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PRODUCTS OF THEIR ENVIRONMENT? NUCLEAR PROLIFERATION AND THE
EMERGING MULTIPOLAR INTERNATIONAL SYSTEM

A Thesis

Presented to

the Faculty of the Josef Korbel School of International Studies

University of Denver

In Partial Fulfillment

of the Requirements for the Degree

Master of Arts

by

Jonathan D. Moore

November 2011

Advisor: Paul R. Viotti

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Abstract

The world is shifting from a unipolar system following the end of the Cold War to a multipolar system that is ushered in by “the rise of the rest.” This change in the global structure has led some analysts to predict an increase in nuclear weapons proliferation caused by increased uncertainty and a decrease in alliances and security assurances. Nuclear proliferation, however, will not increase because these types of predictions are founded upon realist assumptions that inaccurately predict the characteristics of the emerging multipolar system as well as inaccurately understanding calculations of states with regard to nuclear weapons programs. I review a variety of literature concerning international politics theory and nuclear weapons forming a theoretical framework and use Iran and Turkey as case studies to test my hypothesis.

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CHAPTER 1 INTRODUCTION

The study of motivations to pursue nuclear weapons is particularly difficult given the small amount of empirical evidence that is available. Furthermore, as theories of international relations evolve and change over the years, so too do the theories concerning the proliferation of weapons of mass destruction. Over the last 65 years or so, only a relatively small number of states have actually gone the distance in developing nuclear weapons despite the great number of forecasts and predictions that nuclear weapons would spread around the world.

An overwhelming majority of evidence concerning the spread of nuclear weapons comes from the Cold War era—a time when the world was nearly split in half between East and West. Most states around the world, although exceptions certainly existed, either aligned themselves with the United States or the Soviet Union. Many of the theories of the proliferation of nuclear weapons still assume a Cold War environment, but the world has changed. The international system is no longer bipolar. States that were once constrained by the influence of the United States or Soviet Union now have much more freedom to pursue their own policies. Furthermore, in the age of globalization, states are becoming richer and can attain technology once reserved only for the richest and most powerful nations. States around the world are now challenging the power and influence of the United States, which was not possible just a few decades ago during the Cold War. A new international system is emerging.

A key neo-realist assumption is that instability increases in multipolar system, thus the chance of war also increases. This assumption is reflected in many predictions of nuclear proliferation in the coming years. Francis J. Gavin explains that a wide variety of public figures and politicians, from President Obama and Senator John McCain to even Thomas Schelling, have recently proclaimed that nuclear proliferation is and will be America's greatest security challenge in the future.¹ Indeed, the 2010 Nuclear Posture Review (NPR) reflects these sentiments. Although the NPR does not refer to the emerging system, or a multipolar system explicitly, it explains that the United States is shifting its focus to nuclear proliferation and "adapting to a changed security environment."² The NPR reflects the changes in the global system that I will be addressing here, including changes in security assurances and reduced constraint on states in the international system, but fails to address other aspects of the emerging international system that will have a large impact on proliferation in the future. It explains, "A failure of reassurance could lead to a decision by one or more non-nuclear states to seek nuclear deterrents of their own, an outcome which could contribute to an unraveling of the NPT regime and to a greater likelihood of nuclear weapon use."³

¹ Francis J. Gavin, "Same as it Ever Was: Nuclear Alarmism, Proliferation, and the Cold War," *International Security* 34, no. 3 (2009): pp. 7-8.

² "Nuclear Posture Review Report." U.S. Department of Defense, p. 5.

³ *Ibid.*, p. 3.

A National Intelligence Council report further confirms the belief that nuclear weapons will spread in the future, particularly in reaction to perceived Iranian capacity to produce nuclear weapons.⁴ Further, the report claims:

Historically, emerging multipolar systems have been more unstable than bipolar or unipolar ones....[T]he next 20 years of transition to a new system are fraught with risks. Strategic rivalries are most likely to revolve around trade, investments, and technological innovation and acquisition, but we cannot rule out a 19th century-like scenario of arms races, territorial expansion, and military rivalries.⁵

Among the risks the NIC outlines is an increase in nuclear proliferation, particularly in the Middle East.⁶

Does this mean that more and more states will seek nuclear weapons in order to ensure security in this type of environment? If we were to believe basic neo-realist assumptions, the answer would be yes. In fact, it was my intention to demonstrate this at the outset of this study; however, my assumption was based on only a narrow understanding of the emerging international system, and a monocausal explanation of nuclear calculations based on the security environment of states.

It is not my goal to determine a unified theory of proliferation, nor is it my goal to predict which states will and will not pursue nuclear weapons in the future. Instead, it is my goal to counter the theories predicting widespread proliferation in the future caused by a multipolar system. The world will be a very different place than it was during the Cold War, and nuclear weapons research should reflect these changes.

⁴ National Intelligence Council, *Global Trends 2025: A Transformed World* (Washington: US Government Printing Office, 2008), p. 62.

⁵ National Intelligence Council, *Global Trends 2025*, p. vi.

⁶ *Ibid.*, p. 61.

Some of the largest changes in the emerging system have nothing to do with the balance of power as traditionally understood. Instead, major themes in the future will include economic power, globalization, and a larger emphasis on norms and ideas. Although states will be less constrained in the multipolar system than under the previous unipolar and bipolar systems, the conditions of the emerging system will influence states not to pursue nuclear weapons. All too often, once analysts begin to consider what forces are pushing a state towards proliferation, they forget to look at the degree to which those factors are actually pushing and which factors are pushing back.

Problems with Forecasting Nuclear Proliferation

There is certainly no shortage of literature concerning the future of nuclear weapons. Despite such a vast literature, it is difficult to find any two forecasts or theories that agree with one another. Qualitative forecasts and theories primarily fall into two categories—realist and constructivist accounts. With no surprise, realist accounts primarily focus on external security threats, while constructivists emphasize interests, ideas, and identities of states.

As mentioned above, many look exclusively at the threats a state faces in order to determine whether or not it is at risk of pursuing nuclear weapons. Scott D. Sagan warns against the dangers of believing only one model can explain a state's decision to go nuclear. Sagan explains that "a near consensus that the answer is obvious" exists, and many policymakers and scholars are complacent in believing that the decision to go nuclear is a direct reaction to military threats to a state's security.⁷ Sagan admits that

⁷ Scott D. Sagan, "Why Do States Build Nuclear Weapons? Three Models in Search of a Bomb," *International Security* 21, no. 3 (1996): p. 54.

many, if not most, cases of proliferation, can be explained with the classic security model, but “multi-causality, rather than measurement error, lies at the heart of the nuclear proliferation problem.”⁸

Even among forecasts with similar theories, vast differences in methodology exist. Moeed Yusuf of the Brookings institution demonstrates the history of nuclear forecasts and believes it a “paradox” that such a large number of forecasts of nuclear weapons proliferation have incorrectly predicted future proliferation.⁹ Yusuf explains that the failure is due to flaws in methodology¹⁰ and outlines 6 “broad lessons” that can be learned from past forecasting failures:

1. Consistent misjudgments regarding the extent of nuclear proliferation
2. While all the countries that did eventually develop nuclear weapons were on the lists of suspect states, the estimations misjudged *when* these countries would go nuclear.
3. The pace of proliferation has been consistently *slower* than has been anticipated by most experts due to a combination of overwhelming alarmism, the intent of threshold states, and many incentives to abstain from weapons development.
4. The debate concerning the size of future arsenals of the various nuclear powers produced mixed results.
5. The tone of predictive studies was not always consistent with contemporaneous events.
6. There is evidence that over the long-term, external assistance was a major factor in proliferation.¹¹

⁸ Scott D. Sagan, “Why Do States Build Nuclear Weapons?” p. 86.

⁹ Moeed Yusuf, “Predicting Proliferation: The History of the Future of Nuclear Weapons,” Brookings Institution (2009): p. 4.

¹⁰ *Ibid.*, p. 4.

¹¹ *Ibid.*, p. 4-5.

This study agrees with the above analysis and will focus, not on predicting how many states will pursue nuclear weapons in the future, but rather to what degree the international system plays in a state's nuclear calculus. For my purposes, lessons 3, 5, and 6 are particularly useful. Alarmism has not gone away, and is seen in many recent articles claiming that a nuclear cascade is imminent in the Middle East.

Furthermore, the main focus of my analysis is consistent with lesson 5. The contemporaneous events of the emerging international system must be considered when assessing the drivers of nuclear proliferation. It is not sufficient to simply examine the shifting balance of power, which will be addressed in the following chapter establishing the theoretical framework of this study. Lastly, lesson 6 is also important. External assistance is likely to be affected by the multipolar system of the near future, which will in turn make it more difficult for states to pursue nuclear weapons.

Like Sagan and Yusuf, Sonali Singh, and Christopher R. Way, have similar reservations of many forecasts. "Many studies," they argue, "implicitly rely on monocausal logics of inference, comparing competing explanations, as if looking for the 'magic bullet' that will account for all proliferation."¹² Singh and Way bring up an important point: no single variable exists that determines whether or not a state will proliferate. Further, Singh and Way explain another problem with many forecasts. Many forecasts determine proliferation in an all-or-nothing fashion where possession of a weapon is the only affirmative case of proliferation.¹³ Instead, the authors argue,

¹² Sonali Singh and Christopher R. Way, "The Correlates of Nuclear Proliferation: A Quantitative Test," *The Journal of Conflict Resolution*, 48, no. 6 (2004): p. 861.

¹³ Ibid.

proliferation should be viewed as a continuum with four stages: no noticeable interest in nuclear weapons, serious exploration of the weapons option, launch of a weapons program, and acquisition of nuclear weapons.¹⁴ For my purposes, proliferation will refer to the testing of a nuclear bomb. As we have seen in the past, some states that have pursued nuclear weapons, or had the political will to pursue nuclear weapons, were either unable to do so or changed course. I have chosen to use the test of a weapon as the dependent variable, because the international system can and will intervene in different ways with regard to the several variables it takes to build a nuclear weapon. Furthermore, it is possible for states to construct a bomb, or attain a latent capability, that cannot be detected. Therefore, it is not possible to use the construction of a bomb as the dependent variable. Since I have included capacity as one of my independent variables, the international system could still intervene in important ways preventing a state from attaining nuclear weapons.

Methodology

What makes this study different is its focus on the how the changing international system will affect nuclear aspirations and capabilities while taking a multi-causal approach. I examine a variety of variables in order to determine to what extent the emerging multipolar system will influence calculations concerning nuclear weapons in the future. In the next chapter, I will examine which parts of the global system are changing, how those factors might shape states' nuclear calculations, as well as those

¹⁴ Sonali Singh and Christopher R. Way, "The Correlates of Nuclear Proliferation," p. 861.

factors that may not be affected by the international system. Next, I examine the various theories with regard to nuclear proliferation and put them in context with the changing international system. Finally, I test this theory with two case studies: Iran and Turkey.

Variables

Through an examination of the literature concerning nuclear weapons proliferation, I have constructed three causal diagrams to account for the theories; I will examine the theories in the next chapter. Two main variables exist: willingness and capacity. Each of these main variables is driven by a variety of sub-variables. Below I will go into detail of the sub-variables that I will be using for this study. First, however, willingness and capacity should be further explained. Capacity and willingness essentially correspond to the *supply* and *demand* sides of proliferation decisions. Both must be looked at with equal importance.

Willingness refers to whether or not a state wants to pursue nuclear weapons. In the past, this variable was boiled down to the most simplistic examination of security concerns, but, as history has demonstrated, the theory has evolved to include a variety of other factors that go far beyond security concerns. The causal diagram below demonstrates the main variables I will be using to determine willingness of a state to pursue nuclear weapons. The willingness variable is further broken down into ideational and material factors.

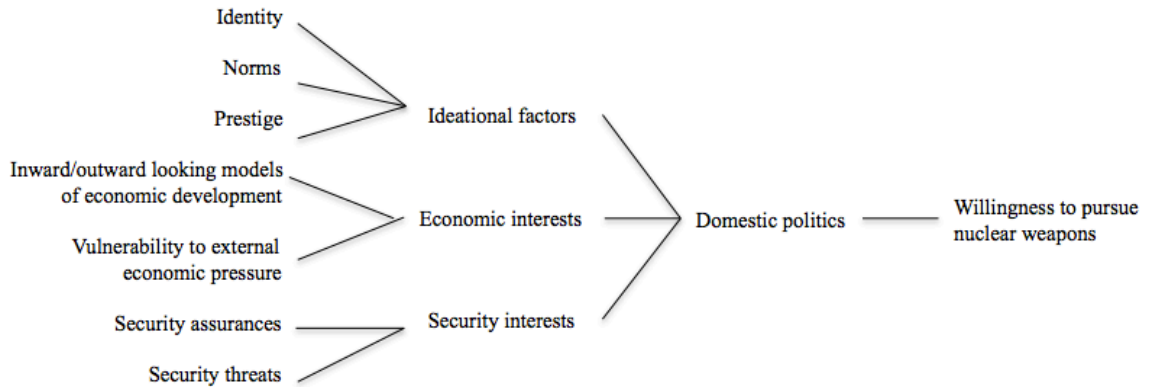


Figure 1

The ideational factors are as indicated in the diagram above: identity, norms, and prestige. The material factors are a combination of economic and security interests, as well as a state’s capacity to pursue nuclear weapons (to be discussed below).

Even though, as I argued above, many analysts have focused too heavily on security interests as a driver of the proliferation of nuclear weapons, it still plays an important role. Nuclear weapons can mitigate security concerns through their deterrent capabilities. Another important aspect of the security environment of a state is the security assurances it may receive from other states. If a state lies under the nuclear umbrella of another state, like the United States, it may be less likely to obtain its own nuclear deterrent. Instead, a state may be more likely to choose to focus its time and energy on other concerns, like developing the domestic economy.

This brings me to my next variable: economic interests, a variable that will play a larger role in the emerging international system as globalization increases and states become more integrated economically. More specifically, it is important to analyze a country’s preferred method of economic development. An outward looking state, one that seeks economic opportunities outside of its own borders will be less likely to pursue

nuclear weapons. On the other hand, an inward looking state, one that focuses its economy inside its own borders, does not rely on the economic partnerships and is more at risk to pursue nuclear weapons. This leads me to the other variable regarding economic interests: the vulnerability of a state to external economic pressure. One of the most common ways the international community attempts to deal with a state it believes is pursuing nuclear weapons is through the placement of sanctions. Weak states cannot stand up to sanctions like stronger states can. It is important to keep in mind, however, that simply because a state is vulnerable to external economic pressure, does not mean that it will cease to pursue nuclear weapons. Further, states with outward looking models of economic development rely on relationships with other states. If these relationships were to be severed, the states vital economic interests would be at risk, and states may find that it is not worth losing its economic interests by seeking nuclear weapons. Some states may conclude, either due to security threats or ideology, that nuclear weapons are worth the expense.

In addition to security concerns and economic interests, ideational factors must also be taken into account. This is a particularly difficult driver to explain due to the large number of ideational factors that can be at play in different countries. Thus, I have broken down ideational factors into a few basic components: norms, identities, and prestige. Norms are playing a more and more important role in proliferation calculations due to the ever-growing number of treaties, agreements, and movements that seek to protect the world from growing nuclear stockpiles. It is possible that states will choose not to pursue nuclear weapons because of the belief that doing so would be harmful for the world. A state's adherence to norms can be difficult to determine, because, as we

have seen in the past, signatories of the NPT often pursue nuclear weapons covertly. Thus, it is also important to look at other indicators like treaties concerning chemical or biological weapons or testing or public statements by state leadership. Also, breaking norms could result in a loss of prestige, or political and economic backlash leading to isolation in the international community.

Identities of a state also play an important role in assessing the risk of a state pursuing nuclear weapons. In this case, identity can refer to a lot of things. But most importantly, it refers to whether a state's ethical and moral traditions allow for nuclear weapons production. Religion can play a large role, as many religious principals, both Eastern and Western, condemn not only the use of nuclear weapons, but the production of them as well. In other states, leaders may simply be ideologically opposed to the idea of nuclear weapons. Still, in other states, the personality of the state's leadership is important in determining proliferation. This will be explained in detail in the theory section.

Finally, prestige is an important factor to consider when calculating a state's motivation to pursue nuclear weapons. In many cases, a state may feel that the only way to get the prestige it feels it deserves is through the production of nuclear weapons. Prestige can come in a few different forms. First, a state may feel that simply the possession of nuclear weapons will persuade the international community to take it more seriously. Also, a state may find prestige in the scientific and technological achievements that come with nuclear weapons. Conversely, states can choose not to pursue nuclear weapons because of prestige. In this regard, prestige can be closely related to norms and

identity. In order to examine whether or not prestige is at play in a given state, I will look at the strategic culture of states as well as public statements by their leadership.

In addition to examining the willingness of states to pursue nuclear weapons, we must also consider a state's capacity to do so—the final material variable. Capacity is the last material variable examined in this study. Even if a state were to be fully committed to pursuing a nuclear weapons program, it will not pursue nuclear weapons if it lacks the ability to do so. I have broken capacity down into four different variables: access to materials, economic capacity, know-how, and technical capacity/technology.

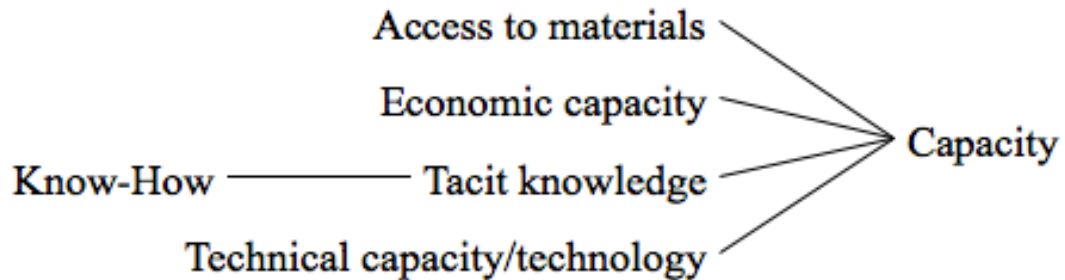


Figure 2

Access to materials is incredibly important to any budding nuclear weapons program. The transfer and sale of uranium is highly regulated, and can only be mined in a relatively small number of countries. If a country is not able to obtain uranium, even if it mastered the ability to enrich it to weaponization levels, it would not be able create the fissile material needed for a weapons program.

