of protection even if the reality of that weapon’s “usage” is obsolete. Obsolescent technology or weaponry is the one that persists in some areas and regions of the world but its utility diminishes in countries that drive that technology. In this sense, tactical nuclear weapons are outmoded and have limited functioning, but they preserve the impression of the U.S. existence and security umbrella in European peninsula.
been operationalized, not even in the Cold War. The United States' role in the nuclear policy then, is to protect the Europeans and to create positive security assurances through NATO. This policy has not been changed from the Cold War, although the threat—which was the Soviet Union—has dissolved.

In his famous Prague Speech, President Obama stated non-proliferation, disarmament, and peaceful use of nuclear energy as the three areas of the United States nuclear policy. All these areas have direct links to the IAEA Statute (Article II) and NPT Articles (Article I, II, III, and IV mainly). The United States claims to follow all the three areas in equal measure. In reality it favors nuclear non-proliferation over nuclear disarmament policies.

The United States' nuclear posture is a combination of threat identification, nuclear democratic policies, and its partial following of the international nuclear treaties. This makes the United States rest at the heart of the model. The United States' national nuclear interest finds form in the international nuclear order as well. The United States has veto power in the United Nations Security Council; it has power in the Board of Governors as most of the IAEA budget is funded through the United States; and it has military power in the NATO structure. All of which give the United States the power to drive the nuclear non-proliferation agenda and dismiss the disarmament field. As Senators Carl Levin and Jack Reed had once said "the nonproliferation is being advocated by the United States as a 'do as I say, not as I do' policy."  


a- Threat Existence: The United States’ doctrine during the George W. Bush administration was based on the “war against terrorism,” a term later criticized during the Obama Administration. George W. Bush’s famous axis of evil speech\textsuperscript{112} at the State of the Union in 2002 established this doctrine. As a result, Iraq, Iran, and North Korea were clearly stated as the enemies of the United States. A year later, former President George W. Bush began the Iraq war, based on a false intelligence report that Saddam Hussein had weapons of mass destruction. Eleven years later, on December 2013, the Obama Administration pulled US troops out of Iraq. Yet, the doctrine that started as war against terrorism was going to continue as war against weapons of mass destruction, as Obama started to pressure Iran and North Korea with sanctions.

The Obama Administration, regardless, does not follow a foreign policy approach that pinpoints enemies of the United States. That being said, North Korea and Iran are defined as threats to the international nuclear order. In this regard, it is difficult to differentiate the United States’ national security agenda from the international security agenda because the United States is involved in all regions of the world, even though it is geographically isolated. Since many threats cross borders easily in the 21\textsuperscript{st} century, the United States’ national interest is also stretched to a non-geopolitical understanding.

The United States does not identify threats to its security in the nuclear field because it is the initiator of the internationally accepted nuclear code of conduct from the very beginning. The United States follows a hegemonic nuclear strategy not in terms of quantitative superiority with its nuclear arsenal, but in terms of the political and strategic upper hand it has in the nuclear field. It is this political-strategic stretching that gives the

United States the dominance to be an influential force in nuclear issues. Additionally, the usage of nuclear weapons is a taboo for all parties after Hiroshima and Nagasaki, although the political and symbolic power of the weapons have not diminished in international relations.

b- Democratic/Transparent Values in the Nuclear Field: The free market approach through the liberal economic policies of the U.S. is limited in the nuclear area because national security is prioritized over economic gains. The United States government, bilaterally, follows an export control approach against the transfer of nuclear materials, dual-use materials, equipment, or components from U.S. companies to third parties. This is conducted through Section 123 Agreements of the Atomic Energy Act of 1954 to “adhere the U.S. to mandated nuclear nonproliferation norms.” The United States have nuclear cooperation agreements with twenty-two states and two international organizations as of February 2014. Contrary to the government’s restrictions via export control measures, national security experts that support the U.S. domestic nuclear lobby argue that 123 Agreements are against the national interest and the U.S. nuclear market share is damaged by these protective policies because there are “alternatives to U.S. sources of supply.” Then again, these agreements are affective in preventing...

114 Argentina, Australia, Brazil, Canada, China, Colombia, Egypt, European Atomic Energy Community, International Atomic Energy Agency, India, Indonesia, Japan, Kazakhstan, Republic of Korea, Morocco, Norway, Russia, South Africa, Switzerland, Taiwan, Thailand, Turkey, Ukraine, United Arab Emirates.
proliferation through enrichment, reprocessing, and transfer of U.S. materials. These agreements are bilateral in nature, have limited duration and need revision.

The Obama Administration has started to follow a more democratic nuclear policy, compared to its predecessors. The Department of Defense with The Department of Energy published seventy-two pages of the Nuclear Posture Review (NPR) Report in 2010. During the Bush Administration, only a three-page report was unclassified.

Rule of law is an international obligation for a liberal democratic state. Within the rule of law, adhering to the international laws is important. The United States, ratifying the NPT, agreed to the Article VI obligations under which nuclear weapon states agreed to cease the nuclear arms race and follow nuclear disarmament policies. The United States, however, dismisses this moral and legal obligation, by switching its focus to nuclear non-proliferation in order to prevent other states joining the nuclear club. As Walker states “the United States views the NPT as a ‘static instrument of disciplinary confinement’ rather than a “dynamic instrument of cooperative engagements for arms control and disarmament.”

117 Doyle criticizes the United States’ NPT approach, for “hardening the existing power asymmetries.” The United States selectively chooses which Articles of the NPT to abide by and which ones to neglect, and by this is not a liberal-democratic posture. Doyle pictures this dilemma with an ethical concern, saying that the United States and other nuclear democracies shifted the NPT discourse from “nuclear arms control and disarmament to a disciplinary institution in which the nuclear

haves can effectively disregard their legal obligations and the nuclear have-nots are punished if they entertain nuclear aspirations."^{119}

The United States follows both a civilian nuclear program as well as a military nuclear program. IAEA inspections are limited to the item specific counting for verification purposes. The United States' public associates nuclear weapons with national security strategy in which sole responsibility is given to the government by consent. The United States in return follows a selective policy, which is to eliminate possible nuclear ambitions from third parties through non-proliferation and counter-proliferation policies. This, however, jeopardizes the United States Article VI obligations in which it should seek to cease arms races and seek nuclear disarmament. The modernization of nuclear weaponry and maintenance of nuclear stockpiles are contrary to this legal obligation.

c- Partially Party to Major Nuclear Treaties: The United States is a follower of nuclear treaties and organizations that serve its national interest and it refuses to ratify treaties that would damage its power in the nuclear field. The United States supports peaceful nuclear energy in the international arena through national funds. The IAEA budget for instance is composed of regular and voluntary funding. Whereas verification is funded through regular budget, Technical Cooperation Program is based on a voluntary funding. The United States was the “largest single contributor,” with allocating $22 million in 2012 to the latter program.^{120}

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The technical cooperation program “consists of projects that support research and development of peaceful nuclear technology” in the areas of “human health, agriculture and food security, water and environment, nuclear energy, safety and security and industry and technology.” After the United States has established technical assistance program to improve safeguards, “19 other states and the European Commission developed supplementary programs that provide technical assistance” following the U.S. lead. This demonstrates the transformative and shaping power of the United States over other states decisions and shows the U.S. commitment to the IAEA Statute.

The technical cooperation program is important for developing countries. There are 125 countries that receive technical cooperation assistance today. Iran, for instance, benefits from the program, yet, due to non-compliance to United Nations Security Council Resolutions; its benefits are considered through a case-by-case assessment. As

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125 The economic sanctions to Iran have also affected the technical cooperation area as well. The IAEA Board of Governors decided that “any technical cooperation provided to Iran by the Agency, or under its auspices, will be limited to activities that are, prima facie, in the Secretariat’s judgment...” This led to limitation of technical cooperation projects that Iran benefits from. More specifically, Iran’s technical cooperation projects decreased from fifteen to eleven national technical projects, and thirty-four regional and six international projects to twenty regional and two international projects. See Director General. 8 March 2007. Cooperation between the Islamic Republic of Iran and the Agency in the Light of United Nations Security Council Resolution 1737 (2006). In GOV/2007/7, edited by IAEA Board of Governors.
the large contributor of this program, the United States has a weighted say in the
decision-making as well.

As part of the peaceful use of nuclear energy, the United States poses its
commitment to NPT Article I as one where it does not transfer any nuclear weapons,
material, nuclear technology, and equipment for nuclear weapons purposes126 but
cooperates in the peaceful use of nuclear energy. Following the main rules of the NPT
and IAEA, the United States still chooses which Articles of the treaty to follow and
which ones to postpone for future debates. One of these issues is nuclear disarmament.
The United States receives harsh criticism from the NPT Preparatory Commission
Working Groups, some of which are in the Non-Aligned Movement, De-Alerting Group,
and the New Agenda Coalition.