Economic capacity is also an important factor determining whether or not a state will pursue nuclear weapons. Nuclear weapons programs are expensive, and few countries can afford one. Some countries divert funds to nuclear weapons programs at

the expense of the well being of their population; simply because a state has limited funds does not mean that it will not go to great lengths to pay for nuclear weapons programs.

Know-how is also an important variable in capacity to produce nuclear weapons. It takes special knowledge and highly educated engineers to not only enrich uranium, but also to turn HEU into workable and efficient bombs. Furthermore, a country also needs to produce delivery methods, which in most cases is missiles. Many countries lack a base of scientists and engineers capable of producing a robust nuclear weapons program. It should be noted, however, that know-how is becoming easier to come by. Not only is know-how bought and sold on the black market, much of the knowledge with regard to building bombs is becoming more and more accessible, which makes this driver one of the easier capacity hurdles to overcome. As I will demonstrate below, however, this kind of knowledge is not enough to create nuclear weapons. A much more specialized knowledge is required that is not necessarily more widely available because of globalization.

It is only when both willingness and capacity align will a state pursue nuclear weapons. As demonstrated in each of the causal diagrams above, many variables exist which will affect a state's willingness and capacity to pursue nuclear weapons.

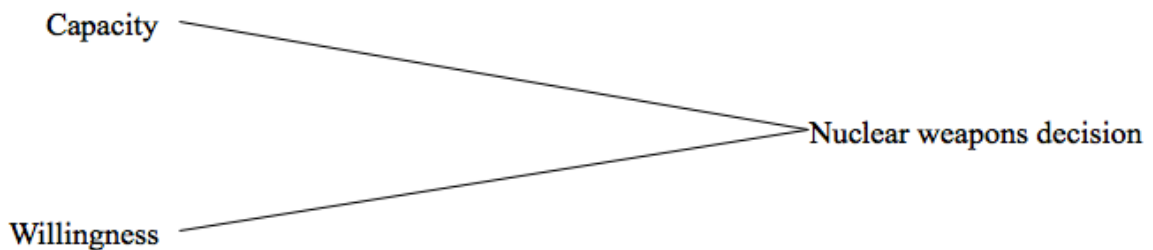


Figure 3

Case Studies

The idea of a nuclear cascade in the Middle East, given the continued pursuit of nuclear weapons by Iran, has grown so popular, that many simply take it as fact. Such a focus on this idea, and how it could happen, has distracted analysts from more realistic understandings of the future of nuclear weapons in the Middle East by focusing too heavily on narrow-minded analyses based solely on realist interpretations of the security environment. When one examines the security environment more closely, however, along with the characteristics of the state's leadership, the political economy, as well as the technological and economic capacity, the prospect of a nuclear cascade in the Middle East no longer seems inevitable. In fact, even if a state should choose to pursue nuclear weapons, the international community has at its disposal a variety of levers for intervention. The immense amount of resources and time it takes to develop a nuclear weapons program allows the international community plenty of opportunity to keep a state from proliferating should it choose that path. To examine this hypothesis, I will focus on Turkey and Iran—two states believed by many to be at high risk of proliferation, especially if Iran continues to pursue the bomb. I will demonstrate using the above four drivers that both Iran and Turkey may have a larger incentive not to pursue nuclear weapons.

Turkey

Some may see Turkey as an interesting choice in testing my hypothesis, but my choice to include Turkey was made after careful examination. Many analysts claim that Turkey is at high risk of proliferation because of a combination of variables. First, many analysts claim that Turkey will not tolerate a nuclear armed Iran, and will pursue its own

nuclear capability should Turkish leaders perceive that Tehran maintain its pursuit of nuclear weapons. Second, many analysts (correctly) observe that Turkey's relationship with NATO is deteriorating quickly. This viewpoint, though shared by many, is characterized by Peter Brookes who claims that Ankara is already considering its nuclear options.¹⁵

Iran

I have chosen to use Iran as my first case study because it demonstrates the most difficult test of my hypothesis, especially since it has gone to great lengths to defy the International Atomic Energy Agency (IAEA) with regard to its enrichment projects, but some clarification is necessary. First, it should be noted that Iran began its "modest nuclear programme" in the 1960s under rule of the Shah. At this time, explains Emanuele Ottolenghi, author of *Iran: The Looming Crisis*, prestige was a strong motivating factor for nuclear research and nuclear weapons proliferation.¹⁶ Iran's current efforts to enrich uranium must be understood in this context, for enrichment began far before the multipolar system began to emerge.

¹⁵ Peter Brookes, "Post Iran Proliferation Cascade," *The Journal of International Security Affairs* 19 (2010): p. 11.

¹⁶ Emanuele Ottolenghi, *Iran: The Looming Crisis* (New York: Profile Books, 2009): pp. 22-23.

CHAPTER 2 THEORY

As mentioned in the introduction, the National Intelligence Council is predicting, “Over the next 15-20 years, reactions to the decisions Iran makes about its nuclear program could cause a number of regional states to intensify these efforts and consider actively pursuing nuclear weapons.”¹⁷ The report continues, “...[E]ven an Iranian *capacity* to develop nuclear weapons might prompt regional responses that could be destabilizing.”¹⁸ The report does not predict, however, that nuclear proliferation is inevitable, even in Iran. Tehran, claims the NIC, may choose to forgo weaponization over “technological impediments” or the desire to integrate its economy with that of the international system.¹⁹ The report glances quickly over this prospect, however, and sensationally predicts that the Middle East will become “*Potentially More Dangerous than the Cold War*,”²⁰ despite the fact that the NIC lists an arms race in the Middle East as one of its *Key Uncertainties*.²¹

¹⁷ National Intelligence Council, *Global Trends 2025*, p. 61.

¹⁸ *Ibid.*, p. 62.

¹⁹ *Ibid.*, p. 61.

²⁰ *Ibid.*, p. 62.

²¹ *Ibid.*, p. v.

Why would the NIC predict such a pessimistic fate for the Middle East despite all that is known about the inaccuracies of nuclear weapons forecasts as demonstrated in the introduction of this study? The answer is simple. Despite hedging that a multi-state arms race in the Middle East is not inevitable, they fall victim to traditional realist theories that have been proven incomplete. The NIC report focuses particularly on the Middle East, but analysts have been predicting that other states are at risk of proliferation as well, for example Japan, South Korea, and even Brazil just to name a few. The goal of this thesis is not specifically to counter the claims of the NIC in *Global Trends 2025*, but rather to explore the actual effects of the changes of the international system on nuclear weapons proliferation around the world. This chapter will examine the historic assumptions of changes in the international system (particularly multipolar systems) followed by predictions of the emerging multipolar international system.

Neo Realist Assumptions

The NIC report mentioned above demonstrates, “Historically, emerging multipolar systems have been more unstable than bipolar or unipolar ones,”²² a traditional neorealist expectation as explained by Jack Donnelly.²³ Hans Morgenthau, one of the founders of contemporary realism, best explains this assumption and explains that multipolar systems increase uncertainty, and thus increase caution.²⁴ Also, in

²² National Intelligence Council, *Global Trends 2025*, p. vi.

²³ Jack Donnelly, "Realism." in *Theories of International Relations*, ed. Scot Burchill and Andrew Linklater (New York: Pelgrave MacMillan, 2009), p. 40.

²⁴ Hans Morgenthau, *Politics among Nations*, 5th Edition, (New York: Alfred A. Knopf, 1973), p. 121.

multipolar systems, Morgenthau claims, even small states can make a big impact.²⁵ This is likely to be the case in the emerging system, as we already see smaller states like Pakistan or Yemen playing a major role in international security, even if in a different capacity than Morgenthau would have assessed. In a system in which states cannot rely on allies, it is easy to understand why smaller states vulnerable to another state's nuclear arsenal will attempt to close a security gap with a nuclear arsenal of their own.

More recently, John Mearsheimer has emphasized the uncertainty and dangers of multipolar systems complementing the work of Morgenthau demonstrated above. Mearsheimer bluntly proclaims, "War is more likely in multipolarity than bipolarity...."²⁶ He lists three reasons why, which deserve listing here. First, Mearsheimer argues, "There are more opportunities for war, because there are more potential conflict dyads in a multipolar system."²⁷ This is one reason many analysts believe that states will choose nuclear weapons in order to ensure their security in an environment where war is more likely. Second, Mearsheimer argues, "Imbalances of power are more commonplace in a multipolar world, and thus great powers are more likely to have the capability to win a war, making deterrence more difficult and war more likely."²⁸ Again, in such an environment, states should have an incentive to pursue nuclear weapons in order to balance against these great powers, which are now more likely to wage war. Finally,

²⁵ Hans Morgenthau, *Politics among Nations*, p. 121.

²⁶ John J. Mearsheimer, *The Tragedy of Great Power Politics* (New York: W. W. Norton & Company, 2001), p. 338.

²⁷ *Ibid.*

²⁸ *Ibid.*, p. 338.

Mearsheimer's third argument explains, "The potential for miscalculations is greater in multipolarity: States might think they have the capability to coerce or conquer another state when, in fact, they do not."²⁹ Again, this argument emphasizes the unpredictability of the multipolar systems.

The above-assumed characteristics of multipolar systems have led many nuclear forecasters to predict widespread proliferation. In fact, Mearsheimer made this claim himself in a famously contested article, "Back to the Future: Instability in Europe after the Cold War." In predicting a multipolar Europe after the end of the Cold War, Mearsheimer infamously predicts that nuclear weapons will also spread across the continent, particularly to Germany and the "minor powers of Eastern Europe."³⁰

An interesting note with regard to uncertainty is that risk also becomes more uncertain, and thus, states take as little risk as possible.³¹ Scott Sagan similarly argues that balance of power politics and the security dilemma actually *deters* proliferation in many cases, thus making the world safer. "Restrained policies that appear to some scholars to be the result of ethical considerations," Sagan argues, "are often actually the calculated pursuit of long-term national security interests." He continues, "This is the case when the nonuse of such weapons is due to a fear that an adversary would take your military action as a precedent or excuse to do something that you do not want to see

²⁹ John J. Mearsheimer, *The Tragedy of Great Power Politics*, p. 338.

³⁰ John J. Mearsheimer, "Back to the Future: Instability in Europe After the Cold War," *International Security* 15, no. 1 (Summer 1990): p. 36.

³¹ Hans Morgenthau, *Politics among Nations*, p. 342.

happen in the future.”³² This means that, for example, if Turkey attempts to counter the nuclear aspirations of Iran, it could push Iran over the proverbial tipping point in order to balance the intentions of Turkey. Thus, Turkey has only created the very undesirable outcome it was looking to avoid in the first place.

Avoidance of risk, however, does not determine whether a state will pursue nuclear weapons or not. A state could be attempting to avoid risk of becoming vulnerable to a state with nuclear weapons. On the other hand, proliferation can be risky in itself. States can be subject to harsh sanctions, isolation from the international community, and even military intervention. For some states, they are already isolated, and are not in a position in which sanctions are particularly harmful (or they do not care about sanctions for one reason or another). Thus, uncertainty is not decisive in tipping a state one way or the other, but can instead help the analyst determine which would be more risky for a particular state.

With regard to nuclear weapons, Kenneth Waltz has spent much time and effort exploring the characteristics of polarity in the international system, and two of his ideas are particularly important to examine in this study, as they echo the arguments of Morgenthau and Mearsheimer, which predict that nuclear weapons proliferation will increase in the multipolar future. The first is that states cannot be certain of other states’ actions.³³ Also, states’ relative capabilities will change in unforeseen ways in the

³² Scott Sagan, “Realism, Ethics, and Weapons of Mass Destruction,” in *Ethics and Weapons of Mass Destruction*, ed. Sohail Hashmi and Steven Lee, (Cambridge: Cambridge University Press, 2004), p. 76.

³³ Kenneth N. Waltz, *Theory of International Politics*. (Boston: McGraw-Hill, 1979), p. 70.

future.³⁴ Thus, states are “unwilling to make any move that results in any deterioration of their existing position,”³⁵ and states will most likely conclude that nuclear weapons will mitigate the uncertainty and vulnerability experienced under multipolarity and maintain their positions within the system.

Indeed, the theory seems to demonstrate that multipolarity will lead to a less predictable and less stable security environment for a variety of states, even if states calculate they are better off not making efforts to close capability gaps as explained by Sagan or receive security assurances from more powerful states. Just as Mearsheimer got it wrong in 1988, analysts predicting nuclear cascade have gotten it wrong this time by examining the theory in a vacuum and not considering other aspects of the emerging system. According to the literature to be reviewed below, some aspects will stay the same, such as international organizations, international agreements, and norms. Indeed, no enforcement mechanism is strong enough to keep states from proliferating, as we have seen before, but the factors just mentioned will still play a strong role, as will security assurances. Furthermore, the NIC has gotten it wrong by extrapolating significant shifts in economic balance of power to the military realm.

Security assurances can mitigate uncertainty. As Morgenthau explains, states will continue to prefer to work with allies, but that states cannot be certain allies will stay “on side.”³⁶ Many observers are predicting an end of a few security assurances that have

³⁴ Kenneth N. Waltz, *Theory of International Politics*, p. 196.

³⁵ Ibid.

³⁶ Hans Morgenthau, *Politics among Nations*, pp. 342, 121.

traditionally kept states under the nuclear umbrella of the United States, particularly with regard to Turkey. This will be elaborated upon below.

Richard Haass explains how the emerging system will reflect this theory, “[N]onpolarity will also increase the number of threats and vulnerabilities facing a country....”³⁷ Haass claims that Iran’s pursuit of nuclear weapons is a result of this. He explains:

Thanks more than anything to the surge in oil prices, it has become another meaningful concentration of power, one able to exert influence in Iraq, Lebanon, Syria, the Palestinian territories, and beyond, as well as within OPEC. It has many sources of technology and finance and numerous markets for its energy exports. And due to nonpolarity, the United States cannot manage Iran alone. Rather, Washington is dependent on others to support political and economic sanctions or block Tehran's access to nuclear technology and materials. Nonpolarity begets nonpolarity.³⁸

With the exception of Haass, the claims by the theorists examined above that dominate the field were formed before anyone could decide, or even hope to foresee, what the future international system will look like. Unlike Waltz and Mearsheimer (at the time), and especially Morgenthau, we now have a clearer picture of the emerging international system.

The Emerging System Will Defy Realist Assumptions

Analysts hoping to predict the extent of future nuclear weapons acquisition should not rely too heavily on the above assumptions as too many have already done. To clarify, it is not my intention to refute the above realist claims. Rather, I intend to demonstrate

³⁷ Richard N. Haass, "The Age of Nonpolarity: What will Follow U.S. Dominance." *Foreign Affairs* (May/June 2008): p. 5.

³⁸ *Ibid.*

that the above claims are not sufficient in explaining nuclear weapons decisions under the characteristics of the emerging intentional system, which includes the addition of other material factors (economic concerns and capacity) as well as ideational factors. As Jack Donnelly explains, the expectations of structural realism are not determinant factors, merely exogenous pressures that push states in one way or another.³⁹ Additionally, sometimes, or perhaps always, other forces are more important.⁴⁰ Kenneth Waltz has even made this argument himself. He explains:

A neorealist theory of international politics explains how external forces shape states' behavior, but says nothing about the effects of internal forces. Under most circumstances, a theory of international politics is not sufficient, and cannot be made sufficient, for the explanation of foreign policy. An international political theory can explain states' behavior only when external pressures dominate the internal disposition of states, which seldom happens. When they do not, a theory of international politics needs help.⁴¹

The question remains, the question this paper will answer, “do these exogenous factors outweigh the endogenous factors?” Furthermore, “are there additional external factors in addition to shifting balances of power?” Therefore, the following review of literature will examine the characteristics of the emerging system and determine what forces are at play while also addressing main themes of emerging theories of nuclear weapons proliferation.

³⁹ Jack Donnelly, *Theories of International Relations*, p. 41.

⁴⁰ *Ibid.*, p. 41.

⁴¹ Kenneth Waltz, “Neorealism: Confusions and Criticisms,” *Journal of Politics and Society* 14 (2004): p. 3.

Characteristics of The Emerging Multipolar System

The world is moving away from the multipolar system that emerged after the end of the Cold War, this much is clear. What is not clear, however, is what kind of system is emerging. Commentators agree that the emerging international system differs from previous multipolar systems, but not all agree that the future will indeed be multipolar. Some analysts predict various systems such as an *interpolar* system, and even a *nonpolar* system. Even among analysts that are arguing that the emerging system is multipolar, they do not necessarily agree on the characteristics of the emerging system. I do not expect to definitively settle the issue of what the emerging system will look like; however, as I will demonstrate, each of these hypotheses has common characteristics that inform whether or not states will wish to seek nuclear weapons under the emerging international system. The following section will outline a few different theories and hypotheses. Some major themes of the emerging international system include: stability, economic interdependence, and a reliance on ethics and norms. I will examine the emerging system in terms of the variables I explained in the introduction.

Security Environment

As explained above, realists would assume that the changing security environment of the emerging system will lead to an increase in proliferation. The security environment of a state remains an important variable to address, even in the emerging international system. As Scott Sagan explains, "...[S]tates build nuclear weapons to increase national security against foreign threats, especially nuclear

threats.”⁴² Likewise, Joseph Cirincione argues “The national security model remains the leading explanation for nuclear proliferation and is based in the long-standing international relations theory of realism.”⁴³ Thus, Cirincione concludes,

Nuclear weapons, from this perspective, are the ultimate security guarantor.... When a state faces an acute threat to its security such as a potential adversary developing nuclear weapons, then that state will almost certainly have to match that capability or risk its very existence.⁴⁴

Security assurances, on the other hand, work as a motivating force against nuclear weapons proliferation. South Korea is a good example of this. Because of a strong security assurance from the United States, it has not, thus far, pursued a nuclear deterrent capability of its own. The logic is simple. States pursue nuclear weapons programs in order to balance against threats presented by other states. But, if a state facing threats can receive an assurance from a state strong enough to balance against such a threat, states can, and will, choose this option instead. Negative security assurances, as Scott Sagan explains, are not effective in curbing the spread of nuclear weapons. He argues that they might “be helpful in the short-run, but will likely not be effective in the long-term given the inherent suspicions of potential rivals produced by the anarchic international system.”⁴⁵

Even though the security model is relied upon too heavily, it is vital to examine in any analysis of nuclear proliferation. The global security environment, however, is not

⁴² Scott D. Sagan, “Why do States Build Nuclear Weapons?” p. 55.