The New Agenda Coalition is composed of countries from different regions,
Brazil, Egypt, Ireland, Mexico, New Zealand, and South Africa. It promotes nuclear
disarmament through General Assembly Resolutions. This group was formed in 1998,
after the indefinite extension of the NPT in 1995. This Coalition’s first proposal was to
call both de jure and de facto nuclear weapon states to eliminate their nuclear capability,
reminding them of their legal commitment to NPT.127 India, Israel, and Pakistan were
against the proposal.128 This proposal does not include non-deployed nuclear stockpiles.

Disarmament projects do not receive much attention from the Obama
Administration, as nuclear disarmament clashes with the status quo. The De-Alerting

126 United States of America. 24 April 2013. Implementing the Treaty on the Non-Proliferation of
Review Conference of the Parties to the Treaty on the Non-Proliferation of Nuclear Weapons.
A/C.1/54/L.18, edited by General Assembly of the United Nations Resolution/Decision 54/54 G.
128 A side note is that the United States did not involve in this process.
Group, which is composed of Chile, Malaysia, Nigeria, and Switzerland, proposed to
"lower the operational status of nuclear weapons systems as a step leading to
disarmament" reminding that "high alert of readiness was a Cold War policy." This
resolution was adopted by the United Nations General Assembly. Reminding that the
United States and Russia are "estimated to keep 1,800 strategic nuclear warheads in high
alert status," this resolution aimed to keep the disarmament agenda alive. Although
President Obama stated his commitment in this area, he has not taken any concrete steps.
In fact de-alerting has not become an issue in the U.S. nuclear politics so far.

Non-Aligned States members (NAM) calls for a "nuclear weapons convention" in
a "specific time frame." This group stresses the "lack of progress" in disarmament due
to the lack of interest of the nuclear weapons states. Stressing the necessity for active
action through the Conference on Disarmament (CD), NAM accuses the nuclear weapon
states' for following "inflexible nuclear posture." The United States is one of the
parties that oppose alternative solutions. Pakistan, however, continues to block the CD,

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129 United Nations General Assembly. 4 January 2013. 67/46 Decreasing the Operational
of the Atomic Scientists.
of the Parties to the Treaty on the Non-Proliferation of Nuclear Weapons.
of the Parties to the Treaty on the Non-Proliferation of Nuclear Weapons.
of the Parties to the Treaty on the Non-Proliferation of Nuclear Weapons.
134 Diane, Barnes. 6 March 2013. "Nuclear Powers Reaffirm Opposition to Special Disarmament
Talks." Global Security Newswire.
showing its strategic vulnerability against India if it agreed to the Fissile-Materials Cut-Off Treaty\textsuperscript{135} at the Conference on Disarmament.\textsuperscript{136}

Another pressure on nuclear disarmament comes from The Non-Proliferation and Disarmament Initiative, composed of Australia, Canada, Chile, Germany, Japan, Mexico, the Netherlands, Poland, Turkey, and the United Arab Emirates. Japanese Ministry of Foreign Affairs started this initiative that calls for specific education programs to promote disarmament and nonproliferation with the participation of “civil society,” through multiple outreaching tools such as “internet-based social network services.”\textsuperscript{137} The aim of this initiative is to “promote the consequences of the use of nuclear weapons,” thus to create global awareness.\textsuperscript{138} The Initiative uses “testimony from an atomic bomb survivor designated by the Government of Japan,” as an example for nuclear disarmament education.\textsuperscript{139} In 2013, it launched the \textit{Young Communicators of a World Without Nuclear Weapons} program to initiate ideas for eliminating nuclear weapons.\textsuperscript{140} This is an implicit and untraditional way of pressuring the nuclear weapon states, especially the United States, as it is the only state that has actually used atomic bombs in history.

\textsuperscript{135} This treaty calls for commitment not to produce fissile materials for nuclear weapons and nuclear explosive devices.
\textsuperscript{136} Viyyanna, Sastry. 29 January 2010. "Pakistan Will Oppose the Fissile Materials Cut-Off Treaty at the Conference on Disarmament." \textit{Institute for Defence Studies and Analyses.}
The United States is not a party to the Comprehensive Test Ban Treaty (CTBT), which is a concrete step for nuclear non-proliferation and disarmament. Being party to the CTBT shows commitment to the global norm of not conducting nuclear testing. Since 1992, the United States has not conducted nuclear testing, yet it is not also party to this treaty. This shows tacit commitment while the U.S. Senate claims to wait for ratification of other states first. In return, non-members legitimize their posture by showing the United States as an example.

Contrary to nuclear disarmament or peaceful use of nuclear energy, nuclear non-proliferation is the area that the United States pays most of its attention to. Nuclear non-proliferation as a policy aims to prevent vertical and horizontal proliferation and ensures that nuclear energy is not diverted to nuclear weaponry production. Part of the non-proliferation approach, the United States calls for states to adhere to the Comprehensive Safeguard Agreement and enroll in the voluntary Additional Protocol within the IAEA framework. Both these verification techniques aim to increase confidence on non-diversion of nuclear material. United States is not subjected to Comprehensive Safeguards for IAEA inspections, since it already possesses nuclear weapons. It follows an item-specific safeguards procedure, like other nuclear weapon states.

The Nuclear Weapons Free Zones (NWFZ) plays an important role in the United States policies through international treaties. The U.S. government supports the establishment of the Middle East and South Asia nuclear free zones, specifically. This policy does not resonate well in reality due to problems in these regions. In the Middle East, for instance, the NWFZ cannot take place when “states are at war” in the region, when states do not “politically recognize” each other, like in the case of Palestine and
Israel, and when states do not “comply with the safeguards agreements.”\textsuperscript{141} The Obama Administration stresses that a NWFZ is composed of “all states whose participation is deemed important to participate.”\textsuperscript{142} This brings Israel into the equation in the Middle East. Israel, in this regard, is the corner stone of establishing a NWFZ in the Middle East; because NWFZ cannot be established when there is a nuclear party in the region that others feel threatened from.

Regardless of the statements regarding equal posture to all parties, the United States does not follow a clear NWFZ policy in the Middle East due to its close ties with Israel. In 2013, the United States unilaterally ‘postponed’ the Helsinki Conference to an undefined time, which had the agenda to establish a nuclear-weapons free zone in Middle East, including Israel. The U.S. favors Israel’s national security over the issues in the Middle East.\textsuperscript{143} The United States and Israel prioritize Israeli security; whereas Arab states, Iran, and Turkey aim to neutralize the power imbalance in the Middle East.

Contrary to the United States’ position, a European Parliament resolution highlighted the “good intentions” of the Arab states to “break the stalemate” in this process and asked for the European Union to “remain actively engaged in supporting this process.”\textsuperscript{144} The United States’ unilateral action shows its power to shape the nuclear agenda in the


Middle East, even though this agenda does not serve many Middle Eastern states' interest.

Although the United States has the power to shape the nuclear nonproliferation realm, international organization bodies, such as the United Nations General Assembly (UNGA) adopt resolutions regarding the risks of proliferation in the Middle East.\textsuperscript{145} The main parties, such as Egypt and Iran, cite Israel as the main obstacle to establish the zone in the Middle East. These states pressured by Israel through the General Assembly to ratify NPT with a non-nuclear weapons state status.\textsuperscript{146} At the 2013 Review Conference, for instance, the Egyptian delegation left the session as a sign of protest of the frustration in the implementation of the 1995 Middle East Resolution.\textsuperscript{147}

Conclusion

In conclusion, Israel is in the material security complex because it is not party to any of the major nuclear treaties and identifies consistent threats to its survival. The threat existence is a major political discourse in Israel, starting from the Holocaust years onwards. This policy has nuclear consequences and leads to an illiberal nuclear posture.

Turkey is in the material-liberal security complex. It is not likely to proliferate; however, it does aim to be a nuclear power in order to diminish its nuclear energy dependency on other powers. It also aims to keep its options open by following a defense

\textsuperscript{145} General Assembly of the United Nations. 3 October 2013. The Risk of Nuclear Proliferation in the Middle East. In \textit{A/68/124 (Part II)}.
\textsuperscript{146} General Assembly of the United Nations. 16 September 2013. Establishment of a Nuclear-Weapon-Free-Zone in the Region of the Middle East. In \textit{A/68/124 (Part I)/Add.1}.
\textsuperscript{147} General Assembly of the United Nations. 16 September 2013. Establishment of a Nuclear-Weapon-Free-Zone in the Region of the Middle East. In \textit{A/68/124 (Part I)/Add.1}. pp.6-7
policy for dual-use weaponry. Turkey's nuclear energy policy feeds from the liberal economy tenets; which is based on maximization of profit and security at the same time.

Iran, on the other hand, is in the material-norms based security complex. It identifies threat to its national security, particularly from the United States and Israel. Iran differs from Israel, in the sense that it is still party to the international agreements and treaties. The Preparatory Committee Working Group statements of the Iranian Delegation showed that Iranian nuclear posture in the international arena is very similar to some of the West European countries, such as Norway and Sweden, all of which ask for nuclear disarmament.

The United States' nuclear posture is fundamental for all parties because it is the one that forms and shapes the nuclear policies of all through its hegemonic capability. The United States' policies are problematic in the nuclear disarmament arena, as it does not follow the NPT obligations for arms control and disarmament. Due to different understanding and interests in the nuclear field, policies do not coincide to create alternative cooperative solutions. Chapter 6 is the analysis of the nuclear security complex theory in respect to these four states.
CHAPTER 6
ANALYSIS, FINDINGS AND DISCUSSION

This dissertation began by arguing that nuclear nonproliferation is a transnational issue; therefore, it requires an approach broader than regional solutions. Secondly, it argued that traditional security complex theory is not capable of explaining nuclear proliferation due to its regional basis. Regional dimensions in the security complex theory clash with the transnational nature of nuclear issues. With this in mind, I have posed a model of nuclear security complexes without regional boundaries but rather, based on state characteristics and nuclear posture. In other words, I have grouped nuclear capable states in terms of threat existence, regime type, membership and compliance to international treaties and observed nuclear posture of selected nuclear capable states. Based on this model, I analyzed the nuclear posture of the United States and three countries in the Middle East—Iran, Israel and Turkey. After an examination of government sources and data from the working groups of the NPT 2015 and 2010 Review Committees, I found out that all three countries in the Middle East (Iran, Israel, and Turkey) belonged in different nuclear security complexes. In the hegemonic system, the United States is placed in a different nuclear security complex as well.

In this chapter, I will conduct an analysis of the suggested model by touching upon the general concepts in International Relations. The idea behind linking International Relations concepts to the analysis is to show to general contribution that this model brings to the International Relations scholarship. When I examined the role of nuclear weapons and nuclear non-proliferation through a theoretical lens, I realized that
nuclear issues are actually transnational in origin. This dissertation, therefore, supports the literature on transnationalism and globalization in the 21st century at its very core. To address this point, I ask the following question in this chapter: What are the implications of transnationalism in nuclear studies? In other words, what does transnationalism bring to nuclear studies?

Power is another concept that scholars of International Relations discuss at all times. The role of power relations in the nuclear security complexes has not been discussed at length in this dissertation. Interaction among actors, however, is one of the main characteristics of Buzan and Waever’s traditional security complexes. Interaction and level of influence is also significant when a cross-analysis is conducted regarding different security complexes. To address this point, I ask the following question: “What are the conditions that make a state change its nuclear practice?”

IMPLICATIONS OF TRANSNATIONALISM TO NUCLEAR SECURITY COMPLEXES

I would like to extend the discussion on nuclear security, safety, proliferation, and disarmament as a transnational matter. In this dissertation I proposed that nuclear proliferation is a transnational issue rather than a regional one. It is transnational due to the following factors:

(1) Nuclear weapons cross borders and regions easily. Simply, the present range of nuclear capabilities endows nuclear weapons with a transnational nature. Intercontinental ballistic missiles (ICBMs), for instance, linked the Soviet Union and the
United States geopolitically during the Cold War. The bipolar world system was a result of the nuclear age and foreign policy in every region was shaped by the rivalry between those two states. Nuclear weapons are transnational but may also have regional and local implications. Focusing on regions particularly however, minimizes the problem and does not let the researcher observe larger patterns.

(2) Nuclear security is a transnational issue because a state's decision to acquire nuclear weapons goes beyond regional concerns. In the post-Cold war era, more countries were expected to acquire nuclear weapons. This expectation did not hold true; some states even rolled back their nuclear weapons programs. Today, nonproliferation is almost a universal norm, as 190 countries, including five nuclear weapon states, have ratified the Nuclear Nonproliferation Treaty (NPT). This universal treaty provides a global context of nonproliferation. The three cases (Iran, Israel, and Turkey) discussed in Chapter 5 also indicated that nuclear proliferation in one country does not necessarily present a motivation to proliferate for the other two countries. In this case, Israel has been believed to have a nuclear weapons program in place since the late 1960s; yet Iran did not begin a nuclear weapons program until the fall of the Shah and Turkey has never sought nuclear weapons.

(3) Nuclear proliferation is a transnational issue because establishing an indigenous full nuclear fuel cycle program is very difficult. A nuclear fuel cycle is composed of mining, milling, fuel fabrication, power reactors, conversion plants, reprocessing facilities, power reactors, repositories, weapons fabrication. To follow a full nuclear fuel cycle, a state still needs to extract ore, produce and enrich uranium, or reprocess plutonium. It also needs dual-use materials to use in the fuel cycle. Without
assistance, it is hard to maintain a full nuclear fuel cycle. This suggests that nuclear ambitions require third-party assistance. Albright, Shire, and Brannan’s analysis in 2009, for instance, indicated that Iran had exhausted its yellowcake stock, which was acquired through South Africa in 1960s.\(^1\) Regardless of Iran’s claims to be self-sufficient, it needs third-party assistance to endure its nuclear weapons program.

Even the United States’ nuclear weapons program was based on nuclear espionage and external assistance. Simultaneous discovery\(^2\) occurred because scientists in different parts of the world worked on similar issues or assisted each other in these discoveries. Britain and France, for instance, had assisted the Manhattan Project that produced the first atomic bombs. Similarly, nuclear espionage led the United States to acquire information from German scientists in the late 1940s.

When nuclear security is grasped as a transnational issue, the implications are also framed transnationally. Here are the implications that nuclear security, as a transnational issue, has brought to this dissertation:

**a- Role of Interdependence:** Transnationalism takes us back to the issue of interdependence. Interdependence comes with costs associated to it. Nuclear security, safety, and proliferation lead states to be mutually dependent on each other. This mutual security dependence, like in economic interdependence, is not equally distributed to all parties. Nuclear weapon states are relatively less dependent on non-nuclear weapon states, while making foreign policy decisions. In other words, whilst nuclear weapon states are sensitive to nuclear proliferation, non nuclear weapon states are vulnerable to

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\(^2\) Simultaneous discovery or inventions are common because scientists work on similar issues in different part of the world. For simultaneous discovery see Malcolm, Gladwell. May 12, 2008. "In the Air: who says big ideas are rare?" *The New Yorker.*
nuclear proliferation. Similarly, all nuclear weapon states also have immense conventional weaponry that provides an alternative route for policy making. The level of vulnerability is related to the relations between nuclear weapon states and non nuclear weapon states. For instance, if a potential nuclear weapon states diminish the security of non-nuclear weapon states and creates insecurity in its region, it may lead to a possible breakout of nuclear proliferation. The neighboring non-nuclear weapon states are vulnerable, at least at the foreign policy level, to a potential nuclear weapon state; while nuclear weapon states will be only sensitive to proliferation.

Whether interdependence due to sensitivity or vulnerability, nuclear weapons have depreciating value in the post-Cold War era. Although most of the NATO allies have not acquired nuclear weapons, they are protected by NATO’s nuclear policy. Today, the same principle holds; however, nuclear weapons are not considered for their use-value but for their symbolic value, which can be used as a tool for policy bargaining.

Two examples are prominent to frame sensitivity and vulnerability security interdependence in nuclear proliferation. One example is from the Cold War era to describe the type of interdependency between two nuclear powers. During the Cold War, the Soviet Union was vulnerable to the United States’ supremacy in nuclear weapons (qualitatively and quantitatively). The United States had intercontinental ballistic missiles in the 1950s whereas the Soviet Union lacked that capability. With the perception of vulnerability, the Soviet Union covertly deployed intermediate-range ballistic missiles to Cuba in order to equalize its power with the United States. John F. Kennedy prevented this equalization of power by blocking Cuba with U.S. naval forces.  

3 For an extensive foreign policy analysis of Cuban Missile Crisis see Graham T. Allison and Philip Zelikow. 1999. Essence of decision: explaining the Cuban Missile Crisis. 2nd ed. New
Crisis decision-making showed the increased level of security interdependence as the crisis dissolved. The United States agreed to withdraw the Jupiter missiles in Turkey and Soviet Union removed its nuclear establishment in Cuba, at the end of the crisis. The parity in vulnerability and the costs associated to a nuclear exchange led the parties to back down.

When nuclear weapons are considered in a transnational setting, the possibility of escalation stops each state from acting because both know that escalation would damage their national security. This makes nuclear weapon states dependent on each other’s decisions; and creates a type of unintended consequence based on rational calculation in a conflict situation. Consequently, nuclear policies examined in a transnational context indispensably carry the idea of ‘security for all’.

Second example is between a nuclear weapon state and a non-nuclear weapon state to describe another type of interdependency through nuclear issues. In Chapter 5, a detailed analysis was conducted regarding the Iranian nuclear weapons program in the post-Cold war era. The analysis has shown that Iran has nuclear weapons ambitions due to the high level of threat that it perceives from regional and global actors. Nonetheless, it continues to implement nuclear treaties. Iran does not follow an overt nuclear weapons program like North Korea; because it is, to some extent, integrated into the international economic system. The positive result of the economic sanctions of the United States, European Union and allies, targeting the Iranian energy sector, for many years show Iran’s economic vulnerability very well. As a Congressional Research Service report indicated “sanctions reduced Iran’s oil exports from 2.5 million barrels per day to about 1

Keeping in mind that oil export is half of the Iranian government’s income, this drop immensely affected the Iranian economy. Likewise, “loss of oil revenues and cut-off from the international banking system,” caused inflation of almost 50%.