⁴³ Joseph Cirincione, *Bomb Scare: The History and Future of Nuclear Weapons* (New York: Columbia University Press, 2007), p. 51.

⁴⁴ *Ibid.*, p. 51.

⁴⁵ Scott D. Sagan, “Why do States Build Nuclear Weapons?” p. 62.

changing in the way that the casual claims of many observers indicate. Thus, I will examine the security environments of Iran, and particularly Turkey, in terms of the emerging global system. The security environment of the emerging system, however, will not revert back to the anarchic uncertainty that realist theory predicts.

Perceptions of power and security will change in the emerging system. Giovanni Grevi argues that the emerging system should focus more on the evolution of the relationships of the states and actors within the system.⁴⁶ He continues, “[P]ower cannot only be measured relative to that of others, but should also be assessed relative to the changing level playing field of international relations and to the prevailing perceptions and expectations therein.”⁴⁷

The first important characteristic of the emerging international system is that it will be more stable than traditionally assessed. Ariel Ilan Roth explains that one of the basic assumptions of the causes of instability of multipolar systems is inaccurate. Roth argues that buckpassing, contrary to popular belief, does not foster instability in a multipolar international system. He claims:

[T]he long debate over the relationship between systemic structure and systemic stability, which has been heavily influenced by the belief in the existence of an incentive to externalize defense costs under multipolarity, must be re-examined, with new tests run and new conclusions explored.⁴⁸

⁴⁶ Giovanni Grevi, "The Interpolar World: A New Scenario." Occasional Paper, European Union Institute for Security Studies (2009), p. 22.

⁴⁷ Ibid., p. 23-24.

⁴⁸ Ariel Ilan Roth, "Nuclear Weapons in Neo-Realist Theory," *International Studies Review*, no. 9 (2007): p. 369.

Buckpassing, Roth explains, occurs in multipolar systems because states may constitute a threat to multiple other states. Thus, a state may be tempted to externalize its security costs by passing the costs on to a third state in hopes that the third state's efforts to balance against a potential aggressor will be sufficient to secure itself.⁴⁹ Thus, conventional wisdom, as Roth indicates, has demonstrated that strong incentives to buckpass create instability in multipolar systems; however, the notion of buckpassing is rooted in a faulty understanding of British behavior before World War II. He explains that a closer examination of the empirical evidence "shows that rather than externalizing defense efforts, the relevant state incurred significant expense and made strenuous efforts to balance the power of its putative rival."⁵⁰

Roth demonstrates that one of the key premises upon which the assumption that multipolar systems are less stable than bipolar systems depends is a falsified premise but falls short of claiming that multipolar systems are *not* less stable than bipolar or unipolar systems.⁵¹ Roth explains that these fears are based on faulty assumptions, and that these fears have become assumptions of multipolar systems. Thus, the fears that the emerging multipolar system will be unstable are not entirely founded.

Likewise, Randall L. Schweller further demonstrates how the emerging multipolar system may not be unstable as previously believed by utilizing the Second Law of Thermodynamics and entropy as a theoretical framework. System *processes* as opposed to system *structures*, argues Schweller, best explain international process. "And

⁴⁹ Ariel Ilan Roth, "Nuclear Weapons in Neo-Realist Theory," p. 370.

⁵⁰ Ibid., p. 369.

⁵¹ Ibid., p. 384.

this process,” he continues, “is one of entropy.”⁵² Entropy, Schweller explains, is closely related with “disorder and chaos because random configurations have a higher probability of occurring more than more ordered ones.”⁵³ With high levels of entropy, a system cannot return to its previous energy state.⁵⁴ He explains:

[M]aximum entropy (final equilibrium) will be reached when power capabilities diffuse to other actors and none has any incentive to move from this condition; that is, when there is equal energy among the primary units of the system (the poles). At this point, the system will have reached a very unique form of multipolarity—one that has never been seen before but whose arrival has been predicted since the early 18th century.⁵⁵

Haass also addresses the entropy that will occur in the nonpolar, or multipolar, system, “[L]eft to its own devices, a nonpolar world will become messier over time.” He continues, “Entropy dictates that systems consisting of a large number of actors tend toward greater randomness and disorder in the absence of external intervention.”⁵⁶ The important aspect with regard to entropy is Schweller’s assessment that states will not have an incentive to move from the conditions once maximum entropy is reached. This means that, once maximum entropy is reached, states that do not have nuclear weapons will not pursue them, which would disrupt the order of the system.

⁵² Randall L. Schweller, "The Problem of International Order Revisited: A Review Essay." *International Security* 26, no. 1 (Summer 2001): p. 145.

⁵³ *Ibid.*, p. 148.

⁵⁴ *Ibid.*

⁵⁵ Randall L. Schweller, "The Problem of International Order Revisited," p. 158.

⁵⁶ Richard Haass, "The Age of Nonpolarity," p. 7.

Economic Interests

The balance of power in the emerging system is not shifting only between nation states, but also non-state actors. Haass explains that the emerging system will have a diffuse balance of power among a variety of state and non-state actors. He explains:

States are being challenged from above, by regional and global organizations; from below, by militias; and from the side, by a variety of nongovernmental organizations (NGOs) and corporations. Power is now found in many hands and in many places.... Today's world is increasingly one of distributed, rather than concentrated power.⁵⁷

Finally, and perhaps most importantly, the emerging international system will be characterized by economics shifts, not shifts in military power. In addition to this diffuse base of power, Haass also emphasizes the importance of regional actors in addition to the 6 major world powers (which he labels as China, the European Union, India, Japan, Russia, and the United States). Some of these regional powers, such as Israel and Pakistan are currently nuclear weapons states. Others, such as Egypt, Iran, Saudi Arabia, and South Korea are believed to be among those at highest risk to pursue nuclear weapons. Even with these emerging powers—both globally and regionally—the United States will remain the world's foremost superpower by far with regards to military power well into the future.

Grevi explains that understanding the relationship between states, particularly with regard to economics, is crucial in understanding all aspects of the future international system. He explains,

Today, the international system is marked by deepening, existential interdependence. Interdependence is existential when its mismanagement can threaten not only the prosperity but the political stability and ultimately, in

⁵⁷ Richard Haass, "The Age of Nonpolarity," p. 2.

extreme cases, the very survival of the actors that belong to the system. Under this unprecedented condition, the ability to shape multilateral cooperation or lead collective action in addressing international challenges becomes a central feature of power.⁵⁸

One of the more notable observations by Grevi is his interpretation of *how* the balance is shifting. Traditionally, observers and theorists interpret any shift of power or balance as a unitary quantity encompassing all aspects of state power like economics, the military, and prestige. Grevi explains that the shift is primarily economic power, not military power.⁵⁹ “The broader political point,” explains Grevi, “is of course that a world where three of the five largest economies will be Asian (China, Japan, and India) will be a very different place.”⁶⁰ This is a key observation. Traditionally, structural realist thinking places the emphasis primarily on the military balance, and how states balance with regard to military threats. Grevi, however, emphasizes that economics will be the primary driver of balance shifts in the emerging international system. Economic power struggles are markedly different than military power struggles, and this should be taken into account when thinking about the emerging multipolar systems. What is good for a state pursuing economic security is not the same as what is good for a state pursuing conventional security. Although, China, India, and Japan are not only economic rivals, they are also security rivals. India and China already have nuclear weapons, but what about Japan? Could they change course and seek nuclear weapons in order to gain

⁵⁸ Giovanni Grevi, "The Interpolar World," p. 23-24.

⁵⁹ Ibid., p. 17.

⁶⁰ Ibid., p. 18.

security in an age where resources and economic interests may need to be secured from economic and security rivals (read: China)?

Haass also highlights the importance economics plays in the emerging international system. Not only is the American GDP increasing, that of other states is increasing. Haass explains further:

GDP growth is hardly the only indication of a move away from U.S. economic dominance. The rise of sovereign wealth funds -- in countries such as China, Kuwait, Russia, Saudi Arabia, and the United Arab Emirates -- is another. These government-controlled pools of wealth, mostly the result of oil and gas exports, now total some \$3 trillion.⁶¹

Additionally, globalization is a leading cause of change in the international system and the interconnectedness that characterizes it. Haass argues:

Globalization reinforces nonpolarity in two fundamental ways. First, many cross-border flows take place outside the control of governments and without their knowledge. As a result, globalization dilutes the influence of the major powers. Second, these same flows often strengthen the capacities of nonstate actors, such as energy exporters (who are experiencing a dramatic increase in wealth owing to transfers from importers), terrorists (who use the Internet to recruit and train, the international banking system to move resources, and the global transport system to move people), rogue states (who can exploit black and gray markets), and Fortune 500 firms (who quickly move personnel and investments).⁶²

It is important to note that, while also constraining states, interconnectedness and globalization also empowers states in ways that were not possible under the bipolar or unipolar systems of the last century. Haass concludes, “It is easier than ever before for individuals and groups to accumulate and project substantial power.”⁶³

⁶¹ Richard Haass, “The Age of Nonpolarity,” p. 2.

⁶² Ibid., pp. 4-5.

⁶³ Ibid.

Fareed Zakaria also emphasizes the rise of non-state actors. “Groups and individuals have been empowered,” explains Zakaria, “and hierarchy, centralization, and control are being undermined.” He continues, “Functions that were once controlled by governments are now shared with international bodies like the World Trade Organization and the European Union.”⁶⁴

One of the most important aspects that is overlooked when speaking of the emerging international system is that the United States will still remain as the world’s strongest power, especially in terms of military strength. While it is true that the relative power and influence of the United States is declining, and in turn that of the rest of the world is increasing, analysts casually including the changing international system within their reports grossly over estimate the degree of relative power shifts.

Like the authors discussed above, he also claims that the shift away from unipolarity is based mostly on economic strength, not military strength. These shifts, claims Zakaria, are occurring in every other realm as well, *except militarily*.⁶⁵ Like the other authors, Zakaria also recognizes that the United States will remain the most powerful and most influential player. Zakaria suggests, that instead of multipolarity, the emerging system more closely resembles Samuel Huntington’s “uni-multipolarity,” or what Chinese politicians refer to as “many powers, and one superpower.”⁶⁶ “The messy language,” explains Zakaria, “reflects the messy reality.”⁶⁷ Zakaria claims, “We are now living through the third great power shift of the modern era,” an era he refers to as, “the

⁶⁴ Fareed Zakaria, *The Post American World*, (New York: Norton, 2009), p. 4.

⁶⁵ *Ibid.*, p. 43.

⁶⁶ *Ibid.*

⁶⁷ *Ibid.*

rise of the rest.”⁶⁸ “Over the past few decades,” he continues, “countries all over the world have been experiencing rates of economic growth that were once unthinkable.”⁶⁹ This robust economic growth, Zakaria claims, “is creating an international system in which countries in all parts of the world are no longer objects or observers but players in their own right.”⁷⁰

Grevi addresses military and political constraint and empowerment to be experienced by actors throughout the globe. Grevi argues, “[T]he deterrent function of military power (notably when used asymmetrically) is acquiring increasing political relevance.”⁷¹ He continues, “In short, from a political-strategic standpoint, it can be argued that military power is increasingly a form of negative power, or power of denial.”⁷² This concept is particularly important in terms of nuclear proliferation, as the power of denial is one of the main external factors at play. We have seen this many times over from both the United States and Israel. The United States went to war in Iraq over the auspices of an Iraqi nuclear program. This is the most extreme example. Israel has also bombed nuclear sites in Iraq as well as in Syria. Finally, the Stuxnet virus that sabotaged Iranian centrifuges is another form of states trying to deny nuclear weapons to other states. This also plays a large role in resource scarcity, which may cause increased conflict. Grevi also explains, however, that the outreach of states other than the US or

⁶⁸ Fareed Zakaria, *The Post American World*, p. 2.

⁶⁹ Ibid.

⁷⁰ Ibid., p. 3.

⁷¹ Giovanni Grevi, "The Interpolar World," p. 21.

⁷² Ibid.

those in the EU is constraining western political influence.⁷³ Grevi concludes this discussion by arguing that negative power contains some short-term benefits, but ultimately more risky long-term effects.⁷⁴

But it is important that Grevi explains that this won't happen naturally—it is going to take serious effort on all parts of the international system to reconcile its inevitable differences, especially with regard to resource scarcity and energy. Furthermore, Grevi explains the importance of addressing the threat of the spread of nuclear weapons as an issue on which the international community will need to cooperate.⁷⁵

Haass adds to this sentiment by explaining that alliances and partnerships will “lose much of their importance.”⁷⁶ Whereas these two authors don't specifically claim that the international community will be pressured into forming partnerships and multilateral institutions, both emphasize that the unpredictability and serious issues that need to be addressed give serious incentives for the international community to cooperate. Haass concludes:

...[E]ncouraging a greater degree of global integration will help promote stability. Establishing a core group of governments and others committed to cooperative multilateralism would be a great step forward. Call it "concerted nonpolarity." It would not eliminate nonpolarity, but it would help manage it and increase the odds that the international system will not deteriorate or disintegrate.⁷⁷

⁷³ Giovanni Grevi, "The Interpolar World," p. 21.

⁷⁴ Ibid., p. 22.

⁷⁵ Ibid., p. 24.

⁷⁶ Richard Haass, "The Age of Nonpolarity," p. 7.

⁷⁷ Ibid.

As Etel Solingen explains that the political economy of a state is a large indicator of its nuclear decisions:

Inward-looking models [of economic development] approximate necessary if not sufficient conditions for nuclear weapons programs. Internationalizing models are not necessary but likely to be sufficient for denuclearization except under two circumstances: (a) when neighboring inward-looking regimes seek nuclear weapons (or other WMD); and (b) when nuclear weapons were acquired prior to the inception of internationalizing models.⁷⁸

Thus, the decision to nuclearize, based on Solingen's conceptual framework, is a calculation based on the political survival of the ruling regime. Stephen F. Burgess demonstrates how this model pertains to the Libyan rollback from nuclear weapons. Qaddafi, explains Burgess, was fearing a growing movement challenging his power in the country, and rolled back the nuclear weapons program in order to win over the "hearts and minds" of the Libyan people, which could not be done while pursuing nuclear weapons.⁷⁹ As we see citizens of several countries throughout the Middle East rise up in opposition of oppressive leadership, is it possible that leadership in other states will come to the same conclusion, perhaps Syria or even Iran?

T.V. Paul argues, at least in some cases, economic interdependence decreases a state's desire to pursue nuclear weapons. He further argues, "The economic interdependence of today is different from any in previous eras in terms of institutions, scale, and depth."⁸⁰ He argues with regard to Germany, "Unilateral nuclear armament

⁷⁸ Etel Solingen, *Nuclear Logics: Contrasting Paths in East Asia and the Middle East*, (Princeton: Princeton University Press, 2007), p. 46.

⁷⁹ Stephen F. Burgess, "Proliferation Reversals/Rollbacks in Africa: South Africa and Libya." (n.d.), p. 12.

⁸⁰ T.V. Paul, *Power Versus Prudence: Why Nations Forgo Nuclear Weapons* (Montreal: McGill-Queen's University Press, 2000), p. 58.

would run counter to German interest in integrating with [European] economies and playing a larger role in these countries. With the end of the Cold War, Germany's security interdependence with other European states has increased, making it more difficult for it to acquire an independent nuclear capability."⁸¹ Although Germany is an extreme case, this logic applies to other states as well. States are less likely to have conflict or go to war with states if they are closely linked economically.⁸² If a state in a close economic relationship with other states were to choose to pursue nuclear weapons, its economic interests would surely suffer as its economic partners attempt to dissuade it from its decisions. As the theories demonstrated above, incentives for states to form economic partnerships are increasing dramatically; thus we should see a reduction in motivation to pursue nuclear weapons.

Ideational Factors

Another way the emerging multipolar system differs from previous assessments of multipolar systems is that ideas, norms, and identities play a larger role. For example, Schweller claims, "[T]he social structure (or social purpose) of a given unipolar system, *not its material structure*, determines the kind of politics that take place within the system and the constraints exerted on the actors" (emphasis added).⁸³ Schweller argues that, had the Soviet Union won the Cold War, "Its unipolar system would likely have been

⁸¹ T.V. Paul, *Power Versus Prudence: Why Nations Forgo Nuclear Weapons*, p. 47.

⁸² *Ibid.*, p. 9.

⁸³ Randall L. Schweller, "The Problem of International Order Revisited," p. 147.

dominated by brute force and coercion.”⁸⁴ Schweller argues, states in the current international system no longer have an incentive to aggressively expand, nor do other states in the system fear this is so. And, without these expectations of conquest, the complexity and uncertainty of the multipolar system should not cause instability.⁸⁵ Schweller argues that this leads to a lack of constraints in the international system, not continued restraint by the United States.⁸⁶ Schweller, however, wrote before the establishment of the preemption doctrine, which has demonstrated that the United States is prepared to project its power overseas. Some states may see the preemption doctrine as a sign that they need to take precautions against becoming the next target of a state seeking to increase its own security to prevent preemptive attacks.

Haass also explains why the “unipolar moment” has ended. States develop; they get better at generating and piecing together the human, financial and technological resources that lead to productivity and prosperity.⁸⁷ Thus, this indicates the rise of many more actors, and can certainly lead to the decline of the United States.

Likewise, Martha Finnemore acknowledges that the emerging system will differ from previous multipolar systems in that norms and legitimacy characterize the emerging system. She explains, “The U.S.-favored liberal model of free markets and democracy became the model of choice for states around the world not through overt U.S. coercion, but in significant part because states and publics had accepted it as the best (ergo most

⁸⁴ Randall L. Schweller, "The Problem of International Order Revisited," p. 146.

⁸⁵ Ibid., p. 157.

⁸⁶ Ibid.

⁸⁷ Richard Haass, “The Age of Nonpolarity,” 4.

legitimate) way to run a country.”⁸⁸ She continues, “...[T]he structure of world politics, however, is social as much as it is material.”⁸⁹ She explains further, “Social structures of norms concerning sovereignty, liberalism, self-determination, and border rigidity (among other things) have changed over time and create vastly different political dynamics among these systems.”⁹⁰ As the United States enjoyed hegemony in both the bipolar system, and the unipolar system that followed, it set in place certain sets of rules and institutions. Finnemore explains, “To exercise power effectively, unipoles must legitimate it and in the act of legitimating their power, unipoles must diffuse it.”⁹¹ Through the use of norms and legitimate institutions used to further the interest of the United States, they became an important part of the new international system.