All these factors and the change of leadership in June 2014, led Iran to come into the terms of the Joint Action Plan made to halt its nuclear enrichment activities. This example shows that an actor, more or less integrated to the international economic and security system, cannot pursue its nuclear ambitions without loosing its economic benefits.

Being exposed to economic sanctions and not having alternative routes to boost its economy, caused a change in Iranian nuclear policy for the short-term. In the case of Iran, economic dependence played a great role in forcing cooperation in the nuclear field and to shift its nuclear policy posture. As Hirschman suggested the more foreign trade a state has, the more vulnerable it is, because trade can be used as leverage.

Iranian dependency on the energy sector induced conflict with the Western world and facilitated cooperation as economic sanctions broke up its will; and sanctions were too costly for the value of continuing the nuclear program. Iranian case suggests that economic integration has security outcomes for parties. This also suggests that alienating states from the economic system may not be beneficial in the long run; because economic integration can be the bargaining chip or a major stick in order to change an aggressor state’s policy.

**b- Role of Cooperation and Conflict:** Transnationalism literature touches upon the debate on conflict and cooperation through a setting of interdependence. The question

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becomes does transnationalism facilitate cooperation, or not? The realist and liberal
camps provide opposite positions for this question; realist scholars defend that
cooperation is not impossible but war or conflict will always prevail. Waltz, for instance,
said that institutions are subordinate to national purposes. Realists assume that relative
gains always prevail. Nonetheless, sometimes states gain more from cooperation than
they do engaging in conflict. Nuclear weapons proliferation is one of those cases. Nuclear
weapons may be leverage for foreign policy bargaining; but they do not exist for actual
usage. As the "incentives to cooperate increased" through nuclear security assurances, a
cooperative environment became possible in the nuclear age. Suffice to say, cooperation
is possible because nuclear wars are too costly.

As Axelrod and Keohane suggested for cooperative environments in a
transnational world order, the number of actors, iteration, and shadow of future are
important concepts for nuclear dealings as well. For this reason, I restated the debate on
nuclear proliferation between Kenneth Waltz and Scott Sagan in Chapter 2, highlighting
that the former stated the more the nuclear weapons the more stable the international
system should become; whereas Sagan stated that nuclear proliferation would cause
instability and conflict. The number of actors is clearly an important factor in nuclear
studies. Iteration is also another factor for cooperation. In a transnational world, states
face each other more than once, which force them to cooperate in the present. The tense

(1): 5-41.
8 Joseph M., Grieco. 1988. "Anarchy and the Limits of Cooperation: A Realist Critique of the
Newest Liberal Institutionalism." International Organization no. 42 (3).
167-214.
Strategies and Institutions." World Politics: 226-254.
Cold War environment is a good analogy for mitigating future conflicts over nuclear weapons as both the Soviet Union and the United States learned from Cold War.

A third-approach in this debate is to state that cooperation is issue-specific. In other words, states cooperate in some issues, while not in others. For instance, Lipson argued that states cooperate easily on economic issues but not on security issues. Contrary to Lipson, though, in a global world, transnational issues affecting many actors force those states to cooperate, since their interest merges over the same causes. Thinking through the nuclear security complexes model that I created in Chapter 2 and Chapter 5, cooperation would depend on which security complex a state is placed. In the material security complex, as discussed earlier, threat existence is the dominant variable. When states' nuclear decisions and policies are shaped through existence of threat to national security, it is tremendously hard to expect cooperation between these states and states in different security complexes. I stated in Chapter 2, for instance, that North Korea is in the material security complex—it is not a member of any major nuclear treaty and it is not a liberal-democratic state that values public participation—therefore, it is not easy to engage in cooperation with North Korea. States in the material-security complex are not likely to engage in cooperation. Nevertheless, cooperation is possible in liberal security complex and norms-based security complex, due to a high democracy level and the nuclear norms that these states possess. This means the nuclear security complex model suggests both cooperation and conflict over nuclear issues, depending on the grouping of an individual state.

c- Role of Transnational Organizations and Actors: The transnational dimension is visible in nuclear issues. The nuclear security complex model assumed that certain groups of states follow nuclear treaties and norms. These states are grouped in the norms-based security complex. The norms-based security complex, then, inhibits the transnational dimension of nuclear issues and follows a relatively international nuclear policy.

When nuclear security is considered as a transnational issue, it feeds directly to the international/transnational organizations. Nuclear issues involve multi-lateral cooperation to ameliorate the existing conditions and this cooperation can be achieved through transnational actors. These actors are not only the traditional ones like states, but also Non-Governmental Organizations (NGOs), and activist organizations. When applied to the nuclear realm, organizations such as the International Campaign to Abolish Nuclear Weapons (ICAN) or Global Zero are effective to change government policies. These activist movements, for instance, take a stance on political issues and can affect government policies through awareness campaigns. In Chapter 5, I provided the Menendez-Kirk pro-sanctions bill against Iran as an example of a reaction from activist movements that could be considered to have been successful. Activist movements, think tanks, and institutions provided different types of memorandum and asked President Obama to veto this bill. As a result, President Obama affirmatively addressed the issue in the 2014 State of Union speech.

Transnational organizations, especially NGOs and activist movements promote principled ideas as well as critical alternative perspectives of nuclear nonproliferation and disarmament. Similar works for transnational advocacy networks. Transnational
Advocacy Networks are composed of “activists that build bridges across borders through the use of information to promote social change.”

Transnational Advocacy Networks (TANs) do not possess traditional power as most of the other actors do in international politics. Their power is considerably limited compared to states. However, activists give a moral and emotional force to a cause. In the nuclear field, disarmament is an issue that most of the states—mainly nuclear weapons states—neglect. States in the norms based nuclear security complexes, as argued in Chapter 4 and Chapter 5 though, pay special attention to the moral dimension of nuclear possession. The moral and emotional force, which is the humanitarian dimension, behind banning nuclear weapons is a political cause of states in the norms based nuclear security complexes, such as Norway.

There is no doubt that states are still the most powerful actors on nuclear dealings. TANs, however, have methods of persuasion and power of influence in international politics. As Keck and Sikkink argued, individuals and groups may influence not only the preferences of their states via representation but they also affect the preferences of individuals and groups elsewhere through a combination of persuasion, socialization, and pressure. Keck and Sikkink discussed four methods that TANs can adopt to influence politics. The first method is “information politics. TANs mobilize information quickly and dramatically. Global Zero reposted The New York Times’ 1989 report, and let us re-learn that “since 1956, at least 50 nuclear warheads have been lost at sea because of

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accidents.”\textsuperscript{14} Not only do TANs collect information but they also diffuse it through effective methods. Global Zero publishes awareness photos from the Cold War years and initiates nuclear disarmament campaigns, such as Bike Around the Bomb, asking participants “to cycle around a “small” nuclear weapon blast in Washington D.C. and London.”\textsuperscript{15}

The second method is symbolic politics, also known as framing. TANs link one idea to another and show both ideas to the public in the same discourse. Framing takes place through symbols, pictures, or placards to resonate with the audience. When Global Zero is considered, the use of symbolic politics is obvious. In one of their campaigns for instance, the Global Zero movement said “instead of investing $355 billion into weapons of mass destruction, we should be investing in our future doctors, teachers, scientists, engineers, and activists.” The campaign stated that spending $355 billion on nuclear weapons is enough money to pay for more than 3 million full-ride scholarships to a four-year public university, pay for more than 6 million k-12 teacher’s salaries, and build more than 50,000 new elementary schools. The symbolic politics with this example is the link between the money spent on nuclear weapons and the money that could be spend on education.

Another example for supporting nuclear disarmament is to frame nuclear weapons within human rights. While addressing the nuclear security complex model, I argued that states in the norms-based security complexes are directly involved in this type of framing by showing support to International Criminal Court’s advisory decision. These states, such as Norway and New Zealand, also establish working groups at the Nuclear


\textsuperscript{15} For further information, visit Global Zero’s official Facebook page.
Proliferation Treaty Preparatory Commission sessions and lobby for disarmament.

Symbolic politics (framing) combines unique information in a very subtle way to change perceptions about one issue. This framing twists perception and reality on the concerned issue (non-humanitarian aspects of nuclear weapons) and makes public to question the priorities of the government policies.

Third method is the leverage politics that TANs use. Leverage politics links causes to things that public value a lot, such as money or prestige. By showing the economic downsides of a considered issue, TANs aim to realize their causes. Global Zero estimated "the energy from all explosives used in WWII, including nuclear weapons used in Hiroshima and Nagasaki, is totaled 3 Megatons. The energy from 1MT of TNT could power average U.S. house for about 103,000 years." Whole idea of this leverage politics is to create public awareness through the use of energy that directly affects citizens' pocketbooks.

The fourth method is the accountability politics of which companies or states show commitment and support to causes of TANs. TANs can assess and observe the given commitment and hold these actors accountable for their non-action. ICAN, for instance, revealed 300 banks, pension funds, and insurance companies in 30 countries to invest in nuclear weapons manufacturing, development, maintenance, and testing. Edgar examined Ireland, for instance, and concluded although government policy supports nuclear nonproliferation and disarmament at the international level; Irish investment policy clashes with this norm. As pointed out by the author, state funds and pensions in Ireland are invested in companies that manufacture, develop, and/or test

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nuclear weapons. This creates an indirect assistance to the nuclear weapons industry and clashes with the nuclear posture of Ireland at the international level.\textsuperscript{17} The accountability policy is visible in the ICAN Reports, especially towards the nuclear weapons states. Edgar, chairman of the Irish Campaign for Nuclear Disarmament, aims to create awareness and change Irish policy, specifically.

\textbf{d- Role of Socialization}: An implication of transnationalism is socialization. Socialization is "a general process of acquiring culture"\textsuperscript{18}: inheriting norms, customs, and establishing ideologies through the interaction of people and groups. In other words, socialization is a learning process that occurs in each culture differently. Socialization is a concept in International Relations, especially within the institutional understanding. States in the same institutions socialize through an established identity, roles, and norms in a transnational setting. Regarding nuclear issues perspective, socialization occurs within nuclear institutions—CTBT, Pugwash Conferences, as well as nuclear proliferation and disarmament offices within organizations, such as in the United Nations and NATO. Pugwash Conferences, for instance, have been platform since 1957, aiming to create a "world free of nuclear weapons and other weapons of mass destruction" through "creating opportunities of dialogue."\textsuperscript{19} Two hundred scientists and leading policy makers attended the last Pugwash Conference held in Istanbul, where they participated in seven working groups. This initiative was a great opportunity to find a common denominator and to search for alternative ways to handle nuclear issues. It is a great opportunity of the socialization for decision-makers and scientists. Yet, it should not be

\textsuperscript{17} Edgar David, Hutchinson. 2012. "Ireland, Irish Finance and the Nuclear Weapons Industry." \textit{Irish Campaign for Nuclear Disarmament}.


forgotten that all agents have a common goal, which is to eliminate nuclear weapons.

This common goal creates the norm and the main cultural setting of the Conference.

Nuclear socialization is a part of learning. In this dissertation, I indirectly argued that nuclear learning is possible as states in one security complex can shift to another in time through interactions with other actors. The United States—within the quasi-hegemonic security complex—has power, to change the course of nuclear issues through this interaction. This is an aspect that I observed especially in the case of Iran. However, the working group reports of the United States and other primary documents such as 2010 Nuclear Posture Review of the United States show that the United States has a problem in separating national interest from international interest. As a hegemonic power, United States should establish the expectation that international interest (nuclear disarmament) could override its national interest (nuclear non-proliferation) for long-term benefits. Nuclear learning is not about “how I learned to stop worrying and love the bomb” anymore, but it is “how I relearn the bomb.” The relearning is a process and necessitates alternative theories and considering the political implications for critical thinking. In the next section, I will discuss the modeled nuclear security complex theory for this purpose.

LESSONS LEARNED FROM CONVENTIONAL SECURITY COMPLEX THEORY

What does conventional regional security complex theory convey about proliferation? Conventional security complexes are based on three significant points that this dissertation modified to shape the nuclear security complexes. First, traditional security complexes follow a grouping pattern, where states in the same geopolitical
region are grouped in one security complex. Security problems and their effects on the neighboring countries are shown as the main reason for this grouping. In this respect, Buzan and Waever stated that not only issues of high-politics (terrorism and nuclear proliferation) but also issues of low-politics (migration, human rights and the environment) are important in shaping foreign policies. Issues of low-politics are security matters in a regional context, even if not at the international level.

In the end grouping states is a methodological choice. In nuclear studies, from Waltz to Sagan, the grouping methodology is implicitly utilized for answering different questions. This dissertation revealed this implicit grouping approach in nuclear studies and its consequences. In Chapter 3, I stated the nuclear literature based on: groupings in terms of legal possession, grouping in terms of theoretical posture, grouping in terms of advantages versus disadvantages of proliferation, grouping in terms of regional and global considerations, and grouping in terms of nuclear policy preferences (deterrence, non-proliferation, disarmament). I then proposed a method, grouping in terms of state characteristics, that led to nuclear posture and nuclear policies.

The second point that conventional security complexes reveal is the regional understanding that underlines so many of the security issues in foreign policy. This regional approach is the key component of the theory as it is a mini-system or sub-structural level of analysis that challenges the mainstream International Relations theories that are based on systems level approaches. The middle level analysis is, therefore, found in regional classification in the conventional security complexes. This is visible in nuclear studies as well.
Taking out the regional part of the equation, mid-level, sub-systemic analysis delivers a new interpretation to nuclear studies. Nuclear security complexes are more than their parts. In other words, examining a state by itself is not the same as examining a state in a group (security complex). When states are examined through the security complexes, generalizations are easier to make for policy purposes. Otherwise, third-party policies suffer from a tailored approach that is skewed towards national interest would be neglected. Suffice to say, this dissertation did not neglect the sheer fact that most of the state policies are based on national interest. While following these policies, however, states should be cognizant of the fact that their existing policies might generate conflicts due to conflicting policies towards states in the same, or similar, security complexes. The United States policy towards states that prioritize threat, such as Iran and North Korea for instance clashes with its policy towards Israel, which is also a state that follows a nuclear policy based on threat identification. This dual approach is appraised under the disguise of national interest even though eliminating nuclear proliferation would be in the United States’ long-term interest. Iran and North Korea, in return, hold the United States responsible for their nuclear ambitions. Following a group level policy, like a mini-system approach, or at least being aware of the state characteristics and nuclear posture of states would benefit the United States’ policy in the long run.

The third point is that regional security complexes reveal the role of a security interdependence that creates interaction among states in the same complex and different security complexes. This bond is not voluntary, but based on security necessities. In traditional interdependence literature, mostly due to economic matters, states are dependent on each other. Buzan and Waever shifted this understanding by developing
the idea of security-based interactions resulting in cooperation rather than conflict. The third point is, essentially, about the securitization of issues. The debate here suggests that neglected security issues need securitization, which is a conscious policy-making process to prioritize an issue. I call this debate securitization versus politicization because some issues are politicized rather than securitized. Buzan & Waever argued that issues in low-politics (migration, environment, human rights, and so on) generally stay in the policy realm but they can be securitized; meaning they can be given a special attention. I argued that issues of high politics, such as nuclear security, do not necessarily become a security matter. The examination of the United States' nuclear posture in Chapter 5 showed this case clearly.

LESSONS LEARNED FROM NEW MODEL

What does the amended theory bring to understanding nuclear proliferation? Throughout the dissertation, I argued that traditional security complex theory is too focused on regions and that it cannot explain transnational issues, such as nuclear proliferation. Not only regional security complex theory, but also other theoretical explanations (mainly realism, liberalism, constructivism) fail to explain nuclear issues comprehensively. The reason for this theoretical failure is that each theory prioritizes a different set of variables and each suggests a single variable that is prioritized over others. Realism stresses the role of power and prestige; liberalism focuses on domestic explanations, such as decision makers or the role of scientific cadre; while constructivism
prioritizes the role of identity, roles, and norms to explain nuclear proliferation, nonproliferation, and disarmament.

All three theories—realism, liberalism, and constructivism—have explanatory power and should not be dismissed; however, none of the theories are above another. Buzan and Waever favor constructivism over other theories while introducing traditional security complex theory, for instance. This is what I try to avoid in this dissertation, although like all researchers I have a theoretical preference. Nuclear security complex theory is built upon the idea that states can be categorized in different groups within different theoretical undertakings. These groups feed from major theoretical assumptions. Material security complex is composed of states that follow realist nuclear posture, for instance. The name ‘material’ comes from the core concept of materialism over idealism, where a state’s capabilities are structured through tangible factors.

The model of nuclear security complexes is an amalgamation of theories; but it is not an eclectic posture. Eclectic scholars in International Relations explain a phenomenon through different theories. In eclectic explanations, Indian nuclear proliferation can be explained through balance of power strategies against China and Pakistan, but also though identity formation, mainly as a result of post-colonial history. A scholar explaining Indian nuclear ambitions through a combination of variables from different theories, for example, follows an eclectic approach. Eclecticism can be favorable to understand a phenomenon as it borrows across different theories. Eclecticism, therefore, answers ‘why’ questions. Eclectic approaches are not helpful, however, to answer how to approach a problem in order to mitigate its consequences in a succinct way. Nuclear security complexes are not an eclectic model in that sense, but it does utilizes particular
variables for each group of states. Israel, for instance, is in the material security complex because of its threat identification; call for power, and because it is not party to nuclear treaties. Israel’s nuclear posture then is in the realist setting. I do not try to explain this posture through liberal or constructivist theory as well. Therefore I am not utilizing an eclectic approach.