In addition to the above assessments of the emerging international system, Giovanni Grevi and Richard N. Haass present two alternatives: the *interpolar system* and the *nonpolar system*, respectively. Grevi claims that the emerging international system is an “unprecedented configuration of international relations,” and defines the interpolar system as “multipolarity in an age of interdependence” coupled with the “redistribution of power at the global level.”⁹² Grevi focuses on “what brings major powers together,”

⁸⁸ Martha Finnemore, "Legitimacy, Hypocrisy, and the Social Structure of Unipolarity: Why Being a Unipole Isn't All It's Cracked Up to Be." *World Politics* 61, no. 1 (January 2009): p. 84.

⁸⁹ *Ibid.*, p. 58.

⁹⁰ *Ibid.*, p. 59.

⁹¹ *Ibid.*, p. 60.

⁹² Giovanni Grevi, "The Interpolar World: A New Scenario," p. 9.

as opposed to “what sets them apart.”⁹³ Grevi claims that interdependence and a continuation of asymmetric balance of power will constrain states from acting unilaterally or independently of others.⁹⁴ This demonstrates that states will still be constrained by certain forces and states in the international system, while simultaneously becoming less constrained in other areas. For my purposes, this demonstrates that, even though states like Turkey, Syria, and South Korea are less constrained by the international system, the international system is still arranged in a way that constrains them from pursuing nuclear weapons due to not only norms and international organizations (namely the NPT), but also pressure from other countries (namely the United States). Much research has been conducted on the role that norms play with regard to the proliferation and use of nuclear weapons including Scott Sagan, Nina Tannenwald, Maria Rublee, and T.V. Paul.

Sagan demonstrates that prestige, in what he refers to as the Norms Model, “focuses on norms concerning weapons acquisition, seeing nuclear decisions as serving important symbolic functions—both shaping and reflecting a state’s identity.”⁹⁵ France is an excellent example of how prestige can drive proliferation. De Gaulle believed that nuclear weapons would help restore France as a great power—to its rightful position in the world.⁹⁶ In this case, nuclear weapons become more of a political tool rather than a military weapon. The French bomb also illustrates an important point about how the

⁹³ Giovanni Grevi, “The Interpolar World: A New Scenario,” p. 10.

⁹⁴ *Ibid.*, p. 17.

⁹⁵ Scott D. Sagan, “Why do States Build Nuclear Weapons?” p. 73.

⁹⁶ *Ibid.*, p. 78.

global system can affect nuclear calculations. De Gaulle chose to pursue his bomb in a time when French prestige was at a low point, because only the United States and the Soviet Union remained as global superpower after World War II. In this case, the bipolar system was a motivating factor for France to balance the power of the United States in order to enhance its prestige.

Conversely, prestige can drive states to roll back, or forego, proliferation. Though, “It took some time for this non-nuclear position to prevail,”⁹⁷ as Cirincione explains, non-proliferation has become a strong norm throughout the international community. Today, 189 states are party to the Nuclear Non-Proliferation Treaty (NPT), and nuclear weapons free zones exist in Latin America, Africa, South Asia, Southeast Asia/Pacific, Antarctica, the seabed, and outer space. States can find prestige in leadership positions with regard to nonproliferation movements.⁹⁸ Further, with regard to rollback specifically, Ukraine found non-proliferation norms and abandonment of their inherited nuclear arsenal as a way to enhance their international standing, according to Sagan.⁹⁹ In this case, this demonstrates a desire of some states to work more closely with the international system, and, as I will demonstrate below, this will likely increase in the emerging multipolar system.

Maria Rublee goes beyond the argument made by Sagan. She argues, “Though it has taken a variety of forms, the rough normative trajectory within the international social

⁹⁷ Joseph Cirincione, *Bomb Scare*, p. 61.

⁹⁸ *Ibid.*, p. 62.

⁹⁹ Scott D. Sagan, “Why do States Build Nuclear Weapons?” p. 80.

environment has been to delegitimize nuclear weapons.”¹⁰⁰ Rublee argues that norms of nonproliferation are cemented in the formalization of the NPT, and, through this formalization, “potential proliferators must face this norm and risk defying it.”¹⁰¹ She acknowledges that the formalization of the NPT is not enough to keep states from pursuing nuclear weapons, even among signatories to the treaty, but “[W]ithout the NPT, the nuclear nonproliferation norm had no official platform from which to be activated....The more the nuclear nonproliferation norm is activated, the more likely policymakers are to commit to forgoing nuclear weapons.”¹⁰² Not only have norms stemmed from ethical and moral assessments of nuclear weapons, they have also changed the way states think about proliferation by shifting the cost-benefit analysis away from simple threat analysis. Rublee explains, “The NPT created social and material incentives for forgoing nuclear weapons as well as making it technically and practically difficult to develop a nuclear weapons program.”¹⁰³ The summary of her argument is as follows:

...[T]he international social environment, supported by first an emergent and then a full-fledged nuclear nonproliferation regime, has helped to provide that systemic impetus toward nuclear nonproliferation. The emerging antinuclear norm led to the development of the nuclear non-proliferation regime, which set forth a clear inductive norm against nuclear proliferation; and then as states acceded to the treaty, the expanding regime established a descriptive norm against nuclear proliferation as well. The negotiations to create the regime, and the regime itself, communicated that a nuclear weapons program was a violation of international norms, instead of an act of national pride. In addition, international legitimacy

¹⁰⁰ Maria Rost Rublee, *Nonproliferation Norms: Why States Choose Nuclear Restraint* (Athens: University of Georgia Press, 2009), p. 37.

¹⁰¹ *Ibid.*, p. 47.

¹⁰² *Ibid.*, pp. 48-49.

¹⁰³ *Ibid.*, p. 50.

was linked to nuclear nonproliferation; members of the international community were expected to comply.¹⁰⁴

Finally, ideational factors also include the psychology of the leadership, based on the research of Jacques Hymans. Hymans explains that proliferation depends on the personality of a state's leadership. Whereas this model goes beyond domestic politics to the individual level of analysis, the leader ultimately makes a decision on the domestic political level. Hymans explains, "[L]eaders who hold a 'national identity conception' of 'oppositional nationalism' have a strong emotional tendency to decide to go for an actual operational nuclear arsenal."¹⁰⁵ Whereas it is easy to see this principle demonstrated using North Korea as an example (Kim Jong Il is nothing if not an "oppositional nationalist"), India is a more nuanced example demonstrating how this principle plays out in domestic politics. On the other hand, three other national identity conceptions, according to Hymans, will ultimately choose to forgo nuclear weapons. These national identity conceptions include: oppositional subaltern, sportsman like nationalist, and sportsmanlike subaltern.¹⁰⁶

Indira Gandhi, and the BJP after the Cold War, is often given credit (or blame) with regard to India's path to the bomb. Indira Gandhi possessed the characteristics of the "oppositional nationalist" and believed that a bomb was needed to keep India secure,

¹⁰⁴ Maria Rost Rublee, *Nonproliferation Norms: Why States Choose Nuclear Restraint*, p. 202.

¹⁰⁵ Jacques Hymans, "Explaining Proliferation and Nonproliferation: A Review of Scholarly Literature." In *Revised Submission to Combating Proliferation in a Dangerous World book project*. (2009), p. 10.

¹⁰⁶ Jacques E. C. Hymans, *The Psychology of Nuclear Proliferation: Identity, Emotions, and Foreign Policy*, (Cambridge: Cambridge University Press, 2006), p. 38.

especially since China had one.¹⁰⁷ After the end of the Cold War, George Perkovich claims, “Only the [BJP] has favored the ‘great power’ norm to the exclusion (almost) of the moral superiority-through-nuclear-self-restraint norm.”¹⁰⁸ Also, those who contend the Indian decision to finally complete nuclearization demonstrate that, since the end of the Cold War, India did not test a bomb until 1998, almost immediately after the BJP came into power.¹⁰⁹ Even though security concerns factored into the decisions of Indira Gandhi and the BJP, ultimately, it was the personalities of the state leaders that led to the decision to nuclearize, and not the security concerns themselves. It should be noted, however, that the BJP inherited the latent nuclear capability from its successors. It is not necessary to explain how this theory leads to nonproliferation, as a state (any of the states that are not the 10 or so currently possessing or pursuing nuclear weapons) simply lacks leaders with the oppositional nationalist identity.

According to Nina Tannenwald, nuclear weapons have become taboo, which “has constrained the practice of ‘self-help’ in the international system. States are not free to resort to nuclear weapons without incurring moral opprobrium or political costs.”¹¹⁰ Tannenwald claims that the nuclear taboo has been created by three groups of factors: a transnational antinuclear weapons movement, non-nuclear states’ strategic pressures and

¹⁰⁷ Rajesh M. Basrur, “Nuclear Weapons and Indian Strategic Culture.” *Journal of Peace Research* 38, no. 2 (2001): p. 186.

¹⁰⁸ George Perkovich, *India's Nuclear Bomb: The Impact of Global Proliferation*. (Berkeley: University of California Press, 1999), p. 479.

¹⁰⁹ Rajesh M. Basrur, “Nuclear Weapons and Indian Strategic Culture,” p.188.

¹¹⁰ Nina Tannenwald, *The Nuclear Taboo: The United States and the Non-Use of Nuclear Weapons since 1945* (Cambridge: Cambridge University Press, 2007), pp. 361-362.

the risk of escalation, and the moral concerns of individual decision makers.¹¹¹

Additionally, many material and normative factors played an important role: the difficulty of mastering nuclear technology; rise of humanitarian norms; and the fact that the US was the first one to actually use a bomb. Had the Soviet Union or China been the first, she argues, the malevolent leaders who did not have to answer to its population may not have restrained themselves.¹¹² Tannenwald argues that the nuclear taboo reaches beyond rationality and has become a genuine normative aspect of decision-making.¹¹³

Each of the driving forces discussed thus far can inform and steer proliferation and rollback with regard to domestic politics. “Whether or not the acquisition of nuclear weapons serves the national interests of a state,” explains Sagan, “it is likely to serve the parochial bureaucratic or political interests of at least some individual actors within the state.”¹¹⁴ In some cases, political entities may be most influenced by security concerns, and other political entities may be more concerned with normative considerations. International norms can constrain state behavior by “shaming” or “pressuring” various political actors, according to Jeffrey T. Checkel.¹¹⁵ Checkel believes that norms go

¹¹¹ Nina Tannenwald, *The Nuclear Taboo: The United States and the Non-Use of Nuclear Weapons since 1945*, p. 365.

¹¹² *Ibid.*, p. 365-366.

¹¹³ *Ibid.*, p. 374.

¹¹⁴ Scott D. Sagan, “Why do States Build Nuclear Weapons?” p. 63.

¹¹⁵ Jeffrey T. Checkel, “International Norms and Domestic Politics: Bridging the Rationalist—Constructivist Divide,” *European Journal of International Relations*, no. 3 (1997): p. 474.

beyond simply constraining behavior—they can actually shape actor’s preferences.¹¹⁶

The domestic politics model may be able to explain Egyptian nuclear restraint. Even though many political forces within Egypt have been calling for a nuclear weapons program for some time, Mubarak is the one that actually kept a lid on nuclear ambitions. Now that he is no longer in power, some analysts are warning that the new government may facilitate the nuclear ambitions of previously suppressed actors.¹¹⁷

Capacity

The final material variable is economic and technical capacities. These variables are facilitating factors that *allow* a state to proliferate, not necessarily a driver in and of themselves, but the converse is not necessarily true. A *lack* of economic or technological capacity can be a driving force of rollbacks. In other words, if all of the other cards are in place driving a state towards nuclearization, it will be forced to roll back if it does not possess the adequate technology. Cirincione argues that economic sanctions hindered Iraq’s technological capacity to build nuclear weapons.¹¹⁸ Can sanctions prevent states in the future from obtaining the technology necessary to build nuclear weapons?

On the other hand, economic considerations can be a significant factor in explaining rollback from nuclear weapons programs. Quite frankly, nuclear weapons

¹¹⁶ Jeffrey T. Checkel, “International Norms and Domestic Politics: Bridging the Rationalist—Constructivist Divide,” p. 488.

¹¹⁷ Joseph Cirincione, “Egypt’s Nuclear Dimension,” *Huffington Post*, February 13, 2011, accessed March 13, 2011, http://www.huffingtonpost.com/joe-cirincione/egypts-nuclear-dimension_b_822588.html.

¹¹⁸ Joseph Cirincione, *Bomb Scare*, p. 75.

programs are expensive—very expensive. Burgess explains that the cost of the Libyan program were so great that it was damaging the Libyan economy and domestic stability.¹¹⁹ In this case, economic capability is closely related to the political interests of a state. Further, in addition to the expense of a nuclear weapons program and the development of delivery systems, sanctions placed by the international community can make the pursuit of nuclear weapons unfeasible. This was a large factor in Libya's decision to roll back its nuclear program. Burgess lists sanctions as his first reason Libya rolled back its nuclear weapons program.¹²⁰ On the other hand, sanctions were not enough to keep Pakistan from attaining nuclear weapons. Rublee explains, "Cases such as North Korea, Pakistan, and Iran only underscore the point: if a country has the political will, not even poverty or underdevelopment can keep it from building a nuclear weapons program."¹²¹

Katherine McCardle Kelleher questions, "can we really restore the genie to its bottle, given the global spread of civil nuclear technologies, the near instantaneous distribution technical literature, and a global commerce system poised to deliver any and all necessary components through a myriad of legal and illegal channels?"¹²² Steven E. Miller and Scott Sagan wrote in 2009 that we are living in a time where an interest in

¹¹⁹ Stephen F. Burgess, "Proliferation Reversals/Rollbacks in Africa: South Africa and Libya." p. 11.

¹²⁰ Ibid., p. 11.

¹²¹ Maria Rost Rublee, *Nonproliferation Norms*, p. 201.

¹²² Catherine McArdle Kelleher, "Introduction," in *Getting to Zero: The Path to Nuclear Disarmament*, ed. Catherine McArdle Kelleher and Judith Reppy (Stanford: Stanford University Press, 2011), p. 3.

nuclear energy is surging. Furthermore, a close link exists between the capability to produce nuclear energy and in producing nuclear weapons, and they ponder, “Will the nonproliferation regime be adequate to ensure safety and security in a world more widely and heavily invested in nuclear power?”¹²³

Dennis Gormley explains that the knowledge to construct nuclear weapons, which he calls explicit knowledge, and related technology, will become more widely available thanks to globalization and the Internet.¹²⁴ From this point of view, one would expect proliferation to become more widespread due to the ease of attainment. However, Gormley explains that explicit knowledge is not sufficient to construct a nuclear weapons and related technology. Tacit knowledge, the kind of knowledge derived from experience, is necessary in order to construct nuclear weapons. He explains:

Whereas explicit knowledge consists of information or engineering formulations that can be recorded and passed easily from one place to another, tacit knowledge cannot be written down or passed via digital media. Rather, it is acquired through the laborious and lengthy process of apprenticeship. Tacit knowledge, then, is the product of a uniquely fertile social and intellectual environment composed of mentors and proteges." Obtained as it is under these narrowly bounded circumstances, tacit knowledge skills are not widely diffused in the way that explicit knowledge is.¹²⁵

The emerging international system will also have to face the challenge of secondary proliferation. As more states are gaining the ability to enrich uranium, even for peaceful purposes, the technology and knowledge (both explicit and tacit) are

¹²³ Steven E. Miller and Scott D. Sagan, “Nuclear Power without Nuclear Proliferation?” pp. 7, 8.

¹²⁴ Dennis M. Gormley, *Missile Contagion* (Westport: Praeger Security International, 2008), Kindle Edition, p. 89.

¹²⁵ *Ibid.*, p. 6.

spreading as well. We have already seen this with states like North Korea and Pakistan giving nuclear assistance to other countries. *The Arms Control Association* explains:

Recent assessments and press reports suggest that Iraq, Iran, and North Korea have been able to circumnavigate the multilateral export control regimes in two ways: one, by focusing on traditional supplier states for mass-market, dual-use equipment and materials, and two, by complementing such acquisitions via a parallel focus on emerging supplier states, such as India and Pakistan, for materials and technology integration.¹²⁶

Even though secondary proliferation poses a significant problem in the future, particularly since more states will be less constrained by international pressures and technology and know-how will be easier to obtain, the emerging international system may actually hold the key to preventing secondary proliferation. Norms and regimes, like export controls and international partnerships to combat the spread of illicit nuclear materials, could effectively curb secondary proliferation. Furthermore, if we are to believe that states will perceive the emerging system as less certain, states may choose to withhold technical assistance to other states in fear that it may actually come back to be detrimental to their security in the future.

Thus, it is important to examine the unique aspects of states with regard to capacity. Some states may be able to easily obtain uranium for enrichment, while others find it difficult. Some states may be getting backdoor assistance from other states like China, Pakistan, or North Korea. Finally, capacity must be examined with regard to will. Is a state likely to attempt to overcome capacity shortfalls such as economic capacity by diverting funds and effort from other projects or government functions?

¹²⁶ Anupam Srivastava and Seema Gahlaut, "Curbing Proliferation from Emerging Suppliers: Export Controls," Arms Control Association, September 2003, http://www.armscontrol.org/act/2003_09/AnupamandGahlaut.

CHAPTER 3 TURKEY: IN THE PATH OF A NUCLEAR CASCADE?

According to Stephen Larabee of the RAND Corporation, “Turkey would consider developing the nuclear option only as a last resort—if, say, its relations with the United States declined, Ankara no longer saw NATO’s guarantees as credible, and the EU rejected Turkey’s membership.”¹²⁷ Although each of these prospects is possible, they are by no means enough to drive Ankara to begin a nuclear weapons program due to a number of other factors that are not so likely to change due to the shifts in balance of power in the emerging international system, particularly Turkey’s shift towards the Middle East where it seeks to play a regional leadership role. Furthermore, it is likely that Ankara will calculate that refusing to pursue nuclear weapons will give the prestige it is looking for.

Security Environment

Motivations to Pursue Nuclear Weapons

Many analysts worry that Turkey is at high risk of pursuing nuclear weapons if Iran continues its ambitious enrichment projects. Ankara is not necessarily only worried about the direct threat that a nuclear capable state on its borders poses, it is also

¹²⁷ F. Stephen Larrabee, "Turkey Rediscovered the Middle East," *Foreign Affairs* (2007): accessed May 17, 2011, <http://www.foreignaffairs.com/articles/62649/f-stephen-larrabee/turkey-rediscovered-the-middle-east>.

concerned about larger instability that might be caused by Iranian pursuit of nuclear weapons.¹²⁸

Several factors contribute to increased vulnerability of Turkey. First, many fear that Turkey will not sit idly by as Iran continues defying the IAEA as well as its enrichment projects. A nuclear capable Iran on its borders will surely make some Turkish officials nervous. Furthermore, Ankara is concerned about larger destabilization in the region. The Iraq War has destabilized the region already to the point it has become one of the most pressing aspects of Turkey's security environment.¹²⁹ Analysts believe that Iran's acquisition of nuclear weapons will destabilize the Middle East to an even greater degree.¹³⁰ This demonstrates that, even if Turkish officials are not concerned about a nuclear-armed Iran, they will be concerned about the destabilization that occurs throughout the region afterwards. Alexandra Bell explains, "The Turks look around them and see conflicts and threats in most directions."¹³¹ She also claims that these factors and the shifting security environment are directly leading to the attitudes and opinions of Turkish policymakers. Bell spoke to one unnamed Turkish official in particular that

¹²⁸ F. Stephen Larrabee, "Turkey Rediscovered the Middle East."

¹²⁹ Avi Jorisch, "Why Ankara Should Not Be Helping Iran Go Nuclear," *Hürriyet Daily News*. April 11, 2011, accessed May 18, 2011 <http://www.hurriyetdailynews.com/n.php?n=why-ankara-should-not-be-helping-iran-go-nuclear-2011-04-11>.

¹³⁰ F. Stephen Larrabee, "Turkey Rediscovered the Middle East."

¹³¹ Alexandria Bell, "Turkey's Nuclear Crossroads," *Good*, August 25, 2009, (accessed May 17, 2011, <http://www.good.is/post/turkeys-nuclear-crossroads/>).

proclaimed, “Turkey would immediately arm itself with a bomb” if Iran obtained a nuclear weapon.¹³²

In addition to the changing security threats in the region, security assurances, or possible lack thereof, will also play an important role in Turkey’s calculations in the future. In the face of deteriorating relations within NATO, particularly with regard to Turkey, Ankara is skeptical of the solid security assurance once given by NATO and the United States.¹³³ This sentiment is exacerbated by America’s desire to withdraw tactical nuclear weapons from Europe, including Turkey. Ankara not only wants American tactical nuclear weapons to remain on Turkish soil for the tangible deterrent effects they offer, but also because some Turkish officials “believe that nuclear sharing is both symbolic of alliance cohesion and a demonstration of how the United States and NATO have committed to defending each other in the event of an attack.”¹³⁴ For some Turkish officials the symbolic effect of keeping US tactical nuclear weapons on Turkish soil displays that the U.S. is still committed to Turkish security, even in a time when the future of NATO is uncertain, particularly for Turkey.

It is easy to see that the uncertainty of the emerging international system is leading to a shift in Turkey’s security environment. First, as Iran continues to defy the IAEA in pursuit of enrichment, the Middle East is becoming destabilized as states consider how and if to balance a new regional superpower. Furthermore, uncertainty of

¹³² Alexandria Bell and Benjamin Loehrke. "The Status of U.S. Nuclear Weapons in Turkey," *Bulletin of the Atomic Scientists*, November 23, 2009, accessed May 18, 2011, <http://www.thebulletin.org/web-edition/features/the-status-of-us-nuclear-weapons-turkey>.

¹³³ Ibid.

¹³⁴ Ibid.

security threats is leading to the uncertainty of the future of NATO. Since NATO no longer has the Soviet Union as a certain enemy, it has to reassess its role in the world, and the security of Turkey is not among its priorities. Even with these uncertainties, the security environment will not drive Turkey towards the bomb.

Motivations to Forgo Nuclear Weapons

It is important to examine Turkish behavior with regard to nuclear weapons without considering the international system. Is it possible these trends, even if only in part, will continue? Why would things be any different under multipolarity? Is the future of Turkey's security environment changing so rapidly and becoming more uncertain? The changes in Turkey's security environment have been slowly developing over decades. Furthermore, uncertainty does not seem to be a large issue. To clarify, it is easy to understand uncertainty surrounding Iran's intentions, the future of NATO, or Turkey's future relations with the EU, but at least Ankara can be certain about the issues at hand. Since these changes in Turkish policies and behavior have been happening for a while now, we should be able to see some sort of movement toward increasing security through traditional means. Instead, what we see is Ankara becoming more empowered as it becomes more independent from the West. Turkey is not behaving like a state that is fearful of an unpredictable and dangerous security environment being ushered in by the emerging system. As Ian O. Lesser explains, "Turks prefer to focus on intentions rather than capabilities when debating proliferation in their neighborhood. Improved relations with Teheran and Damascus have simply lowered the perception of risk."¹³⁵

¹³⁵ Ian O. Lesser, "Can Turkey Live with a Nuclear Iran?" The German Marshall Fund of the United States, Washington, 2009, p. 2.

Some analysts argue that Turkey is not concerned with nuclear weapons on its borders because it tolerated the arsenal of the Soviet Union throughout the Cold War. Skeptics, and those that agree with the neo-realist assumptions, would claim that it is only because Turkey was a part of NATO and had NATO nuclear weapons on its soil. Skeptics would also claim that the fact Turkey wants U.S. tactical nuclear weapons to remain within Turkish borders is a sign that Ankara values nuclear weapons. If Turkey really believed that nuclear weapons were necessary to deter a nuclear Iran, however, then it is doubtful that U.S. tactical weapons would play much of a role in Turkish calculations.¹³⁶ The weapons currently in Turkey would “take months to prepare them for battle.”¹³⁷ Additionally, NATO weapons require a complex 27-nation decision process before use. The weapons currently on Turkish soil really had no direct effects.

Naturally, some analysts may predict that Turkey might not be so willing in the future to continue practicing nuclear restraint, especially given the uncertainty of the future of NATO or Iran’s intentions, but Turkey has demonstrated a long tradition of not relying on nuclear weapons. Turkish officials are surely adding in their calculations American and European concern over Iranian intentions and aspirations, which may reassure Ankara that, even without a formal alliance, American and European actions will play to Turkey’s favor. Given the growing relationship between Ankara and Tehran, it does not seem that Turkish leaders would calculate they are at imminent risk of a possible

¹³⁶ Tom Sauer, "U.S. Tactical Nuclear Weapons: A European Perspective," *Bulletin of the Atomic Scientists* 66, no. 5 (2010): pp. 65-75.

¹³⁷ Alexandria Bell and Benjamin Loehrke, "The Status of U.S. Nuclear Weapons in Turkey."

future Iranian nuclear capability. Given this perception of Turkey's security environment, it would not make sense that Ankara would pursue nuclear weapons.

Also, many authors cite Turkey's vehement opposition to the Iraq war as one of the major signs of a US-Turkey split. Stephen F. Larabee claims, "81 percent of Turks disapproved (and only seven percent approved) of President George W. Bush's handling of international policies."¹³⁸ This does not necessarily mean that US-Turkey relations are falling apart. Some of the United State's closes Allies, France, Germany, and Canada, were also vehemently against the foreign policies of the Bush administration. Even further, France had worse relations with NATO far longer than Turkey's supposed falling out. Yet, despite these issues, the alliance stuck together (though, I'm sure my critics will point out that France had their own nuclear arsenal).

First, as mentioned above, Turkey seeks to play a leadership role in the Middle East, and a larger, more prominent role in the international community. Despite legitimate concerns of security and Iranian hegemony in the Middle East, pursuing nuclear weapons would be even more harmful to Turkey's prestige and leadership than choosing not to proliferate. Even though Alexandra Bell claims that Turkey would immediately pursue its own nuclear deterrent should Iran obtain a bomb, she also acknowledges that much leadership in Turkey, with whom she spoke directly, showed little interest in an Iranian nuclear capability, explaining that the Turks and the Persians have not been in conflict with each other in over 500 years.¹³⁹ It is unfortunate that so

¹³⁸ F. Stephen Larrabee, "Turkey Rediscovered the Middle East."

¹³⁹ Alexandria Bell, "Turkey's Nuclear Crossroads."

many analysts and commentators focus so heavily on sensationalized statements ignoring other sentiments.

Economic Interests

Turkey's economic interests and its internationalization model of economic development will be strong motivators for Turkish politicians and leaders to forgo nuclear weapons programs. Turkey has a long tradition of working with the West—both the EU and the United States—and is not likely to give up the advantages of these relationships even though they may not be as strong as they used to be. Furthermore, for the foreseeable future, Turkey remains committed to joining the EU, or at least maintaining good relations, and will not jeopardize this special relationship in exchange for nuclear weapons research.

Though having faced a great number of setbacks and challenges, Turkey remains committed to accession to the European Union, and evidence of Ankara's commitment is still evident. In early May 2011, Prime Minister Erdogan proclaimed, "We are preserving our determination to join the EU." He continued, "We are fulfilling our commitments in the best way to harmonize with the [EU] acquis."¹⁴⁰ Turkey has spent the last six years as an EU candidate implementing a number of reforms to meet EU accession criteria.¹⁴¹ Further, some analysts and observers emphasize that it took Spain 8

¹⁴⁰ "Turkish PM Blames EU for Stalled Accession Talks." *Hürriyet Daily News*, May 6, 2011, accessed May 19, 2011, <http://www.hurriyetdailynews.com/n.php?n=pm-blames-eu-over-stalled-accession-talks-2011-05-06>.

¹⁴¹ "Turkish PM Blames EU for Stalled Accession Talks." *Hürriyet Daily News*, May 6, 2011, accessed May 19, 2011.

years to become an EU member, so it is likely that Turkey will remain patient,¹⁴² especially given the harsh economic environment that surely makes many European leaders cautious to take on any more responsibility. If Turkey were to seek nuclear weapons, its relationship with the EU would surely be severely damaged, ending Turkish hopes of becoming a part of the world's largest economic bloc.

Interestingly, Ankara's economic ties with Iran also demonstrate reasons why Turkey might not be willing and ready to proliferate in the future. Avi Jorisch explains the extent of the Turkish-Iranian economic relationship:

In 2008, the two countries conducted \$10 billion of business, and officials from both countries have called for an increase to \$20 billion by 2012. Iran exports mostly oil and gas to the Turkish market. Naturally, Turkey wants to fuel its economy, and Turkish officials have made it clear that they will look to all available sources of energy, including Iran.¹⁴³

Additionally, until May 2011, "Turkish companies and banks regularly abuse the financial system to facilitate payments to [Iran]," as explained by the *Hürriyet Daily News*.¹⁴⁴ One should not perceive this type of facilitation as direct Iranian support by the Turkish government; however, the Turkish government did not try to stop it until late May 2011 when Turkish banks finally officially cut all ties with Iran's top bank.¹⁴⁵ This is particularly telling given Turkey's many attempts to, "[help] Iran circumvent

¹⁴² Mark Paredes, "Turkey's Myths, Pragmatism and the West." *Deseret News*. May 9, 2011, accessed May 14, 2011, <http://www.deseretnews.com/article/705372256/Turkeys-myths-pragmatism-and-the-West.html>.

¹⁴³ Avi Jorisch, "Why Ankara Should Not Be Helping Iran Go Nuclear."

¹⁴⁴ *Ibid.*

¹⁴⁵ "Turkish Banks Cut Ties with Top Iran Bank." *Trade Arabia*, May 21, 2011, accessed May 21, 2011, http://www.tradearabia.com/news/BANK_198952.html.

intentional sanctions.”¹⁴⁶ It seems as if Turkey places more importance in economic strength than security concerns over a nuclear Iran.

Ideational Factors

In addition to the security environment, it is necessary to also examine a variety of characteristics including the role prestige plays in decision-making, domestic political dynamics, and the governmental structure itself.

Motivations to Pursue Nuclear Weapons

For some analysts, even if the changing security environment is not enough to push Turkey towards proliferation, prestige may complement security concerns and push the country to its own bomb. Even though Turkey may not fear a conventional war with Iran, prestige is likely to play a role in Ankara’s nuclear calculations. As Turkey’s identity grows further and further from the West since the end of the Cold War, its policies have shifted to become a leader in the Muslim world, as well as maintaining close relations with the West, including the EU and NATO.¹⁴⁷ Avi Jorisch explains, “If Iran goes nuclear, it will become the regional hegemon, extinguishing Ankara’s hopes of becoming a key player in the Middle East.”¹⁴⁸ Turkey’s perception of prestige is closely linked with a changing perception of its own identity. Once aligned closely with the West, it is now growing closer and closer to the Middle East, and now wishes to play a larger role in this region.

¹⁴⁶ Avi Jorisch, "Why Ankara Should Not Be Helping Iran Go Nuclear."

¹⁴⁷ F. Stephen Larrabee, “Turkey Rediscovered the Middle East.”

¹⁴⁸ Avi Jorisch, "Why Ankara Should Not Be Helping Iran Go Nuclear."

With the Cold War over, Turkey is less constrained by geopolitical pressures and now pursues foreign policies that would not have been possible under intense pressure from the United States. Furthermore, Turkey's domestic politics are becoming more conservative, more religious, and more nationalist.¹⁴⁹ For example, breaking away from the West, Turkish policy has become more pro-Palestinian. This in itself is not an indicator of Turkey looking for a new place in the Middle East, but in January 2006, Prime Minister Erdogan hosted a high-ranking Hamas delegation in Ankara "hoping that the visit would highlight Turkey's ability to play a larger diplomatic role in the Middle East." A clear indicator that Ankara is less constrained than in previous years, Erdogan arranged these meetings without first consulting Washington or Jerusalem.¹⁵⁰

Another example of Turkey attempting to play a larger role in the Middle East outside of a NATO or Western-led coalition is its opposition to sanctions on Iran with regard to its alleged pursuit of nuclear weapons. Ankara had long pushed for a nuclear fuel swap deal with Tehran in place of increased sanctions from the West. In May 2011, Ankara finally signed a deal with Tehran in which Iran would ship low-enriched uranium to Turkey in exchange for fuel rods. Under this agreement, the low-enriched uranium (LEU) would remain property of Iran while in storage in Turkey.¹⁵¹ Prime Minister Erdogan has proclaimed that this deal has eliminated the need for new sanctions aimed at

¹⁴⁹ Avi Jorisch, "Why Ankara Should Not Be Helping Iran Go Nuclear."

¹⁵⁰ F. Stephen Larrabee, "Turkey Rediscovered the Middle East."

¹⁵¹ "Iran Signs Nuclear Fuel-Swap Deal with Turkey," *BBC News*.

Tehran.¹⁵² This example is not important with regard to whether or not this deal will actually work, but rather because it demonstrates Ankara's search for a greater role in the region by attempting to broker a compromise between the West and Iran. As mentioned above, should Iran obtain a nuclear weapon, the regional dynamics and diplomacy would dramatically shift against the interests of Turkey.

Given the above examples of Turkey attempting to demonstrate its powerful role in the region, it is likely that Ankara is more concerned about the diplomatic and symbolic effects of an Iranian bomb. It is not unreasonable to predict that Turkish leadership will seek its own nuclear capability to keep up with its impending nuclear neighbor much like France pursued nuclear weapons during the Cold War. A shift in the balance of influence would severely damage Ankara's intentions of becoming a leader in Middle East.

Motivations to Forgo Nuclear Weapons

The international system has focused so heavily on Iranian nuclear aspirations that Turkey really doesn't need to; thus, the international community (or, the West, more accurately) is working harder on Turkey's security environment, even if only indirectly. Since the end of the Cold War, Turkey has become less constrained both politically and in terms of security threats. This is where the real shift in Turkish policies is happening. Instead of Turkey feeling more vulnerable to threats, it is feeling more empowered to assert itself in global politics.

¹⁵² Julian Borger, "Iran-Turkey Nuclear Swap Deal 'Means New Sanctions Are Unnecessary'," *Guardian.co.uk*, May 17, 2010, accessed May 18, 2011, <http://www.guardian.co.uk/world/2010/may/17/iran-nuclear-uranium-swap-turkey>.

The structure of the Turkish government will surely pose logistical problems should Turkish leadership choose to pursue nuclear weapons. Because Turkey is an open democratic society, building a clandestine nuclear weapons program will be difficult.¹⁵³ According to a poll conducted in early 2011, only three percent of Turks believe that the biggest threat to Turkey comes from Iran; 43 percent, on the other hand, believe that the largest threat comes from the United States.¹⁵⁴ It is not likely that the public will allow their political leaders to pursue nuclear weapons under these conditions, so any effort to do so would have to be done clandestinely. Furthermore, environmental concerns are growing in importance in Turkey, which has grave concerns over the negative aspects of nuclear energy.¹⁵⁵ This growing movement will make Turkish nuclear energy ambitions more difficult to fulfill, thus making the possible pursuit of nuclear weapons even more difficult in Turkey's democratic system.

Furthermore, Turkey has a good track record when it comes to nuclear norms and regimes. The Nuclear Threat Initiative (NTI) explains, "Turkey is not known to possess nuclear, chemical, or biological weapons or weapons programs, and is a member and in good standing of all the major treaties governing their acquisition and use."¹⁵⁶ Turkey is either a party or signatory to arms control, nuclear, chemical, biological, testing, and

¹⁵³ Leon Feurth, "Turkey: Nuclear Choices Amongst Dangerous Neighbors," In *The Nuclear Tipping Point: Why States Reconsider their Nuclear Choices*, ed. Robert J. Einhorn, Mitchell B. Reiss Kurt M. Campbell (Washington: Brookings Institution Press, 2004), p. 167.

¹⁵⁴ Avi Jorisch, "Why Ankara Should Not Be Helping Iran Go Nuclear."

¹⁵⁵ Ibid.