The amended theory brings a new understanding to nuclear studies. I do not claim in any part of this dissertation that this new understanding—grouping states—is superior to former approaches. I claimed, rather, that this is an alternative approach that the policy cadre could benefit from. What does this new understanding do then? The nuclear security complex theory expressed and found out:

1) **Non-Regional Posture for Nuclear Non-proliferation**: States in the same region follow different nuclear policies; therefore regional approaches to nuclear proliferation, disarmament, safety and security necessitate a broader non-regional understanding. When Iran, Israel, and Turkey’s nuclear posture are examined, these different nuclear policies become visible. Israel proliferated in 1960s, yet Iran did not follow this route during the Shah’s ruling. Turkey, on the other hand, does not hold any nuclear weapons ambitions but aspires to be self-sufficient in the energy sector.

2) **Country profiling through state characteristics and nuclear posture may generate alternative nuclear policies**. Two states that have nuclear weapons ambitions/nuclear weapons program do not necessarily have same nuclear posture. Nuclear weapons programs may be generated from the different needs and vulnerabilities of a state. North Korea and Iran’s nuclear ambitions differ from each other; although, the end-state, to proliferate, is the same. The United States, lying in the quasi-hegemonic
security complex, follows similar a nuclear non-proliferation policy to all other states; although, it claims to have tailored deterrence approach. The United States' nuclear policy towards North Korea and Iran were almost identical up until the interim agreement that the European partners brought to the table. The United States' policy identified possible options and sorted out different policies but in the end it employed a similar policy regardless of Iranian or North Korean state characteristics. In the end, the policy implications were identical; which was to issue United Nations Security Council Resolutions and employ economic sanctions. Yet, the nuclear ambition and practices of these two states differ drastically. In a nutshell, Iran is still responsive to the institutional pressures whereas North Korea does not follow the IAEA inspections as part of rule of law. It is problematic to expect a single policy to work for two distinct states. The nuclear security complex theory has stationed these two states in different groups. North Korea is suggested to be in the material security complex theory whereas Iran is in the material-norms based security complex theory. The European diplomatic initiative with President Rouhani works because of the characteristics that Iran still holds to some of the 'norms' based security complex. From this example, nuclear security complex theory suggests examining state characteristics first and then to employ nuclear policies. These policies differ from tailored deterrence.

(3) Mid-level policies for nuclear non-proliferation: It is suggested that tailored deterrence is an inductive approach that is too particular for any particular state. General deterrence, on the other hand, is too broad to result in a meaningful nuclear policy. Nuclear security complexes are a middle approach that favors group level policies. Nuclear security complexes are non-territorial, issue-focused grouping of states. The
group-level policy options that nuclear security complex theory suggests for groups are as follows:

a- **Promoting Economic Integration to world economic system for the Material Security Complex:** Policies should focus on integrating states in the material security complex theory into the international system; perhaps not through international institutions and treaties; but through economic incentives. States in this security complex favor relative gains over absolute gains. If employed carefully, economic regulations would be a visible relative gain for these states. These incentives should not be in the form of economic aid or in the form of economic sanctions. Literature, as discussed in Chapter 4, shows that economic sanctions are not effective in every situation. The role of transnationalism is important in this respect. If a state is economically integrated in the international system, it will be pressured later, to follow international norms and rules due to economic gains and loses.

b- **Promoting Transparency and Openness in Material-Liberal Security Complex:** Policies should focus on transparency and openness in the material security complex theory. States in this security complex suffers from non-transparent nuclear policies, especially the nuclear weapons states. Although these states follow economic liberal policies, they do not transmit the same understanding to nuclear issues. It is a common premise that nuclear weapons program are disguised under national security parameters. In this security complex, public consent and awareness play a great role in continuing existing policies. Therefore, civil society movements and transnational advocacy networks should flourish in these countries. Any policy of a third party should
focus on the role of transparency in the security and defense sector, and to the integration of society into nuclear dealings.

**c- Promoting Internalization Policies in Liberal Based Security Complex:**

Policies should focus on the role of international organizations and institutions while considering the liberal based security complexes. States in this security complex should be able to internalize international nuclear policies to their domestic laws and policies. This internalization is a process where socialization plays a great role. Non-nuclear weapon states in this security complex can prioritize disarmament over nuclear proliferation. Any third-party policy should focus on the disarmament portion when handling negotiations with these states.

*(4) Degrees of Cooperation and Conflict Vary in Each Security Complex:* The three core nuclear security complexes (the material security complex, liberal security complex, and norms-based security complex) have different degrees of distance to conflict and cooperation. States in the material security complex are highly likely to choose conflict over cooperation and to prioritize nuclear proliferation over non-proliferation and disarmament. States in this security complex prioritize relative gains. States in the liberal security complex link economic gains to security policies. These states are less likely to proliferate in the 21\textsuperscript{st} century but the ones already possessing nuclear weapons are unlikely to renounce their nuclear capability. States in the norms based security complex are highly unlikely to proliferate and less likely to acquire nuclear weapons because these states are concerned with following international nuclear norms (such as nuclear disarmament). These differences are also visible in the interaction of states with the different security complexes.
(5) Interaction among states in a security complex and interaction among states in different security complexes are related to the expected outcomes and level of influence over one another. The level of interaction among states in the same security complex is based on state characteristics. Interaction among states from different regions is related to the concept of power in International Relations. Power, in the nuclear security complexes, varies from coercion, deterrence, compellence, inducements, and persuasion.

In the material security complex, states have similar nuclear posture, but this does not necessitate a level of interaction based on assistance. North Korea and Israel for instance are in the same security complex but they do not assist each other in nuclear deals and even have opposite nuclear posture due to their relative relations with the United States (the quasi-hegemonic security complex). The level of interaction from a state in material security complex to another state in the same complex then changes in line with its relations to the United States The relations of states from the material security complex to the liberal security complex and norms based security complex and vice versa are through coercion, deterrence, and inducement strategies. On July 29, 2014, for instance, Hwang Pyong-So, a North Korean military official, “threatened a nuclear strike on the White House and Pentagon after accusing Washington of raising military tensions on the Korean Peninsula.”20 Although North Korea does not possess a long-range ballistic missile capability, this discourse is based on linking one issue to another to achieve a desired outcome through verbal coercion.

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States in the liberal security complex states have relations with each other and states in the norms based security complex through persuasion methods. The level of influence through persuasion is related to the question 'which nuclear policy should prevail the international nuclear arena?' States in the liberal security complex wants to persuade others that they value nuclear non-proliferation and reduction of nuclear weapons; whereas states in the norms based security complex wants to persuade others that the value should be given to nuclear disarmament and abolishment of nuclear weapons. The contention between these two visions does not generate aggressive policies rather it generates room for dialogue in an international institutional setting. In this regard, aggressive policies are not viable due to shared liberal-democratic values and norms in each security complex. In Chapter 5, I have stated extensively about the rivalry between nuclear nonproliferation supporters and nuclear disarmament supporters. I also suggested that the United States’ policy suffers from a balance between these two policies.

States in the liberal security complex may favor coercive diplomacy methods against the states in the material security complex. In Chapter 5, I also stated that the current policy against Iranian nuclear proliferation is an example of coercive diplomacy. Economic sanctions against Iran have coercive power, whereas the talks aimed at establishing a comprehensive agreement play a diplomatic role.

States in the norms based security complex endorse each other's nuclear disarmament policies through international settings. The interaction level among these states is high, compared to other countries because they regard nuclear disarmament as a vision and an end-state. States like Norway and New Zealand socialize through the Nuclear Proliferation Treaty Review Conferences Working Groups. This socialization
follows with a pro-active policy to pressure nuclear weapon states in the liberal security complex. Likewise, states in the norms based security complex value diplomatic engagements and economic inducements to states in the material security complex in order to assure nuclear nonproliferation; stating the role of nuclear disarmament in the world order. In Chapter 5, I gave examples of groups that promote nuclear disarmament in international settings. The Vienna Group of 1021, for instance, promotes and takes action on safeguards, verification, and compliance matters through “the broadest possible amount of consultation and dialogue.”22

Table 3. Interaction Level Between Security Complexes

<table>
<thead>
<tr>
<th>Interaction</th>
<th>Material SC</th>
<th>Liberal SC</th>
<th>Norms-based SC</th>
</tr>
</thead>
<tbody>
<tr>
<td>Material SC</td>
<td>Assistance Endorsement</td>
<td>Coercive Diplomacy Deterrence</td>
<td>Diplomacy Compliance</td>
</tr>
<tr>
<td>Liberal SC</td>
<td>Coercive Diplomacy Deterrence</td>
<td>Assistance Endorsement</td>
<td>Persuasion</td>
</tr>
<tr>
<td>Norms-based SC</td>
<td>Diplomacy Compliance</td>
<td>Persuasion</td>
<td>Assistance Endorsement</td>
</tr>
</tbody>
</table>

21 Australia, Austria, Canada, Denmark, Finland, Hungary, Ireland, the Netherlands, New Zealand, Norway, and Sweden.
FINDINGS

What is expected to come out of the suggested approach? The expected outcome of this approach is to realize the nuclear proliferation and nonproliferation process through a different perspective. I do not claim that this is the best perspective to study nuclear issues. I argued, however, that this approach aims to create an alternative reality through a systematic analysis of country positions. This alternative approach can generate a critical analysis and open up new policies to handle nuclear issues.