¹⁵⁶ Nuclear Threat Initiative, "Turkey Profile." *Nuclear Threat Initiative*, March 2011, accessed May 18, 2011, http://nti.org/e_research/profiles/Turkey/index.html.

technology regimes including: NPT, IAEA Additional Protocol, CTBR, PTBT, Chemical Weapons Convention, Biological and Toxin Weapons Convention, Nuclear Suppliers Group, Missile Technology Control Regime, PSI, and many others.¹⁵⁷ Whether genuinely, or for self-serving purposes, Turkey has demonstrated a strong commitment to norms and regimes. It is not likely that this will change in the future. Furthermore, if Turkish officials do begin to stray from these norms, it will surely be met with intense resistance from the international community. It is much more likely that Turkey will obtain the prestige it seeks in the Middle East by demonstrating to other Middle East states that reliance on norms and regimes are superior to the pursuit of nuclear weapons, particularly given the many voices calling for a nuclear weapons free zone in the Middle East.

Capacity

Motivations to Pursue Nuclear Weapons

According to NTI, Turkey has the technological capability to establish a successful nuclear energy program. NTI explains, “However, it lacks nuclear power reactors and commercial-scale fuel cycle capabilities, meaning that foreign suppliers will be key to Ankara's success in launching a nuclear power program.¹⁵⁸ Turkey plans to build additional reactors, and the recent Fukushima disaster in Japan has not deterred

¹⁵⁷ Nuclear Threat Initiative, “Turkey Profile.”

¹⁵⁸ Ibid.

Turkey from pursuing nuclear energy.¹⁵⁹ Prime Minister Erdogan has proclaimed that his goal is to have at least 20 reactors online by 2030 with the help of Russian and Japanese companies for the first plants.¹⁶⁰

Turkey may also have a way to gain the know-how and tacit knowledge necessary to build a nuclear weapons program. According to Leon Fuerth, it is possible that nuclear scientists with knowledge of how to build nuclear weapons from the former Soviet Republics may have made their way into Turkey.¹⁶¹

Motivations to Forgo Nuclear Weapons

These ambitious goals are not guaranteed to come to fruition. NTI explains that Turkey has had plans to pursue nuclear power on three separate occasions, and each time, “financial limitations and domestic or international political constraints prevented success.”¹⁶² Unless things change, Turkey will not have the economic capacity to pursue nuclear weapons in the future. Given Turkey’s ambitious nuclear energy goals, however, analysts should watch to make sure technology is not being diverted to clandestine nuclear weapons projects. In this case, it seems as if economic capacity, combined with economic interests, is keeping a state from pursuing a nuclear weapons capability.

¹⁵⁹ “Political Parties Conceal Stance on Nuclear Energy,” *Today’s Zaman*, May, 22 2011, accessed May 22, 2011, http://www.todayszaman.com/newsDetail_getNewsById.action?load=detay&newsId=244686&link=244686.

¹⁶⁰ “Turkey Targets 20 Nuclear Reactors by 2030,” *Reuters*, January 31, 2011, accessed May 11, 2011, <http://af.reuters.com/article/energyOilNews/idAFLDE70U0B920110131?pageNumber=1&virtualBrandChannel=0>.

¹⁶¹ Leon Fuerth, “Turkey: Nuclear Choices Amongst Dangerous Neighbors,” p. 165.

¹⁶² Nuclear Threat Initiative, “Turkey Profile.”

Conclusions

The grim prospects that Iran poses to not only Turkey's security environment, but also its economic and political goals, combined with deteriorating NATO security assurances, indicate that analysts must indeed keep a close eye on Ankara's possible nuclear weapons developments.

We should not fear that Turkey is in the path of a nuclear cascade sweeping through the Middle East as a result of bold Iranian enrichment projects. If the changes in the emerging international system were to cause major shifts in nuclear calculations, Turkey's policies would already be showing signs of caution and stronger security and defense policies. Instead, Turkey is pursuing more active and unrestrained policies with regard to economic policy and diplomacy. It is clear that Turkey is not too concerned with an Iranian nuclear capability, as neo-realist theory would predict, because Ankara seems to be enabling Iran's uranium enrichment projects. Turkey's economic policies are bolstering Iran's economic capacity. Simultaneously, Iran's diplomatic efforts with regard to nuclear fuel trade are averting international pressure and defying Western efforts to stop Iranian enrichment.

Thus, it is clear that other factors clearly play a stronger role than the shifting balance of power that is clearly taking place in the Middle East. Two factors play a role in particular: prestige and economics. Whereas it is beyond the scope of this project to assess the personalities of individual Turkish leaders, and the extent of their influence, the policies examined above demonstrate a collective aspect of the personalities of Turkish policymakers. Prestige in this case reflects the collective personalities of Turkish leadership in what Hymans would label a sportsmanlike subaltern. Turkey is looking to

improve its status by resisting the influence of more powerful states, while at the same time, working within the international community to achieve its goals. Economics, on the other hand, are important to Turkish officials not only for the improvement of the country, but also as a way to form closer relationships with countries in the region, whether Europe or the Middle East.

CHAPTER 4 IRAN: ON THE BRINK OF NUCLEAR WEAPONS?

Many analysts and commentators speak as if Iran's pursuit of nuclear weapons is fact; however, all that is known is that Iran is currently pursuing large uranium enrichment projects. Most people in Washington already believe that Iran is definitively pursuing a nuclear weapons capability, according to Karim Sadjadpour of the Carnegie Endowment for International Peace.¹⁶³ On the other hand, Iranians maintain that their program is for peaceful purposes only.

Whereas the evidence of Iran's nuclear research is unsettling, it does not mean that Iran will choose to go the extra step to weaponize. Many factors exist that may keep Iran from pursuing nuclear weapons despite its pursuit of uranium enrichment. Such factors include security concerns in the globalizing system, economic concerns, personalities of the divided leadership—including the possible existence of norms and religious edicts—as well as the technological capacity, which is being affected by the globalizing economy as well.

Iran began its nuclear research in the 1960s under rule of the Shah, and according to Jon Wolfsthal, has had an “on again, off again march toward mastering the entire

¹⁶³ Karim Sadjadpour interview by Bob Scheffer. "Iran's Nuclear Secrecy," *CBS' Washington Unplugged*, February 19, 2010, accessed May 7, 2011, http://carnegieendowment.org/publications/index.cfm?fa=view&id=31017&solr_hilite=.

nuclear fuel cycle.”¹⁶⁴ Over the years, Iran has hidden its enrichment projects from the international community and has defied the IAEA on several accounts. Furthermore, Tehran has dealt on the black market to obtain uranium and know-how, including transactions with A.Q. Khan¹⁶⁵ and dealings with foreign governments such as South Africa. Because Iran’s nuclear progress thus far stretches decades, long before anyone could hope to assess what the emerging international system would look like, it is difficult to assess whether or not any of its current activities are a direct result of shifts in the international system. It is not unthinkable that Iran might not decide to pursue weaponization, as a number of countries have conducted extensive enrichment research ultimately deciding not to weaponize including Brazil, Argentina, Sweden, Switzerland, and Iraq, just to name a few.¹⁶⁶

Should one closely examine documents and analyses of Iran’s nuclear program, one theme is immediately obvious: inconsistency. Analysts can’t agree on Iran’s intentions, its progress, or even when and if it was enriching uranium at various points in time. Perhaps classified evidence exists that would be crucial in discovering the real answer but, for those of us who do not have access to such information, I would like to present an alternate point of view—one that challenges the assumptions many take as fact. Iran is certainly influenced by international pressures, and the strength of such pressures is growing due to the current changes in the international system as described in

¹⁶⁴ Jon Wolfsthal, "Understanding Iran's Nuclear Maneuvers," *Center for Strategic and International Studies*, accessed May 12, 2011, http://csis.org/files/media/csis/pubs/060112_wolfsthal.pdf, 2006, p. 1.

¹⁶⁵ Ibid.

¹⁶⁶ Nuclearweaponsarchive.org

the previous chapters. These pressures must be taken into account, but they are often ignored or dismissed.

Even Schelling, despite believing himself that Iran is pursuing a nuclear weapon, acknowledges that no one knows whether or not Iran is actually planning on weaponizing the fissile material it is currently attempting to produce.¹⁶⁷ Likewise, several high-ranking U.S. officials do not speak or act as if Iran is definitively pursuing a nuclear weapon. For example, former Secretary of Defense Robert Gates is quoted as saying, "They're not close to a weapon at this point, and so there is some time."¹⁶⁸ Furthermore, Director of National Intelligence James Clapper has recently stated, "Iran's nuclear decision-making is guided by a cost-benefit approach, which offers the international community opportunities to influence Tehran."¹⁶⁹ The statements of these high-ranking officials give us some limited insight into what intelligence is assessing of Iran's nuclear weapons program, albeit only to a small degree. It is important to note that the reactions and rhetoric of some of the nation's highest defense and intelligence officials are not consistent with that of the elected officials explained above.

¹⁶⁷ New America Foundation. *Thinking Through the Thinkable on a Nuclear Iran*. April 16, 2010, accessed May 14, 2011, http://newamerica.net/events/2010/tom_schelling.

¹⁶⁸ Mike Shuster, "Experts Disagree Over Iran's Nuclear Intentions." *National Public Radio*. March 2, 2009, accessed May 2, 2011, <http://www.npr.org/templates/story/story.php?storyId=101354866>.

¹⁶⁹ Tony Karon, "The World Can Only Watch as Iran Implodes from Within." *The National*. June 15, 2011, accessed June 15, 2011, <http://www.thenational.ae/thenationalconversation/comment/the-world-can-only-watch-as-iran-implodes-from-within>.

Security Environment

Motivations to Pursue Nuclear Weapons

Many claim that the Motivations of Iran to proliferate are based heavily on concerns about its security environment. Indeed, Iran lies on the edge of the international system without any real allies. Furthermore, it is surely concerned about American presence in the region, and has historically been concerned about other actors in the region, particularly Iraq. As Joseph Cirincione explains, Iran exists on the edge of the “periphery of the international system,” and such states have a more acute sense of threats to their national security. Further, states in Iran’s position on the periphery have more incentive to pursue a nuclear weapon.¹⁷⁰ Iran is balancing against a variety of powers, globally and regionally. They will continue to perceive threats from both regional and global powers. More generally, Iran hopes that a nuclear capability will reduce or eliminate U.S. interference or opposition to Iran’s domestic and foreign policies.¹⁷¹

Shahram Chubin explains, “Iran’s nuclear weapons program was part of a broader attempt to become more self-reliant in arms and technology in the 1980s.” He continues, “Increasingly isolated, Tehran struggled to acquire arms to fight Iraq, which used chemical weapons and had a nuclear weapons program. The eight-year war was the Middle East’s bloodiest modern conflict. Iran’s nuclear program was an outgrowth of this

¹⁷⁰ Joseph Cirincione, *Bomb Scare*, p. 53.

¹⁷¹ Willis Stanley, "Iranian Strategic Culture and its Persian Origins," In *Strategic Culture and Weapons of Mass Destruction: Culturally Based Insights into Comparative National Security Policymaking (Initiatives in Strategic Studies: Issues and Policies)*, ed. Kerry M. Kartchner, Jeannie L. Johnson and Jeffrey A. Larsen, (New York: Pelgrave MacMillan, 2009), p. 153.

experience.”¹⁷² Ayatollah Khomeini approved Iran’s modern nuclear program, which began in 1985 when Iran saw the advances of Iraq’s weapons of mass destruction program. “Iranian leaders concluded,” Colonel Anthony C. Cain explains, “that they could ill afford to allow regional competitors to gain again the upper hand in the nuclear, chemical, or biological weapons arena.”¹⁷³ Cain continues, “The U.S.-led coalition’s apparent difficulty in dismantling the Iraqi program during and after Operation Desert Storm left the Iranians with little confidence in international collective security mechanisms.”¹⁷⁴ Iran’s distrust of collective security mechanisms underlines the self-help factor that is characteristic of realist interpretations. Iran now has even more power to balance against in the region, and a bomb is an easy way to balance against those powers in the face of deteriorating conventional capabilities.¹⁷⁵

Before 9/11, Iran’s prime motivation to seek a deterrent capability was Iraq, but since, the United States has become the primary reason behind motivations to proliferate “to compensate for strategic isolation...”¹⁷⁶ The United States occupies and maintains a strong presence on two of Iran’s borders, and has military bases in countries throughout the Middle East, as well as tactical nuclear weapons in Turkey, a NATO ally, which

¹⁷² Shahram Chubin, "The Politics of Iran's Nuclear Program." In *The Iran Primer: Power, Politics, and U.S. Policy*, ed. Robin Write (Washington: United States Institute of Peace, 2010), p. 82.

¹⁷³ Anthony C. Cain, *Iran's Strategic Culture and Weapons of Mass Destruction* (Air War College: Maxwell Air Force Base, n.d.), p. 13.

¹⁷⁴ *Ibid.*, p. 14.

¹⁷⁵ *Ibid.*, p. 17.

¹⁷⁶ Amin Tarzi, "The Role of WMD in Iranian Security Calculations: Dangers to Europe." *Middle East Review of International Affairs* 8, no. 3 (September 2004): p. 98.

surely exacerbates feelings of insecurity in Tehran. Further, Israel, as the primary enemy of Iran in the region, possesses nuclear weapons. Finally, it is likely that Iran feels more insecure because of the American arms deal with Saudi Arabia providing \$60 billion in arms sales.

Additionally, as Willis Stanley explains, "...Iranian lack of trust in the international 'system' makes it difficult to construct a set of positive inducements that would both preclude Iranian deception and provide reassurance to the Iranians that the deal struck will be honored by the 'Great Satan' and its minions."¹⁷⁷ Recent U.S. claims and statements of both the George W. Bush and Obama administrations have exacerbated this distrust. Under the George W. Bush administration, U.S. Officials iterated time and time again that it had nothing but violent intentions concerning Iran's nuclear program. It's only been eight years since President George W. Bush called for regime change in Tehran in his State of the Union Address.¹⁷⁸ Further, "President Bush had denounced the governments of Iran, Iraq, and North Korea as members of an "axis of evil"" with ties to international terrorism."¹⁷⁹ Even more recently, Secretary of State, Hillary Clinton, has reassured Iran that the United States will not rule out the use of force, including nuclear force, for states continuing to pursue nuclear weapons programs.¹⁸⁰

¹⁷⁷ Willis Stanley, "Iranian Strategic Culture and its Persian Origins," p. 154.

¹⁷⁸ Scott D. Sagan, "How to Keep the Bomb From Iran." *Foreign Affairs* (September/October, 2006): p. 6.

¹⁷⁹ Ibid.

¹⁸⁰ "Secretary Clinton Warns Iran, North Korea," Council on Foreign Relations, July 22, 2009, accessed November 12, 2010, http://www.cfr.org/publication/editorial_detail.html?id=1548.

Finally, the 2010 Nuclear Posture Review boldly states, “[T]he United States is now prepared to strengthen its long-standing ‘negative security assurance’ by declaring that the United States will not use or threaten to use nuclear weapons against non-nuclear weapons states that are party to the NPT and in compliance with their nuclear non-proliferation obligations.”¹⁸¹ This phrasing is also a signal that the United States reserves the right to use nuclear force against states that are not in compliance with NPT obligations, including Iran.

As Iraq, once Iran’s most pressing foe in the region, is no longer an imminent threat to Iranian security, Israel and the United States have recently demonstrated the extent of their capabilities and ability to extend power throughout the region. Some analysts conclude that, in order for Iran to balance this power, it needs nuclear weapons.

Motivations to Forgo Proliferation

Israel has a history of attacking places that it thinks might have nuclear weapons. Israel attacked a site in Syria in 2007, and a site in Iraq in 1981. Furthermore, the United States has a demonstrated track record of complete regime change. Some analysts have argued that Iran has certainly learned from these lessons and, as a result, constructed its nuclear enrichment plants deep underground all across the country.¹⁸²

Furthermore, Iranian officials may not perceive Israel and the United States as great threats to Iran. Etel Solingen argues that the claims of analysts who argue that Israel and the United States are driving Tehran towards nuclear weapons because of the security environment they have created in the region are not accurate. She argues that the

¹⁸¹ "Nuclear Posture Review Report." U.S. Department of Defense, p. viii.

¹⁸² Whitney Raas and Austin Long, "Osirak Redux? Assessing Israeli Capabilities to Destroy Iranian Nuclear Facilities," *International Security* 31, no. 4 (2007): p. 14.

drive towards nuclearization in the 1980s was mainly a result of the threat Iraq posed.¹⁸³ Solingen explains, "...[B]ut many in Iran disagree with the premise of these threats or how to cope with them, pointing to nuclear weapons as potentially undermining or enhancing security, depending on the eyes of Iranian beholders."¹⁸⁴

Economic Interests

Motivations to Pursue Nuclear Weapons

Willis Stanley stresses that we "must consider the near total role petroleum products play in Iran's calculus."¹⁸⁵ Whereas oil embargos and targeted sanctions would be effective, Stanley explains further, "[T]he mechanics for organizing such an effort are vulnerable to exactly the tactics at such the Iranian leadership excels."¹⁸⁶ The weapon of choice in attempting to coerce Tehran to halt its nuclear research is sanctions. Sanctions have not only come from the United States, but Europe, and the international community as a whole in the form of U.N. resolutions. The United States has had sanctions in place on Iran since 1979, and five American presidential administrations have imposed sanctions since.¹⁸⁷ Since 2006, The U.N. Security Council has passed six resolutions

¹⁸³ Etel Solingen, *Nuclear Logics*, p. 186.

¹⁸⁴ *Ibid.*, p. 186.

¹⁸⁵ Willis Stanley, "Iranian Strategic Culture and its Persian Origins," p. 153.

¹⁸⁶ *Ibid.*

¹⁸⁷ Patrick Clawson, "U.S. Sanctions," in *The Iran Primer: Power, Politics, and U.S. Policy*, ed. Robin Wright, (Washington: United States Institute of Peace, 2010), p. 115.

designed to eliminate Tehran's ability to pursue its ambitious nuclear research.¹⁸⁸ James Dobbins of the RAND Corporation explained in a testimony to Congress in December 2009, "Further international sanctions will probably not compel a change in Iran's nuclear policies nor cause a halt to those programs."¹⁸⁹ Whereas Dobbins explained that sanctions have not worked historically,¹⁹⁰ other reasons exist why sanctions will be ineffective in Iran. In 2010, Ray Takeyh and Suzanne Maloney wrote argue that sanctions "...will not be 'crippling', as Mrs. Clinton once promised, because they do not directly strike at the Islamic Republic's lifeblood - its oil revenues, which total in the tens of billions."¹⁹¹ The authors continue, "As a result, it will now focus its energies on averting, circumventing, insulating and even exploiting them, endeavours that the regime has elevated to an art form."¹⁹²

Furthermore, sanctions may be ineffective because Iranian leadership focuses its economic resources toward weaponizing instead of other areas they may be needed. Commentators argue that sanctions will remain ineffective because Iran is so motivated

¹⁸⁸ Jason Starr, "The U.N. Resolutions." In *The Iran Primer: Power, Politics, and U.S. Policy*, ed. Robin Wright, (Washington: United States Institute of Peace, 2010), p. 119.

¹⁸⁹ James Dobbins, *Iran Sanctions: Options, Opportunities, and Consequences*. Testimony presented before the House Oversight and Government Reform Committee, Subcommittee on National Security and Foreign Affairs, RAND Corporation, 2009, p. 1.

¹⁹⁰ Ibid.

¹⁹¹ Ray Takeyh and Suzanne Maloney, "Sanctions Will Not Curb Iran's Nuclear Ambitions," *Financial Times*, July 11, 2010, accessed July 2, 2011, <http://www.ft.com/cms/s/0/8dd2319c-74f4-11df-aed7-00144feabdc0.htm> l#axzz1SUwDyydl.

¹⁹² Ibid.

to pursue nuclear weapons it will not allow economic restraints get in its way.¹⁹³ This is similar to Pakistan's approach to nuclear weapons after the United States placed sanctions on the country in attempt to halt Islamabad's pursuit of nuclear weapons. Instead of diverting money away from the nuclear program to benefit the Pakistani people, Prime Minister Bhutto vowed that the Pakistani people will "eat grass" if necessary in order to develop nuclear weapons.¹⁹⁴

For a while, the emerging international system worked in Tehran's favor as it used banks in Turkey to sidestep sanctions. Turkey was desperate enough for a closer economic relationship that it was willing to work with Iran in exchange for economic support. This relationship made it possible for Iranian funds to enter Europe under the auspices of Turkish banks.¹⁹⁵ In May 2011, however, Turkey terminated this relationship, and Iran can no longer rely on Turkish banks to sidestep sanctions.¹⁹⁶

Motivations to Forgo Proliferation

The economic interests of Iran are a vulnerability of its nuclear weapons program because they rely so much on materials obtained from outside of its borders and produced and delivered by other states. The increased interdependence of the emerging system will

¹⁹³ "New IAEA Resolution on Iran not to have Effect," *Turkish Weekly*, June 10, 2011, accessed June 10, 2011, <http://www.turkishweekly.net/news/115922/new-iaea-resolution-on-iran-not-to-have-effect.html>.

¹⁹⁴ "Iran's Supreme Leader: We do not Seek Atomic Bombs," *CNN*, February 19, 2010, accessed May 22, 2011, http://articles.cnn.com/2010-02-19/world/iran.nuclear_1_nuclear-program-nuclear-watchdog-iran-and-israel?_s=PM:WORLD.

¹⁹⁵ Jorge Benitez, "Tracking Iran's Nuclear Money Trail to Turkey," Atlantic Council, September 21, 2010, accessed May 24, 2011, <http://www.acus.org/natosource/tracking-irans-nuclear-money-trail-turkey>.

¹⁹⁶ "Turkish Banks Cut Ties with Top Iran Bank." *Trade Arabia*. May 21, 2011, accessed May 21, 2011, http://www.tradearabia.com/news/BANK_198952.html.

only exacerbate this problem, making Iran even more vulnerable to external political economic pressure. Matthew Levitt Claims that, because of the globalized economy, unilateral sanctions from the United States will be more effective than previous sanctions.¹⁹⁷

The Iran Primer explains, “Increased international pressure and sanctions are likely to increase the program’s costs, which is also likely to make the program more contentious at home – and potentially exacerbate existing political differences in the leadership.”¹⁹⁸ The document continues to argue, “The weapons component of the program has never been debated or acknowledged and further revelations or costs associated with it could make it more controversial.”¹⁹⁹ Thus, sanctions and lack of material for a nuclear weapons program could make the costs of weaponization unacceptable.

Iran has been pursuing its enrichment experiments using 600 tons of yellowcake uranium bought from South Africa in the 1970s, and its supply is diminishing.²⁰⁰ And even though Iran mines its own Uranium, it does not have enough to fulfill the needs of a

¹⁹⁷ Matthew Levitt, "Financial Sanctions," in *The Iran Primer: Power, Politics, and U.S. Policy*, ed. Robin Wright (Washington: United States Institute of Peace, 2010), p. 123.

¹⁹⁸ Shahram Chubin, "The Politics of Iran's Nuclear Program," p. 283.

¹⁹⁹ Ibid.

²⁰⁰ Mike Shuster, "Experts Disagree Over Iran's Nuclear Intentions."

nuclear power program, according to Jacqueline Shire.²⁰¹ It depleted its stockpiles of uranium in its mines in the 1970s.²⁰²

This does not mean that Iran is incapable of getting more uranium, but it does mean that Iran has to rely on other states to supply the needed material. This means that Iran is even more susceptible to international pressure. Iran currently looks to several states from which to purchase uranium including Brazil, Kazakhstan, and Uzbekistan. A coalition of Western States including the United States, Canada, France, Britain, Germany, as well as Australia have lobbied the governments of these countries not to sell uranium to Iran.²⁰³

Bahgat explains that several international companies on which Iran relied for its nuclear program have backed out of the country as a result of pressure from the United States.²⁰⁴ Furthermore, their program has relied heavily on foreign assistance, particularly from China, Pakistan, and Russia at different times throughout its existence.²⁰⁵ Is it possible that Chinese assistance will grow because of China's growing power in the emerging system? What about Russia? Will its influence grow weaker?

The EU is already trying policies to offer incentives coupled with unfavorable side effects with regard to Iran. Bahgat explains, "Since the early 2000s, the EU has

²⁰¹ Mike Shuster, "Experts Disagree Over Iran's Nuclear Intentions."

²⁰² Peter Cassata, "Report: Iran Nearly out of Uranium," *Atlantic Council*, January 24, 2009, accessed May 23, 2011, http://www.acus.org/new_atlanticist/report-iran-nearly-out-uranium.

²⁰³ Ibid.

²⁰⁴ Gawdat Bahgat, "Nuclear Proliferation: The Islamic Republic of Iran." *Iranian Studies* 39, no. 3 (2006): p. 311.

²⁰⁵ Ibid.

negotiated a Trade and Cooperation Agreement (TCA) with Iran.” He continues, “The EU has established linkages between progress on the TCA negotiations and changes in Iran’s position on the Arab-Israeli peace process, terrorism, and proliferation of WMD.”²⁰⁶ In 2003, France, Germany, and the UK started negotiations with Iran that eventually led to Tehran signing the Additional Protocol of the NPT and to freeze some of its nuclear activities.²⁰⁷ This is not to say that this has been completely successful, as Iran has recently stated that it has resumed enrichment, but it does demonstrate a linkage between economic incentives and norms.

Ideational Factors

Motivations to Pursue Nuclear Weapons

In addition to Iran’s security environment, many analysts, commentators, and observers also acknowledge the large role that state characteristics play in Iran, particularly the sense of prestige pursued by the state’s leadership. *The Iran Primer* explains that Iran’s nuclear program has “unfolded in context of its overall policies,”²⁰⁸ which were created in order to obtain prestige and self-reliance. If we are to believe the *Iran Primer*, then it is unlikely that the emerging international system has had anything to do with its nuclear enrichment projects. If anything, it was under the bipolar system that many of the drivers of Iran’s nuclear program came into existence.

²⁰⁶ Gawdat Bahg, "Nuclear Proliferation: The Islamic Republic of Iran," p. 325.

²⁰⁷ Ibid.

²⁰⁸ Shahram Chubin, "The Politics of Iran's Nuclear Program," p. 83.

Bahgat explains, “Most Iranians perceive their nation as a great civilization that has been deprived of its ‘rightful’ status as a regional superpower by foreign intervention, including the Russian, British, and American.”²⁰⁹ Iran’s leadership has not only declared its right to enrich uranium again and again, but it has also demonstrated how prestige comes from scientific endeavors, as well as from defying the West.

A group of researchers from a variety of academic institutions in the United States and France conducted a psychological survey of a “small but politically significant portion of the Iranian population” has found that many Iranians have begun to see nuclear energy as a “sacred value” which may lead many Iranians to think of nuclear energy in terms beyond a simple cost-benefit analysis.²¹⁰

More recently, though once quiet on the issue, Ayatollah Khamenei has spoken about Iran’s nuclear enrichment program. The supreme leader has proclaimed, “We only seek to awaken the spirit of dignity in the whole of the Muslim community,” which was apparently in response to an IAEA report just a few days earlier.²¹¹ This demonstrates that, even though analysts often rely on the deep divisions within Iranian leadership, consistency exists throughout with regard to importance of pursuing nuclear energy.

Karim Sadjadpour, Ali Vaez, and Fariborz Ghadar argue, “A combination of misguided nationalism and government misinformation has compelled many non-official

²⁰⁹ Gawdat Bahg. "Nuclear Proliferation: The Islamic Republic of Iran," p. 323.

²¹⁰ Morteza Dehghani, Scott Atran, Rumen Iliev, Sonya Sachdeva, and Douglas Medin, "Sacred Values and Conflict over Iran's Nuclear Program." *Judgement and Decision Making* 5, no. 7 (2010): pp. 540-541.

²¹¹ “Iran: Ayatollah Ali Khamenei says Nuclear Program Aimed at 'Awakening the Spirit' of Muslim World,” *LA Times*, February 19, 2010, accessed June 2, 2011, <http://latimesblogs.latimes.com/babylonbeyond/2010/02/iran-khamenei-nuclear-ahmadinejad-mousavi-iranelection-islam-jihad-persian-gulf.html>.

Iranian elites -- including staunch regime critics -- to support the Islamic Republic's self-professed 'inalienable' nuclear pursuits."²¹² Additionally, the *Iran Primer*, published by the Carnegie Endowment for International Peace, explains:

The program may also have been a byproduct of the troubled revolution's omnipresent need for legitimacy and Iranian nationalism's quest for respect and international status. Tehran has long sought access to nuclear technology generally as a key to development and a means of restoring its former greatness as a center of scientific progress.... The regime views the international community's dictates as an attack on a founding principle of the revolution, namely Iran's independence from outside influence or intervention.²¹³

Self-reliance is not only a key founding value of the republic,²¹⁴ but also a lesson learned after its protracted war with Iraq. It is also likely that sanctions will exacerbate feelings among Tehran's leaders that it must be self-reliant because the West, particularly the United States, has consistently attempted to coerce Iran with sanctions and even threats of regime change.

The Iranian nuclear issue has transformed due to domestic politics across several different periods of time. Initially, they argue, the nuclear issue was supposed to be a national issue, and "there appeared to be a general consensus among the political elite..." with regard to enriching uranium.²¹⁵ In recent years, the issue has become much more politicized, and both Khamenei and Ahmadinejad use the issue to "stigmatize" their critics. Reformists were labeled as being soft, complacent to demands of the United

²¹² Karim Sadjadpour, Ali Vaez, and Fariborz Ghadar, "Will Fukushima Force Iran to Reconsider Nuclear Program?" April 1, 2011, accessed April 1, 2011, *The Atlantic*, <http://www.theatlantic.com/international/archive/2011/04/will-fukushima-force-iran-to-reconsider-nuclear-program/73293/>.

²¹³ Shahram Chubin, "The Politics of Iran's Nuclear Program," p. 83.

²¹⁴ Ibid.

²¹⁵ Ibid.

States, and “willing to negotiate away Iran’s Interests.”²¹⁶ Through this kind of political isolation, the forces within the Iranian government pushing Tehran away from nuclear weapons are becoming weaker and weaker. For some, this indicates that the domestic political processes will actually facilitate Iranian proliferation.

Could this combination of prestige, self-reliance, and domestic politics push Tehran towards constructing a nuclear weapon?

Motivations to Forgo Proliferation

Although the issue of prestige and the personalities of some of Iran’s key leadership would indicate that Iran is on the path to the bomb, when examined more closely, the evidence becomes much more complex and nuanced. In this section, I will examine the characteristics of the Iranian government that are pushing it away from the pursuit of nuclear weapons.

Robert Baer, a former CIA operative, has written extensively on what he believes to be Iran’s true motivations and intentions in his book, *The Devil We Know: Dealing with the New Iranian Superpower*. He not only dismisses many of the assumptions he believes American’s have taken for granted, he seeks to restructure the way Americans, both the public and the government, understand Iran. “President Ahmadinejad is...a figurehead no more able to take Iran to war than Joseph McCarthy was able to take America to war against Communism,” claims Baer. Iran’s real leaders,” he continues, “are rational, pragmatic, and calculating.”²¹⁷

²¹⁶ Shahram Chubin, "The Politics of Iran's Nuclear Program," p. 83.

²¹⁷ Robert Baer, *The Devil We Know: Dealing with the New Iranian Superpower*, (New York: Thre Rivers Press, 2008), p. 77.

Baer claims that Americans are too focused on the worst-case scenario, which is not what Tehran really wants.²¹⁸ A 2007 National Intelligence Estimate (NIE) claimed that Tehran stopped its pursuit of a bomb in 2003. To Baer, this indicated two things: that Iran was in no hurry to obtain a bomb; and that nuclear weapons are not essential to Iran's security.²¹⁹ Because Iran's leadership is calculated and patient, Baer argues, "Right now, at least, Iranians don't need a nuclear bomb." He continues, "If a war is to be fought...Iran will almost certainly fall back on its asymmetrical tactics and weapons." He concludes by indicating that Iran will likely calculate that the continued pursuit of a bomb will be more detrimental than relying on these other tactics and strategies.²²⁰

As mentioned above as a facilitator of proliferation, Iran is driven by prestige, but it is possible that prestige, like with Turkey, will actually push Tehran away from producing nuclear weapons. "Iran wanted to be taken seriously as a major power," claims Baer, "in the same way it wanted to control the Hormuz and the world's oil."²²¹ He continues,

But at the same time, the Iranians see a nuclear bomb as nice to have but not crucial to their survival.... Iran may not yet have nukes, but it has three things that are vastly more important: highly developed asymmetrical fighting skills and weapons; a growing army of hungry, disaffected, street-smart fighters; and an invincible anticolonial message. With that, Iran has set the stage for its push toward empire—a push they've already begun.²²²

²¹⁸ Robert Baer, *The Devil We Know*, p. 77.

²¹⁹ *Ibid.*, p. 23.

²²⁰ *Ibid.*, p. 110.

²²¹ *Ibid.*

²²² *Ibid.*, p. 111.

Thus, in a complicated political environment where various factions of the government are pitted against each other, those in favor of weaponization may not be so dead set on obtaining a bomb when prestige can be obtained other ways.

The Iran Primer explains, “The most fundamental difference is whether Iran should continue as a revolutionary state willing to defy the world, or whether it should settle down and become a normal state that plays by international rules. The nuclear issue is increasingly a reflection of this basic division.”²²³ This may mean that the will of the leadership to enhance its position and standing in the world may be largely affected by the emerging international system. Could leadership that is rational and bases much of its decisions on cost benefit analyses see that weaponization is actually harming its position?

With regard to norms and institutions, the most common assumption among analysts is that Iranian leadership does not adhere to them. It is important to remember that Iran has shown no signal of leaving the NPT thus far, despite several violations and attempts to side-step IAEA regulations and inspections. Even if it does not idealistically agree with the goals of the IAEA and the NPT, it goes to great lengths to maintain a relationship with the organizations. Furthermore, stronger evidence of norms exists within Iran.

Before 2005, many within Iranian politics opposed enrichment.²²⁴ If these aspects of the Iranian government become more prominent in the future, is it possible that they will be more willing to negotiate and cooperate with the West? Furthermore, is it possible that they will give up the idea that uranium enrichment, and nuclear weapons,

²²³ Shahram Chubin, "The Politics of Iran's Nuclear Program," p. 82.

²²⁴ *Ibid.*, p. 84.

are not needed to bolster Iranian prestige? This does not seem likely given the recent growing rift between Khamenei and Ahmadinejad. It is more likely that hardliners will continue to expand their dominance within Iranian politics.

Furthermore, often talked about in passing, Iranian leadership claims that Ayatollah Khamenei issued a fatwa prohibiting the production and use of nuclear weapons. Unfortunately, no one has ever seen this fatwa, as it has never been published. But the fact that Iranian leadership claims it exists is quite meaningful in itself. Whereas it is certainly not an assurance that the Islamic Republic will not build nuclear weapons, it does demonstrate that the existence of nuclear weapons is unacceptable to some. Furthermore, in February 2010, Khamenei reemphasized that Islam doesn't allow for nuclear weapons:

Iran will not get emotional in its response to these nonsensical statements, because we have often said that our religious tenets and beliefs consider these kinds of weapons of mass destruction to be symbols of genocide and are, therefore, forbidden and considered to be haram (religiously banned).²²⁵

Unless Khamenei is intentionally misleading the international community, how would it be possible to pursue nuclear weapons? Although, it may be possible that future leadership may not have a similar point of view with regard to Islam and nuclear weapons.

More evidence of norms exists. In a legislative initiative, government officials voted on a measure that would ban the production of nuclear weapons. Although this measure failed to pass, it still indicates that norms play a role in Iranian politics. To some, the fact that this measure even became an issue means that the fatwa does not exist,

²²⁵ "Iran's Supreme Leader: We do not Seek Atomic Bombs," *CNN*, February 19, 2010, accessed, May 22, 2011, http://articles.cnn.com/2010-02-19/world/iran.nuclear_1_nuclear-program-nuclear-watchdog-iran-and-israel?_s=PM:WORLD.

because if the supreme leader had already banned the production of nuclear weapons, there would be no need to create a legislative initiative. The fact that this even came up, however, in the Iranian government demonstrates that norms play a role in nuclear calculations, though, they may not be strong enough to keep Iran from ultimately pursuing nuclear weapons.