An expected outcome from this approach for the United States, for instance, is to realize that prioritizing nuclear nonproliferation over nuclear disarmament damages not only international nuclear standing but also creates resistance from likely proliferators, such as Iran. Interestingly, this analysis, through the grouping approach shows that Iran’s nuclear posture is close to states like Norway, Sweden, or the Netherlands. Although an extensive analysis on all these states would be valuable, through a brief observation, we can say that all these parties favor nuclear disarmament over nonproliferation. Iran favors disarmament to pressure nuclear weapon states and to legitimize its nuclear weapons program and nuclear actions, whereas the latter group is in favor of nuclear disarmament due to their confidence in international institutions, rules, and norms.

What do the cases tell us about nuclear proliferation and nonproliferation? All four country profiles, which I also call cases, (Iran, Israel, Turkey and the United States) revealed certain facts about nuclear proliferation and nonproliferation:

1- Nuclear proliferation and non-proliferation policies do not necessarily rest on regional security calculations. Although state security is linked to relations with neighboring countries and on increasing power capability in the traditional sense, the case
analyses showed that vulnerabilities are not necessarily covered by material capabilities. Iran’s peaceful nuclear energy policies during the Shah period, even though Israel followed nuclear weapons policy in 1960s, are a fact to indicate non-regional nuclear policies. Iran’s peaceful nuclear policies, when it had close relations with the United States, before the Islamic Revolution, is an indicator of the role of hegemony or superpowers to shape the international nuclear agenda. Likewise, Iran’s nuclear weapons program does not simultaneously start proliferation efforts in neighboring countries. On the contrary, Turkey’s national nuclear policy is based on non-proliferation efforts in the Middle East, especially against Iran’s nuclear ambitions.

2- The United States’ policy of nuclear disarmament is only for the eyes. Concrete steps are not taken and initiatives from the European partners, calling for nuclear disarmament are blocked at the United States’ governmental level. The United States needs to establish a nuclear disarmament road map that is not limited to and subjected to its relations with Russia. Russian-U.S. nuclear cooperation is bound to other parameters.

The Ukrainian crisis and Russia’s annexation of Crimea showed this case very well. The Malaysian civilian air flight taken down in Eastern Ukraine was also another indicator that Russia cannot control its missiles. Likewise, last month, the United States claimed Russia’s violation of the 1987 Intermediate-Range Nuclear Forces Treaty by testing cruise missiles.23 Russian generals denied this immediately.24

The renewed report by the U.S. State Department on Adherence and Compliance with Arms Control, Nonproliferation and Disarmament Agreements and Commitments

on July 2014, is not comprehensive and does not open up discussion space with Iran. The report admits that it does not include an analysis of the ongoing Joint Plan of Action (JPOA)—interim agreement—with Iran and thus it starts with the tone that Iran does not comply with NPT. My analysis regarding Iran's dialogue within the JPOA and its membership to the nuclear treaties, contradicts the United States' posture. The United States does not want to draw conclusions from the ongoing dialogue, which is in line with my suggestion not to shift Iran from material-norms security complex to another one too easily.

3- Turkey is not an actor in the nuclear deals, negotiations, and issues because it does not have a concrete national nuclear policy. Turkey's nuclear nonproliferation posture is accurate but Turkey does not take sides on nuclear issues. Turkey's nuclear rhetoric under the AKP government can be summed up in a sentence: Turkey will not allow Iran to have nuclear weapons in the region. Turkey, a country in the material-liberal security complex, shares similarities with Iran, a country in the material-norms based security complex. Both states are aware of the regional threat conditions and have nuclear energy programs. The difference between the two states in the 21st century is Turkey's close ties with the United States and with the liberal world. As I stated for Iran previously, the fall of Shah and formation of the Islamic Republic itself was not the cause of Iran's nuclear weapons program. The ongoing hatred and 'feeling of betrayal' in Iranian discourse within the working group discussions indicated that it is the degraded relations with the United States that triggered Iran's nuclear weapons ambitions. Turkey,

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however, lacks an overall nuclear policy; therefore, it does not become an actor in the nuclear agreements.

In the NPT Preparatory Commission working groups, Turkey does not take a clear stance with either with the non-proliferation nor with the nuclear disarmament group of states. This makes Turkey a weak actor in the nuclear area because it does not have power to pressure either side. Turkey, together with Brazil, couldn't manage the Iranian nuclear swap deal because it could not get nuclear nonproliferation or nuclear disarmament supporters to its side. The Tehran Declaration was a nuclear swap deal to deposit 1200 kg low enriched uranium (LEU) to Turkey. This was not a nuclear nonproliferation or nuclear disarmament effort; rather it was a peaceful use of nuclear energy effort, because it ensures the safety of the LEU and aims to prevent clandestine nuclear weapons activity through enrichment. This initiative, however, would not be sufficient for Iran not to proliferate. President Obama, as discussed in depth in Chapter 5, directly pointed out his concern in a letter to President Lula and Prime Minister Erdogan. With the Tehran Declaration, Turkey and Brazil, unintentionally, changed the nuclear nonproliferation agenda to peaceful use of nuclear energy. This is because Turkey does not distinguish that nuclear nonproliferation and peaceful use of nuclear energy could be at odds.

4- Israel’s nuclear ambiguity does more harm than good: The Nuclear Proliferation Treaty is actually in favor of the non parties to the treaty—India, Israel, North Korea and Pakistan. To follow an effective and universal nonproliferation policy, it is significant to create a system where each state is equally responsible. If the United

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States and allies, however, are determinate on their nuclear nonproliferation and disarmament efforts then they should press these four states for nuclear clarity. Israel’s nuclear posture harms its democratic claims and the public does not question the Israeli state’s nuclear policy due to the perpetual state of emergency.

This dissertation has positioned Israel in the material security complex, which is the group that North Korea is in. Some may suggest that this is a very harsh assessment. However, once Israeli non-democratic, non-liberal nuclear posture is considered, one can see there is not much difference between the two states. Likewise, both are not party to major nuclear treaties. This results in the conclusion that the international stance on North Korea and Israel should be on a similar basis regarding nuclear ambiguity. This, however, is never the case. Why so? Realism, power relations, and national interest calculations usually prevail in the decisions of states, even within an institutional setting. When national interest prevails the common/societal interest, the decisions made are biased.

One should not expect a solution for Arab-Israeli conflict or on Iranian nuclear ambitions without noticing that Israel is one of the key actors and factors that generates these insecurities. This does not mean all other parties are right on their claims or are legitimate in their nuclear cause. It only means that a dual nuclear posture by the United States begets proliferation desires and/or harms the possibility of peace in the Middle East.

5- Iran’s full integration to the economic system will help the United States and its partners to create dependency. Iran’s membership to the main nuclear treaties is not enough to convince the world of its intent not to proliferate. Iran’s nuclear nonproliferation policy discourse does not meet the international standards, as
International Atomic Energy Agency inspectors cannot rule broad conclusions about Iran. Due to the economic sanctions that pressed the society and the change in the leadership, from former President Ahmadinejad to Rouhani, Iran is at the negotiation table with the United States and European partners. The interim deal, however, is not comprehensive. It does not, for instance, involve the ballistic missiles program. Once the Western powers have alleviated the existing economic sanctions, Iran is likely to continue its nuclear weapons ambitions. Iran, in this regard, has a history of non-compliance.

Economic sanctions help the liberal-democratic countries only to a certain extent. As discussed in Chapter 5, Iran lacks a nuclear democratic posture and the Iranian public is not totally aware of the nuclear weapons program. Yet, they consider Iran’s nuclear initiatives within the peaceful use of nuclear energy realm. For a successful, long-term approach, the United States can focus on engaging with the Iranian public without any propaganda acts.

Another aspect is related to the limited role that the United States might have on Iran’s nuclear nonproliferation posture. The historical animosities between Iran and the United States after the fall of Shah do not let the parties engage in a pro-active solution. The European states within the European Union initiative can take the lead in this case. The interim agreement is a good example of such an action. Most of the European states lay either in the liberal security complex or in norms based security complex. It might help to shift the nuclear discourse on nuclear disarmament rather than focusing on nuclear nonproliferation, to engage with Iran. One other initiative could be to link the United States’ policies of reduction of nuclear weapons with Iran’s nuclear
nonproliferation policies. In this respect, Iran might sense a level of leverage; thus power, in the nuclear deals, and can engage in nuclear cooperation.
CHAPTER 7
CONCLUSION

This dissertation is based on the question ‘does security complex theory explain nuclear proliferation’, especially in the 21st century. I suggested to amend conventional security complex theory, because its regional focus does cannot be applied to transnational issues, like nuclear proliferation. I still utilized the regional understanding in security studies as a tool for grouping states. To have a non-territorial grouping approach in the nuclear field, I proposed the nuclear security complexes model. Based on this model, state characteristics shape nuclear posture. The main state characteristics that are gathered from nuclear proliferation literature are existence of threat, nuclear democracy and institutions, and nuclear treaty participation and compliance.

The grouping method is significant to understand, analyze, and suggest policies to nuclear capable states. The findings show that nuclear weapons are a transnational issue; therefore regional approaches mainly fall short to explain different nuclear behaviors in a region. In this regard, I examined the nuclear postures of Iran, Israel, and Turkey. I placed these three countries in different nuclear security complexes due to their differences in state characteristics.

The proposed model is not tested in a traditional research methods structure. In other words, I did not follow a rigid cause and effect relationship for examining states’ nuclear posture. The model followed the method of falsification by examining Buzan and Waever's security complex theory and by analyzing this theory for nuclear proliferation purposes. In other words, the conventional theory’s robustness to explain nuclear
proliferation is examined but not the he proposed theory. This dissertation, rather used 4 countries (Iran, Israel, Turkey, United States) to show an example of how the proposed theory, which is to group states in terms of state characteristics to reach nuclear posture, may work in practice. In the future area of research, the model can be applied to another group of states, such as Russia, Kazakhstan, and Ukraine, to analyze nuclear posture from a systemic level.

In the proposed model, states from the same region may be placed in different groups, Nuclear posture differs inside the regions because nuclear weapons are transnational in nature and nuclear proliferation ambitions are not necessarily based on regional security problems but may result from global or domestic issues. The transnational nature of nuclear weapons is the first challenge to the conventional security complex theory. Nuclear weapons, nuclear knowledge, nuclear materials and expertise cross boundaries easily. This dissertation also found that nuclear security is a transnational issue because foreign policy reflections are not limited to regional boundaries. Western powers oppose nuclear proliferation because of the established nuclear regime in the post-Cold War era.

While conducting the grouping method three core variables are used: threat existence, nuclear democracy and institutions, nuclear treaty ratification and compliance. The model indicated that there are actually 7 types of nuclear posture in world politics and not necessarily all types of nuclear proliferation are the same. North Korean nuclear ambitions, for instance, fell under the existence of a threat category, whereas Iran’s nuclear ambitions fell under a sub-category of which Iran is still a legitimate actor in the nuclear field but it faces and/or creates major security threats that puts decision-making
structures into limbo. As a result, Iran does not fully comply with the nuclear treaties but remains a member of the international nuclear structure.

The proposed model pointed out that material issues such as threat existence, military dependency, economic, political, and military power weaknesses may cause states to consider nuclear proliferation. State survival is the main driving motive under a nuclear weapons program because these states act in a self-help system, where gains are viewed as relative. The world is a zero-sum game and it is almost a win or lose situation. North Korea's leaders' aggressive statements about a tactical nuclear attack on the United States, or Israel’s official rhetoric, in which is Israel is surrounded by enemies are forms of the zero-sum game conceptualization of world politics in the material security complex.

The proposed model also pointed out that once states internalized nuclear treaties and norms through domestic structures and when they have liberal and democratic policies over their nuclear energy and weapons projects, they are not likely to proliferate. The nuclear weapon states that have already proliferated in the Cold War environment, however, are not representative of this assumption because the Cold War system was based on bipolarity in which states’ built up their arsenal in that context. The contextual shift after the Cold War is significant to consider while modeling nuclear security complex theory.

The proposed model also pointed out that when states adhere to the nuclear treaties and they voluntarily follow nuclear non-proliferation through an institutional framework, they are less likely to proliferate. These states' nuclear posture is to follow peaceful nuclear energy programs and to pressure nuclear weapon states to renounce
upon their nuclear weapons. Civil society movements and transnational advocacy networks are also part of this process.

The analysis also showed that there is a huge difference between the nuclear undertakings of the nuclear weapon states, non-nuclear weapon states and nuclear transitioning states. The de jure nuclear weapon states support nuclear nonproliferation policy in the international agenda. The de facto nuclear weapon states follow a policy based on nuclear ambiguity. The non-nuclear weapon states mainly call for nuclear disarmament. The nuclear transitioning states uses nuclear disarmament as leverage against nuclear weapon states, although they follow concrete proliferation policies at home. As long as the nuclear non-proliferation supporters (thesis) do not engage with the nuclear disarmament (antithesis) supporters, it is extremely hard to expect a synthesis that may affect the nuclear transitioning parties. So, in reality, the power is in the hands of the nuclear nonproliferation and disarmament supporters by not letting the ‘transitioning nuclear states’ to politicize nuclear issues based on their national interest.

The United States can voluntarily give up some of its power in the nuclear field at international setting so that alternative policy making could emerge. The reason for this suggestion is because the United States pursues its national interest so much more than the international/global interest. A check and balances dynamic could be supported only through the United States voluntary decision to renounce its power in the nuclear field.
FUTURE RESEARCH AREAS

This dissertation only proposes an alternative approach to nuclear proliferation that is formerly dominated by regional settings. There are still areas of research for future scholars, if they would like to pursue a non-territorial analysis of nuclear proliferation.

The first question, in this regard, is to ask ‘how do states shift from one nuclear security complex to another?’ Throughout this dissertation, I have explicitly stated that states can shift from one nuclear security complex to another. I, however, have not stated how this could be possible in the real world. I assumed that the international system is not fixed. When the international system is not fixed and states have alternative options to choose from, it is easier to shift between and within security complexes. This shift, if not voluntary, would take time. For instance, I have mentioned about the contemporary engagement with Iran through the Joint Action Plan. Although Iran seems to adhere to the conditions of this plan, its place in the material-norms security complex does not change up until the point where its policies are followed by actions, especially in the domestic realm. I assume that the United States, as a hegemon, has the power to shift states’ nuclear policies from one stage to another; therefore, a shift in the security complex is possible. An examination of the role of the United States with a possible proliferator would be a good future research topic.

I assumed in theory that states are not fixed to one group. Unlike neo-realism’s assumption of states dwell under anarchy, therefore they have similar state characteristics, this dissertation argued that state characteristics change from state-to-state different even though state system lacks rules and regulations above the states. At the micro-level, different nuclear postures are an example of this process. If state actions are
not fixed to a group, unlike in regional security complexes, then shifts between groups is possible. Nuclear rollback is a result of this type of change, such as in Taiwan, South Korea, Brazil, South Africa and Libya. I would expect a shift from one security complex to another in conditions such as a change in the polarity of the system, powerful interaction with one state to another in a different security complexes, persuasion, influence, coercive actions and change in the domestic structures.

Nuclear security complex theory is currently based on a unipolar world order in which the United States is the main power after the end of the Cold War. Polarity in the international system affects national policies as well. Due to the bipolar world order in the Cold War, small states either balance each other or bandwagon with one of the superpowers. In a bipolar world order, arms races and small wars become indispensable in regional settings as two clashing views become dominant. Nuclear proliferation and nonproliferation efforts are driven by the superpowers in a bipolar world order. Similarly, hegemony leads a dominant nuclear policy in line with its interests in monopoly. A systemic shift may shuffle the nuclear posture of most of the states. Argentina, Brazil, South Africa, and some European countries invested in nuclear weapons program during the Cold War, for instance, but with a shift in the system, they rolled back from these programs.

The power of the hegemon to change other states' nuclear posture is based on the economic, political, and societal power that the hegemon has over the other states. I discussed in Chapter 5 explicitly that the United States' hegemonic capability in the 21st century is limited, as emerging powers have challenged its economic power and some European partners do not pursue and/or challenge its political power. To this end, I stated
the example of the British public refusing to take an action against the Syrian regime
during the uprising. The United States’ nuclear posture, which is nuclear
nonproliferation, is the dominant international policy today.

The second way to cause a shift in nuclear posture is through the hegemon’s power. The United States, when combined with the European partners can cause shifts in other states’ nuclear posture. How long would it take to settle a state’s nuclear posture, is not observed in this dissertation. While analyzing Iran’s nuclear posture, however, I rest the case of Iran’s nuclear compliance to the European and American coordination on applying economic sanctions and on Iranian economic and political integration into the international system. The Iranian inclination for cooperation may not be a long-term policy but a strategy to ease the effects of economic sanctions though. This means that shifts from one security complex to another is a long process that needs to be backed by domestic and foreign policy actions.

Secondly, as I assume that state interaction in different security complexes may affect the nuclear policy outcome, an analysis of how states, in different security complexes, interact would be a good start to analyze the process of interaction that may lead to a positive outcome. In this regard, any sort of historical interaction that great powers have through their nuclear undertakings would be helpful.

Thirdly, for the purpose of this research, I have selected only four countries to examine the model. I think that an all encompassing analysis of all nuclear capable states, both in a qualitative and quantitative way, would be valuable to create an overall schema for nuclear nonproliferation behavior. This analysis should be perpetual; meaning to be
conducted at certain times, so that it would be timely to react to any sort of change in the system.

The proposed model to group states in terms of their state characteristics may lead to a positive outcome, when and if states realize that their nuclear behavior is a result of state characteristics. There is a lack of communication and comprehension between nuclear weapon states, non-nuclear weapon states and nuclear transitioning states. Nuclear non-proliferation and nuclear disarmament becomes an object of domestic policy discourse; whereas it could be considered an international security problem. Rather than being stuck to the end-state (non-proliferation versus disarmament), states’ interest could focus on the process in the nuclear field. That process would eventually lead to a different outcome.
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