One important aspect of Iran's state characteristics are the deep divisions that exist within the government. Unfortunately, we cannot be sure of how the divisions are affecting Iran's nuclear choices. Jeffrey Lewis explains that a variety of viewpoints exist within the Iranian government "ranging from those who want the bomb now, to those who want a capability, to those who want to demonstrate Iranian scientific achievement to the world, to those who don't want a bomb but realize...that if they oppose the uranium enrichment program, they will appear to be weak."²²⁶

In June 2011, President Ahmadinejad admitted the rift between the clerics and himself publicly for the first time. *The National* reported, "Mr. Ahmadinejad and his closest allies alarmed the clerics by seeking to refashion the state's ideology on nationalist - rather than Islamist - lines, and to shift its centre of political power from the clergy to the presidency." The paper continued, "The clerics are also outraged by Mr. Ahmadinejad's religious populism. Appealing to a less educated poorer population, he claims a direct connection with Shiism's hidden 12th Imam, the messianic Mahdi, and as such claims that he doesn't need clerical supervision to govern on Islamic principles."²²⁷

²²⁶ Mike Shuster, "Experts Disagree Over Iran's Nuclear Intentions."

²²⁷ Tony Karon, "The World Can Only Watch as Iran Implodes from Within," *The National*, June 15, 2011, accessed June 15, 2011, <http://www.thenational.ae/thenationalconversation/comment/the-world-can-only-watch-as-iran-implodes-from-within>.

Ahmadinejad claimed in a news conference in June 2011 that he and his supporters are “180 degrees away from [Khamenei and his supporters]—We are actually on opposite sides.”²²⁸ This rift has led Roger Cohen to declare, “That’s not how you make a nuke.”²²⁹ Jeffrey Lewis concludes, “...[I] don't think any of us know what decision the Iranians will make when they actually get to the point where they can build a bomb.”²³⁰

Not only have the President and his supporters angered the religious elite, particularly Ayatollah Khamenei, the mullahs have also alienated the President and his supporters. *The Economist* reports, “The supreme leader’s inflexibility now looks like an error. He has infuriated those moderate conservatives who recognise that the events of the second half of last year have changed Iran irrevocably, and who advocate concessions in the name of national unity.”²³¹

Shahram Chubin argues that, despite consensus within Iran with regard to the right to nuclear energy, no evidence of consensus exists in Iran with regard to nuclear weapons—most people just believe that one exists.²³² “Divisions on the nuclear question exist,” argues Chubin, “and are in fact a surrogate for a broader question: how should

²²⁸ Tony Karon, “The World Can Only Watch as Iran Implodes from Within.”

²²⁹ Roger Cohen, “Iran Without Nukes,” *New York Times*, June 11, 2011, accessed June 13, 2011, <http://www.nytimes.com/2011/06/14/opinion/14iht-edcohen14.html>.

²³⁰ Mike Shuster, “Experts Disagree Over Iran's Nuclear Intentions.” *National Public Radio*, March 2, 2009, accessed May 2, 2011, <http://www.npr.org/templates/story/story.php?storyId=101354866>.

²³¹ “A Supreme Leader at Bay,” *The Economist*, January 7, 2010, accessed May 22, 2011, <http://www.economist.com/node/15213450>.

²³² Shahram Chubin, “The Iranian Nuclear Riddle after June 12.” *The Washington Quarterly* 33, no. 1 (2010): p. 164.

Iran relate to the international community?"²³³ Differences exist within Iran between those that "seek a larger role for Iran in the international community as a normal state," argues Chubin, and "those who wish to acquire a nuclear weapons capability to continue to confront the West...."²³⁴

Ayatollah Khamenei is likely concerned about regime security, and slowly building a bomb, he has surely concluded, is only detrimental to regime security. As mentioned above, they have surely taken notice of what the United States and the international community have done in Afghanistan, Iraq, and now Libya. On one hand, yes, perhaps this has only solidified the need for a nuclear deterrent capability in the minds of Iran's leadership. After all, would NATO have intervened in Libya had Qaddafi had a nuclear deterrent capability? This calculation is useless, however, since they are building it incredibly slowly, and surely won't be able to create a deterrent capability any time soon, even if they do successfully test a weapon. Roger Cohen argues:

Remember, Ali Khamenei, the supreme leader, is the guardian of the revolution. That is a conservative business. Breakout, let alone a bomb, is a bridge too far if the Islamic Republic is what you've vowed to preserve. Much better to gain leverage by producing low-enriched uranium — far from weapons grade — under International Atomic Energy Agency inspection and allow rumors to swirl.²³⁵

²³³ Shahram Chubin, "The Iranian Nuclear Riddle after June 12," p. 164. .

²³⁴ Ibid.

²³⁵ Roger Cohen, "Iran Without Nukes."

Capacity

Motivations to Pursue Nuclear Weapons

For many, the progress Iran has already made towards enrichment is damning evidence that it seeks nuclear weapons. Recently, the IAEA has stated that its knowledge of enrichment activities in the Islamic Republic is diminishing, meaning that the IAEA can no longer be certain of Iran's undeclared enrichment activities. The IAEA also recently claimed that Iran is currently running 8,000 centrifuges used to enrich Uranium.²³⁶

As mentioned earlier, Iran currently possesses a significant capacity to enrich uranium. Furthermore, it has a capacity to produce nuclear weapons, but only to a certain extent. Some say that Iran's quest for a nuclear capability goes far beyond cost-benefit analysis and is rather an issue of prestige and defiance. It could be that Iran is taking the road taken by Pakistan, as examined above. If this is the case, then it doesn't matter how much it costs. Iran will certainly have the economic capacity if they divert money away from other places. Furthermore, like Pakistan, they will go to great lengths to overcome the effects of sanctions put in place by the West. Peter Cassata reported in January 2009 that it is estimated that Iran has enough uranium to build "several dozen" nuclear

²³⁶ Jonathan Tirone, *Iran Nuclear Work Advances while UN Scrutinizes New Weapon Plans*, May 24, 2011, accessed May 24, 2011, <http://www.bloomberg.com/news/2011-05-24/iran-nuclear-work-advances-while-un-scrutinizes-new-weapon-plans.html>.

weapons.²³⁷ He also reported that any effort to stop countries from selling Iran any more uranium would likely be unsuccessful.²³⁸

Motivations to Forgo Proliferation

For years, analysts and commentators have predicted that Iran is only a few years away from a bomb, but, as time passes, Iran does not seem any closer to completing a nuclear weapon. But it is possible that Iran may not have either the technical or the economic capacity to pursue nuclear weapons. Even if this capacity exists, it is not unlikely that Iranian leadership may perceive forgoing nuclearization as preferential. First, Iran may not be able to obtain enough uranium for its ambitious enrichment activities. Second, it may not see the exorbitant cost of its nuclear program worth expanding in order to produce enough uranium for a nuclear arsenal. Sadjadpour, Vaez, and Ghadar explain:

The economics of Iran's nuclear approach, however, suggests that its astronomical costs appear to dwarf its minimal benefits. The country's lost foreign investment in its energy infrastructure -- estimated to be around \$60 billion -- is unlikely to ever be redeemed by nuclear energy, as power generated by the Bushehr plant can only satisfy two percent of Iran's projected electricity consumption. By comparison, 18 percent of Iran's electricity is wasted through transmission because of technical problems and mismanagement. The country's scarcity of domestic uranium resources and the inefficiency of its obsolete centrifuge technology mean that Iran's immense investment in uranium enrichment facilities will probably never pay off. In the most optimistic scenario, Iran's projected uranium reserves could only supply one nuclear reactor for less than a decade.²³⁹

²³⁷ Peter Cassata, "Report: Iran Nearly out of Uranium," *New Atlanticist*, January 24, 2009, accessed May 23, 2011, http://www.acus.org/new_atlanticist/report-iran-nearly-out-uranium.

²³⁸ *Ibid.*

²³⁹ Karim Sadjadpour, Ali Vaez, and Fariborz Ghadar, *Will Fukushima Force Iran to Reconsider Nuclear Program?*

Also, the small amount of uranium that Iran is able to mine domestically suffers from purity problems.²⁴⁰ This means that Iran has to get its uranium from somewhere else, as mentioned above. We know that Iran attempted to smuggle uranium out of the Congo in 2005, but were caught.²⁴¹ How much uranium is it smuggling? Is this a possible lever for intervention by the international community? It seems that if the international community works together to stop the illegal smuggling of uranium, then Iran will be forced to work with what little supply it has. Furthermore, the more weapons like the Stuxnet virus work to delay, complicate, and sabotage Iran's nuclear enrichment activities, Iran's supply of uranium will dwindle even quicker and become less productive.

According to analysts, the recent Stuxnet worm "wiped out roughly a fifth of Iran's nuclear centrifuges and helped delay...Tehran's ability to make its first nuclear arms."²⁴² Furthermore, U.S. Secretary of State Hillary Clinton claims that sanctions have considerably hindered Tehran's ability to procure components necessary to develop nuclear weapons.²⁴³ These analysts also claim "sanctions have hurt its effort to build more advanced (and less temperamental) centrifuges."²⁴⁴ Many critics of sanctions often complain that they don't work because they actually create more motivation for the

²⁴⁰ Peter Cassata, *Report: Iran Nearly out of Uranium*.

²⁴¹ Ibid.

²⁴² William J. Broad, John Markoff, and David E. Sanger, "Israeli Test on Worm Called Crucial in Iran Nuclear Delay," *New York Times*, January 15, 2011, accessed January 15, 2011, <http://www.nytimes.com/2011/01/16/world/middleeast/16stuxnet.html?pagewanted=all>. p. 1.

²⁴³ Ibid.

²⁴⁴ Ibid., p. 8.

leaders of states to continue what they are doing. But here, it is not important that Iran's mind is changed. What is more important is that they lack the capacity. It would be very difficult to change their mind (though, I must admit, if they were already not looking to weaponize, this may push them over the edge), and, in this case, it is much easier to affect the supply rather than the demand. With greater internationalization, more states have incentive to cooperate with the West.

This brings up an important point. Even if Iran is to obtain the bomb in the future (or near future), it is because the important changes of the international system have not yet pushed other, smaller states, into cooperating with the West. It is important to remember that two things are going on in Iran that affect this analysis. First, Iran has been pursuing the steps to the bomb for quite some time, long before the new effects of the emerging multipolar system came into play. Second, the effects of the emerging multipolar system that we can currently observe are in their nascent stages. They might not be mature or developed enough to stop a country that has already gone to great lengths to enrich uranium for as long as Iran has; however, even if these things do not stop Iran from proliferating, I have demonstrated here that the effects of the multipolar international system have *hindered*, not *hastened*, Iran's proliferation decisions.

Conclusions

When only examining the evidence of Iran's current nuclear enrichment projects with select remarks from President Ahmadinejad, it certainly seems as if Iran is on a path to the bomb, but Iran's nuclear ambitions must be examined in a broader context. Furthermore, many Iranian state characteristics are pushing Iran away from pursuing

weaponization, and the emerging international system is making the drivers of forgoing nuclear weapons capabilities that much stronger.

Even though Iran is a pariah state with outspoken leaders who attempt to defy the West whenever possible, the leadership of Iran is deeply divided. Furthermore, as Robert Baer argues, Iranian leadership is highly calculative, patient, and rational. The evidence presented above demonstrates how such leadership could certainly choose to forgo weaponization. Additionally, it is possible that norms play a role in Iran pushing the country away from weaponization. As examined above, many leaders have claimed that nuclear weapons are against Islamic law, and efforts have been made within the legislative bodies to ban the production of weapons. Whereas the forces of these norms may not be strong enough by themselves to prevent weaponization, when combined with the other drivers, such as the divided leadership, and economic capacity, weaponization becomes less likely.

The emerging international system is also pushing Iran away from weaponization. First, as the economy becomes more and more globalized, it is becoming more difficult for Tehran to procure the materials needed due to international pressure and regulations on supplying states. Furthermore, as has happened with Turkish banks, international pressure on foreign governments has eliminated Tehran's ability to side-step sanctions.

CHAPTER 5 CONCLUSIONS

The case studies examined represent both a best and worst-case test for my hypothesis that the emerging international system will not increase nuclear weapons proliferation as many analysts and commentators have recently feared. In both tests, I demonstrated that the characteristics of the emerging system will actually push states away from pursuing nuclear weapons. I also demonstrated that state characteristics unlikely to be affected by shifts in the emerging system, such as norms or political institutions, are capable of only pushing states further from nuclear weapons. When these drivers are examined together, it is unlikely that states will pursue nuclear weapons in the emerging system as traditionally expected. This conclusion will examine the similarities, as well as the differences between the likely calculations of both Turkey and Iran.

Security Environment

As expected by neo-realist theory, the emerging international system is creating a less certain security environment for many countries, particularly in the Middle East, but this changing security environment is not enough to drive either state towards nuclear weapons. Because the United States will remain the world's strongest military power and has recently flexed its muscles and influence throughout the Middle East, many fear that Iran will, as a result of decreased pressure from the international system, attempt to balance American power in the region. As I demonstrated above, however, Tehran may

not make the same calculation. Thus, if Iran will not attempt to balance American power in the region with nuclear weapons, then Turkey should not fear an altered security environment created by Iran.

The security environments of each country are drastically different. That of Iran is characterized by mistrust of the international system, long rivalries with neighboring states, and the world's strongest military power surrounding it on most sides, both directly and indirectly. Through Tehran's quest for self-reliance and perceived need to balance against military power, some believe it may turn to nuclear weapons in order to fulfill this requirement. Even though the security environment is changing for both states, it is not changing in ways that will make nuclear weapons proliferation more likely. Iran will still likely rely on traditional military capabilities, as well as asymmetrical capabilities. Furthermore, Turkey will likely focus its attention on other types of issues, particularly political and economic, as it seeks to further its influence in the region. Turkey, on the other hand, has a longstanding security assurance with the United States through NATO as well as no direct military rival. Instead, the effects of Iranian quests for superiority in the region are indirect consequences. For example, Iranian quest for prestige may hinder Turkish goals of becoming a leader in the Middle East.

Economic Interests

As the economy becomes more globalized, it will dramatically affect the calculations and capacities of both Turkey and Iran with regards to nuclear weapons. As mentioned above, Turkey has a strong interest to improve its economic strength, and the pursuit of nuclear weapons would destroy this ambition. Even though the prospects for

Turkish EU membership look grim, Ankara still has strong economic ties to Europe. These ties will certainly be cut if any evidence of nuclear weapons research were to be discovered in Turkey. But this may not even be an issue should Turkish leadership remain persistent in their efforts to join the EU. Also, as the economy becomes more and more globalized, Turkey is working with states that may have a detrimental impact on its security environment, as mentioned above with respect to Iranian economic relationships. It is clear that the economy of Turkey plays a much stronger role than security concerns, and Turkish calculations certainly do not fit the neo-realist mold. For Turkey, the globalizing economy is a positive incentive for Turkey to forgo nuclear considerations.

Iran, on the other hand, is more likely to be affected by disincentives caused by the globalizing economy. As the international community attempts to stop enrichment in Iran, sanctions are becoming more targeted and more focused. Furthermore, many analysts hope that sanctions will eliminate Iranian capacity to fund and supply expensive weaponization programs.

Ideational Factors

Both Turkey and Iran are looking for prestige as they pursue their goals of becoming leaders in the Middle East. For Turkey, this means becoming an example of a secular and democratic government can work in the Islamic world. For Iran, this means increasing its influence in the region and becoming more like the great Persian Empire of the past.

Furthermore, governmental characteristics will certainly play a large role in the nuclear calculations and decisions of both states. For Turkey, as an open and democratic society, any decision about nuclear weapons will be much more difficult to pass. This is

exacerbated by the strong environmentalist voices in Turkish politics that will likely not approve of nuclear plants or research facilities needed for nuclear weapons programs.

For Iran, the differences between Ayatollah Khamenei and President Ahmadinejad (and perhaps future presidents), as well as other factions within the Iranian government, will make the coordination of large-scale projects more difficult.

Finally, norms play a role in both Turkey and Iran, albeit to very different degrees. In Turkey, the strong adherence to norms is genuine. They are in good standing with every WMD treaty, and seek legitimacy within the international community. Iran, on the other hand, does not have nearly as good of a record when it comes to WMD norms. The fact that Tehran has attempt to defy the IAEA and the international community time and time again with its uranium enrichment projects is strong evidence that Iran is not concerned with norms; however, as demonstrated above, norms still play a role, albeit to a much smaller degree than in Turkey. For example, Ayatollah Khamenei has proclaimed time and time again that nuclear weapons are against Islamic principles. This is not sufficient evidence to demonstrate that norms are a strong enough force to keep Tehran from weapons, but it demonstrates that norms exist to some capacity, and these are not likely to be changed by the emerging international system.

Capacity

Both countries seem to have the capacity, albeit, to different degrees, to obtain a nuclear capability. Turkey has the nuclear know-how, or at least the ability to gain it, with regard to nuclear energy (although perhaps not with regard to the tacit knowledge required to build a weapon). Furthermore, it likely has the economic capacity to pursue expensive nuclear enrichment and weaponization programs if it so chooses; however, it is

not likely that Turkish officials will conclude that nuclear programs will be worth the money, and choose to focus on investing in other areas. Furthermore, Ankara's economic capacity to produce nuclear weapons would significantly decline if they chose to pursue them due to the inevitable alienation by the international community.

Iran, on the other hand, is much more likely to obtain the ability to produce nuclear weapons in the future due in large part to two things: its current advances in nuclear enrichment research and its economic capacity as a result of its large oil supplies. Furthermore, Iran has received vital assistance in the past.

Concluding Remarks

The research and analysis presented here demonstrate a different future than is traditionally expected with multipolar systems. I have demonstrated many theories and hypotheses that do not align with traditional neorealist theories of multipolar systems. The emerging system will not be characterized by material rivalry, but by economic rivalry and interdependence. Furthermore, norms and regimes will mitigate power struggles that may occur. Even though nuclear proliferation is not a problem that is going to go away, the prospect of the spread of nuclear weapons in the emerging multipolar international system is not as horrific as many analysts and commentators make it out to be.

In the emerging system, ideational factors will play a stronger role in pushing a state to pursue nuclear weapons than material factors. Ideational and material factors, however, cannot be separated. Whereas these factors may be separated analytically, empirically, they are deeply connected and intertwined. Although capacity and economic interests will be pushing states away from nuclearization, ultimately, the way in which

state leadership, influenced by their norms, ideas, and the understandings they have of their interests, will be the deciding factor.

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